

The City of Hanford
CALIFORNIA



City Council Meeting Agenda

November 7, 2017
6:00 PM – Closed Session
7:00 PM – Regular Meeting
Council Chambers
400 N. Douty St.

6:00 PM CALL TO ORDER CLOSED SESSION:

ROLL CALL:

PUBLIC COMMENT - CLOSED SESSION:

Comments from the public are limited to items on the agenda (GC54954.3a). A maximum of three minutes is allowed for each speaker.

CLOSED SESSION FOR DISCUSSION OF THE FOLLOWING:

A. CONFERENCE WITH LABOR NEGOTIATORS - Government Code Section 54957.6

Agency Designated Representatives: Darrel Pyle, Marissa Gonzales, Paula Lofgren, and Mario Zamora
Employee Organization:
General Employees Management Association (G.E.M.A.)
Hanford Firefighters Local 3898, IAFF
Hanford Police Officers Association (HPOA)

B. CONFERENCE WITH REAL PROPERTY NEGOTIATORS - Government Code Section 54956.8

Property: 218 N. Douty Street
Agency Negotiators: Darrel Pyle, Darlene Mata, Ty Mizote
Negotiating Party: Robin Leamy for Rabobank
Under Negotiation: Terms and Price

C. CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION - Government Code Section 54956.9(d)(1)

CASE NAME: Helena Chemical v. City of Hanford
CASE NUMBER: Kings County No. 17C0102

CASE NAME: San Joaquin Valley Environmental Defense Center v. City of Hanford
CASE NUMBER: Kings County No. 17C0142

7:00 PM CALL TO ORDER REGULAR SESSION:

ROLL CALL:

INVOCATION:

FLAG SALUTE:

CLOSED SESSION ACTION REPORT:

RECOGNITIONS/PROCLAMATIONS:

STAFF COMMUNICATIONS:

- A. Capital Improvement Projects Status - Informational Item

PUBLIC COMMENT:

This is the time for citizens to comment on subject matters not on the agenda and that are within the jurisdiction of the Hanford City Council. This is also the public's opportunity to request an item from the Consent Calendar be pulled for discussion purposes or to comment on any item on the agenda. Comments related to Public Hearing items will be heard at the time the item is discussed.

*A maximum of **three minutes** is allowed for each speaker. Please begin your comments by stating your name and providing your city of residence*

CONSENT CALENDAR:

Consent Calendar items are considered routine and will be enacted in one motion. There will be no separate discussion of these matters unless a request is made and then the item will be removed from the Consent Calendar to be discussed and voted upon by a separate motion.

- A. City Clerk: Approve Minutes from the October 17, 2017 Meeting
- B. Administration: Approve the request from Koinonia Christian Fellowship for a city donation for the Party-4-Life event scheduled for December 31, 2017.
- C. City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to Reyna Reyes
- D. City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to Laura Cervantes
- E. Public Works: Approval of Resolutions 17-55-R, 17-56-R, and 7-57-R regarding Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities.

- F. Public Works: Purchase of one 2018 Peterbilt 520 automated refuse vehicle from Ruckstell California Sales Co., Inc., of Fresno, Ca., in the amount of \$307,169.34; authorize an appropriation of \$48,080.82 from Refuse Enterprise Funds; and declare one 2009 refuse vehicle as surplus.
- G. Parks & Recreation: Approve contract with Westscapes in the amount of and not to exceed \$34,520.72 for Landscape Assessment District Enhancement Projects
- H. Utilities and Engineering: Approve a Notice of Completion for the Youth Athletic Complex - Storm Drain Outfall Structure, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.
- I. Utilities and Engineering: Approve a Notice of Completion for the Sixth Street at Douty Street Parking Lot Improvements Project and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.
- J. Utilities and Engineering: Approve a Notice of Completion for the FY 16-17 Manhole Repair Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.
- K. Utilities and Engineering: Approve a Notice of Completion for the FY 16/17 Cape Seal Treatment Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.
- L. Utilities and Engineering: Approve the Final Map and Subdivision Agreement for Tract No. 887, Unit 2, and accept all easements and dedications offered for public use. (Centennial Dr. and Berkshire Lane)
- M. Utilities and Engineering: Award a contract Bush Engineering, Inc. of Hanford, CA in the amount of \$881,373.00 for the 11th Avenue at Houston Avenue Traffic Signal Installation Project, and establish a construction contingency of \$88,137.00.
- N. Utilities and Engineering: Authorize the City Attorney to prepare and the City Manager to execute a Purchase and Sale Agreement with Kuldeep S. Sidhu and Sukhminder Kaur for the remnant parcel north of the Fire Station No. 3 on 12th Avenue and Hanford Armona Road
- O. Finance: Warrant Register

PUBLIC HEARINGS:

- A. General Plan Amendment No. 2017-03 (A): a request to change the land use designation on a 9.48-acre portion of a parcel from Office to High-Density Residential. Rezone No. 2017-01: a request to change the zoning designation on a 9.48-acre portion of a parcel from O Office to R-H High-Density Residential. Tentative Parcel Map No. 2017-01: a request to divide the 19.68-acre parcel, located at APN 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. Mitigated Negative Declaration No. 2017-11: a request to certify that the project will not have a significant effect on the environment with the incorporation of mitigation measures. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

- B. General Plan Amendment No. 2017-03 (B): a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02: a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11: a request to convert an existing single-family residential home to a professional office. Mitigated Negative Declaration No. 2017-12: a request to certify that the project would not have a significant impact on the environment with the incorporation of mitigation measures. The project is located at the northwest corner of Grangeville Boulevard and Leoni Drive, 206 W. Grangeville Boulevard (APN 009-282-003).

GENERAL BUSINESS:

- A. Utilities and Engineering: Approve an additional appropriation from Storm Drain Reserves in the amount of \$32,381.92 and approve the purchase and installation of a new pump and motor from Valley Pump and Dairy Systems for a price not to exceed \$32,381.92.
- B. Utilities and Engineering: Approve the purchase of new water meters, meter box lids, AMR radio units, and attaching hardware in conjunction with the flat to meter conversion project from Zenner, USA for a price not to exceed \$461,787.17.
- C. Community Development: Recommendation by the Community Development Director to award a total of 21 Cannabis Business Permits to Nc3 dba Caliva, Genezen and Premium Extracts in accordance with Section 5.56.090 of the Hanford Municipal Code and adopt Resolution 17-59-R Amending the Number of Permits

COUNCIL REPORTS/COMMENTS:

COUNCIL FUTURE AGENDA ITEMS:

ADJOURNMENT:

Materials related to an item on this Agenda submitted to the City Council after distribution of the agenda packet are available to public inspection in the City Clerk's Office located at 319 N. Dooty Street, Hanford, California 93230, during normal business hours. Such agendas are also available at the city's website, www.cityofhanfordca.com subject to staff's ability to post the agenda before the meeting.

If you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the City Clerk's office, 559-585-2515, 319 N. Dooty Street, Hanford, California 93230, at least 2 days prior to the meeting {28 CFR 35.102.35.104 ADA Title II}



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: A
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SUBJECT:

Capital Improvement Projects Status - Informational Item

RECOMMENDATION:

None. This is an informational item.

BACKGROUND:

The attached list shows the Capital Improvement projects that are currently in construction, along with the contractor, change order status, and expected completion dates, for Council information.

FISCAL IMPACT:

None

ATTACHMENTS:

Capital Improvement Projects Status



AGENDA

STAFF REPORT

MEETING DATE: November 7, 2017
AGENDA SECTION: Informational Item Only

TO: Mayor and City Council

FROM: Engineering and Utilities Division

DATE: November 7, 2017

SUBJECT: Status Report for Capital Improvement Projects in Construction

This report is prepared for the City Council's information.

1. Airport Taxilane – Phase 2 & 3 (Contract Amount \$1,062,110.00)
 Contractor: CenCal Paving
 Start Work Date: 6/22/17
 Work Completed: **75% completed**
 Estimated Completion Date: November 2017
 Change Orders: none
2. Fire Station #3 Design Build (Contract Amount \$2,300,000.00)
 Contractor: Carvalho Construction
 Start Work Date: 12/01/17 (anticipated start date)
 Work Completed: **0% completed**
 Estimated Completion Date:
 Change Orders: none
3. Longfield and Police Dept Re-Roofing (Contract Amount \$258,363.00)
 Contractor: Fresno Roofing Company, Inc.
 Start Work Date: 08/14/17
 Work Completed: **99% completed**
 Estimated Completion Date: 10/25/17
 Change Orders: \$54,042.00
4. Police Station Remodel (Contract Amount \$999,500.00)
 Contractor: Carvalho Construction, Inc.
 Start Work Date: TBD
 Work Completed: **0% completed**
 Estimated Completion Date: TBD
 Change Orders: none
5. Rotary Field Lighting (Contract Amount \$198,927.00)
 Contractor: Nick Champi Enterprises, Inc.
 Start Work Date: 09/25/17
 Work Completed: **70% completed**
 Estimated Completion Date: 11/09/17
 Change Orders: none

Attachment: Capital Improvement Projects Status (UE: Capital Improvement Projects Status)

- | | |
|--|---|
| 6. FY 16/17 Cape Seal Treatment | (Contract Amount \$210,000.00) |
| Contractor: | VSS International |
| Start Work Date: | 06/19/17 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | October 2017 |
| Change Orders: | \$224,638.75 (scope change) |
| | |
| 7. FY 16/17 Fiberized Pavement Treatment | (Contract Amount \$191,007.00) |
| Contractor: | Sierra Nevada Construction, Inc. |
| Start Work Date: | 07/17/17 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | October 2017 |
| Change Orders: | -\$8,000.00 (decrease) |
| | |
| 8. FY 16/17 Manhole Repair Project | (Contract Amount \$47,9598.00) |
| Contractor: | So Cal Pacific Construction Corporation |
| Start Work Date: | 09/25/17 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | October 2017 |
| Change Orders: | -\$3,894.00 (decrease) |
| | |
| 9. CIR – 12 th , Lacey, and 11 th Avenue | (Contract Amount \$2,282,131.00) |
| Contractor: | Avison Construction |
| Start Work Date: | 09/06/16 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | October 2017 |
| Change Orders: | \$98,447.32 |
| | |
| 10. YAC Storm Drain Outlet | (Contract Amount \$29,355.00) |
| Contractor: | Hayden Construction, Inc. |
| Start Work Date: | 09/15/17 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | 10/15/17 |
| Change Orders: | none |
| | |
| 11. Sixth at Douty Parking Lot | (Contract Amount \$308,785.00) |
| Contractor: | Agee Construction |
| Start Work Date: | 05/22/17 |
| Work Completed: | 100% completed |
| Estimated Completion Date: | 10/26/17 (delay due to SCE energize) |
| Change Orders: | \$14,363.86 |
| | |
| 12. 11 th at Houston Traffic Signal | (Contract Amount \$881,373.00) |
| Contractor: | Bush Engineering |
| Start Work Date: | March 2018 |
| Work Completed: | 0% completed |
| Estimated Completion Date: | June 2018 |
| Change Orders: | none |
| | |
| 13. Redington at Fourth Traffic Signal-CALTRANS | |
| Contractor: | Cal Electro, Inc. |
| Start Work Date: | 10/09/17 |
| Work Completed: | 20% completed |
| Estimated Completion Date: | 12/15/17 |
| | |
| 14. Lacey at 13 th Traffic Signal-COUNTY | |
| Contractor: | Agee Construction, Inc. |
| Start Work Date: | 10/16/17 |
| Work Completed: | 20% completed |
| Estimated Completion Date: | 02/12/18 |



**AGENDA
STAFF REPORT**

MEETING DATE: 11/7/2017	AGENDA SECTION: A
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SUBJECT:

City Clerk: Approve Minutes from the October 17, 2017 Meeting

RECOMMENDATION:

Approve the minutes from the October 17, 2017 City Council meeting.

FISCAL IMPACT:

ATTACHMENTS:

101717 Minutes



CITY COUNCIL MEETING MINUTES

**October 17, 2017 7:00 PM
Council Chambers
400 N. Douty St.**

6:00 PM CALL TO ORDER STUDY SESSION & CLOSED SESSION:

Mayor David Ayers called the Study Session & Closed Session to order at 6:00 p.m.

ROLL CALL:

Present: Justin Mendes, Francisco Ramirez, Martin Devine, Sue Sorensen, David Ayers

PUBLIC COMMENT - STUDY SESSION & CLOSED SESSION:

Comments from the public are limited to items on the agenda (GC54954.3a). A maximum of three minutes is allowed for each speaker.

There were no comments given.

STUDY SESSION:

A. Public Works: Review of updated Infrastructure Master Plans for Water, Sewer and Storm Drainage

Public Works Director Lou Camara thanked QK, Zumwalt Hansen, and Akel for their work on these master plans. Steve Brandt of QK gave an overview on how the General Plan, Master Plans, and Impact Fees are all connected through policy and implementation.

Tony Akel provided the background and objectives for the Master Plans. They become the guiding documents for existing users and for future growth. Mr. Akel discussed the existing system evaluations and the capital improvement projects that are recommended for future development for the water system, sewer system, and storm drainage system.

The consultants and staff responded to questions and comments by the City Council.

CLOSED SESSION FOR DISCUSSION OF THE FOLLOWING:

Mayor Ayers adjourned to closed session at 6:36 p.m.

A. CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION - Government Code Section 54956.9(d)(4)

Number of Potential Cases - 1

Attachment: 101717 Minutes (Minutes 101717)

B. CONFERENCE WITH REAL PROPERTY NEGOTIATORS - Government Code Section 54956.8

Property: APN 008-192-011
 Agency Negotiators: Darrel Pyle, Darlene Mata, Ty Mizote
 Negotiating Party: Dirk Holkeboer for Habitat for Humanity
 Under Negotiation: Terms and Price

Property: APN 011-090-004
 Agency Negotiators: Darrel Pyle, Darlene Mata, John Doyel, Ty Mizote
 Negotiating Party: Kuldeep Sidhu
 Under Negotiation: Terms and Price

7:00 PM CALL TO ORDER REGULAR SESSION:

Mayor Ayers called the regular meeting to order at 7:01 p.m.

ROLL CALL:

Attendee Name	Title	Status	Arrived
Martin Devine	Council Member	Present	7:00 PM
Sue Sorensen	Vice Mayor	Present	7:00 PM
David Ayers	Mayor	Present	7:00 PM
Francisco Ramirez	Council Member	Present	7:00 PM
Justin Mendes	Council Member	Present	7:00 PM

INVOCATION:

Bobby Guerra provided the invocation.

FLAG SALUTE:

Mayor Ayers led the flag salute.

CLOSED SESSION ACTION REPORT:

There was nothing to report.

RECOGNITIONS/PROCLAMATIONS:

STAFF COMMUNICATIONS:

Police Captain Karl Anderson provided a brief update on recent police activity.

Utilities & Engineering Director John Doyel discussed upcoming projects and an opportunity to make energy efficient improvements with the assistance of Schneider Electric.

Public Works Director Lou Camara commented on the progress of submitting the grant application for the grade separation project.

Fire Chief Chris Ekk commented on the success of their Open House and the return of crew members from fires in other areas.

Finance Director Paula Lofgren stated that they are looking at ways to reduce fees with the City's bank and improve services. She also briefly commented on interns working for the City.

Recreation Supervisor Armando da Silva reported on the upcoming community events and programs.

PUBLIC COMMENT:

This is the time for citizens to comment on subject matters not on the agenda within the jurisdiction of the Hanford City Council or to comment on items listed under the Consent Calendar or to request an item from the Consent Calendar be pulled for discussion purposes. Comments related to General Business items or Public Hearing items will be heard at the time the item is discussed.

*A maximum of **three minutes** is allowed for each speaker. Please begin your comments by stating your name and providing your city of residence.*

Bob Ramos expressed his frustration over the past agenda item that changed the public comments from five minutes for three minutes.

Skip Athey inquired about a warrant entry dated September 19 for \$38,700 payable to the U.S. Treasury for a 2015 penalty.

CONSENT CALENDAR:

Consent Calendar items are considered routine and will be enacted in one motion. There will be no separate discussion of these matters unless a request is made and then the item will be removed from the Consent Calendar to be discussed and voted upon by a separate motion.

Motion to approve the Consent Calendar, except for the item pulled for separate consideration.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Justin Mendes, Council Member
SECONDER:	Martin Devine, Council Member
AYES:	Devine, Sorensen, Ayers, Ramirez, Mendes

- A. City Clerk: Approve Minutes from the October 3, 2017 Meeting
- B. City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to CSAA as Subrogee for Sara Perez
- C. City Clerk: Deny leave to present a late claim for damages and direct the City Clerk to send out notification of such to Daniel Alaniz
- D. City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to Adventist Medical Center
- E. Police: Resolution 17-51-R, a resolution of the City Council of Hanford approving a application for authorization to access State and Federal Level summary criminal history information for employment, volunteers, and contractors, licensing or certification purposes; and repeal Resolution 17-49-R.
- F. Police: Waive the second reading and adopt Ordinance 17-17 adding Chapter 12.18 of Title 12 Regulating Bicycle Parking, Civic Park.

- G. Police: Approve the purchase of a 2018 Dodge Charger and radio to replace unit 42 in the amount of \$29,589.
- H. Utilities and Engineering Department: Approve a Notice of Completion for the FY 16/17 Fiberized Micro Surface Pavement Treatment Project and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.
- I. Finance: Treasurer's Report of Investments and Cash September 2017
- J. Finance: Warrant Register

ITEMS PULLED FROM CONSENT CALENDAR:

- 1. Police: Waive the second reading and adopt Ordinance 17-18 amending Chapter 8.32 for language and general consistency with the new Hanford Municipal Code Chapter 5.56 Commercial Cannabis Activity.

Council Member Ramirez pulled the item and requested an overview of this ordinance.

Captain Anderson provided a brief explanation of the minor changes being made to the Municipal Code.

Motion to waive the second reading and adopt Ordinance 17-18.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Francisco Ramirez, Council Member
SECONDER:	Justin Mendes, Council Member
AYES:	Devine, Sorensen, Ayers, Ramirez, Mendes

PUBLIC HEARINGS:

GENERAL BUSINESS:

- A. Utilities and Engineering: Permission to Advertise the Flat Rate to Water Meter Conversion Project and Pre-Authorize the City Manager to award and execute the contract on behalf of the City.

Utilities & Engineering Director John Doyel provided background information for the Council's review and consideration. Mr. Doyel responded to questions and comments by the City Council. He also provided a Status Report for Capital Improvement Projects in Construction which will be provided to the Council on an ongoing monthly basis.

Motion to approve as presented.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Justin Mendes, Council Member
SECONDER:	Francisco Ramirez, Council Member
AYES:	Devine, Sorensen, Ayers, Ramirez, Mendes

- B. Utilities and Engineering: Reimbursement to Lennar Fresno, Inc. in the amount of \$262,573.12, credit park impact fees for Tract No. 887, Unit No. 1 and Unit No. 2, and appropriate an additional \$112,573.12 from Park Impact Fee Reserves. (Centennial Dr. at Berkshire Ln.)

Utilities & Engineering Director John Doyel discussed the project and the reimbursement to the developer crediting park impact fees.

Motion to approve as presented.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Sue Sorensen, Vice Mayor
SECONDER:	Francisco Ramirez, Council Member
AYES:	Devine, Sorensen, Ayers, Ramirez, Mendes

C. Fire: Fireworks citation appeal hearing for administrative citation FW-033

Fire Chief Chris Ekk discussed the citation, and the statements made by Jerry Isenberg during the August 15th City Council meeting claiming that the illegal fireworks belonged to him.

Jerry Isenberg commented on the statements and interactions taken on the 4th of July with City staff.

Council Member Mendes inquired about the usage of body cameras and the circumstances as to when they are used. Captain Anderson responded to his questions. Mr. Mendes sought clarification that Robert Isenberg was reimbursed the \$1,000 for his appeal. Chief Ekk stated that he was reimbursed.

Council Member Ramirez expressed that he would like the police to have the body cameras in operation at all times when interacting with the public. He recommended that Jerry Isenberg only be fined \$500 since he was not correctly fined at the time of the incident.

Vice Mayor Sorensen commented on the benefit of police and fire working together when citing residents and believes that the process will improve in the future.

Mayor Ayers discussed his concern over illegal fireworks and the need for the City to take action against them.

The Council denied the appeal 4-1 (Ramirez in favor of appeal) for Administrative Citation FW-033.

RESULT:	CONSENSUS
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COUNCIL REPORTS/COMMENTS:

Council Member Mendes stated that he attended the meeting with John Doyel and Schneider Electric but did not provide any input. He briefly commented on city activities that he attended.

Council Member Ramirez participated in the Ghost Walk Tour and stated that it was really well attended. He also commended the Parks & Recreation staff for their use of social media.

Council Member Devine attended the Renaissance Faire and Moon Festival.

Vice Mayor Sorensen commented on the actions taken at the recent Parks & Recreation Commission meeting. She also attended the League of California Cities General Membership meeting and the Fire Department's Open House. Ms. Sorensen provided some background and prior discussions by the City Council Members to reduce the time for public comments. City Manager Darrel Pyle responded to the Public Comment explaining the oversight of filing a report due to turnover in the Finance Department that led to the penalty to the U.S. Treasury.

Mayor Ayers attended the League meeting in Delano and the Chamber of Commerce meeting.

COUNCIL FUTURE AGENDA ITEMS:

Council Member Mendes requested support for Schneider Electric to analyze the City's electric usage to determine opportunities for the City to save costs. He requested that the City do some research to determine if any ordinances can be developed to address the homeless issues. City Manager Darrel Pyle stated that the Police Chief is currently reviewing legislative options to bring forward at a future study session. The Council provided a consensus for staff to move forward with both of his requests.

Council Member Ramirez would like a discussion on the fees of illegal fireworks to go to the Fire Department rather than a fireworks show. There was no consensus to bring back an agenda item to change this process at this time.

City Manager Darrel Pyle stated that Mark Pratter submitted correspondence to the City Clerk prior to the meeting to be included with the official record for Public Comments regarding the three minute time limit. Mr. Pyle discussed the next steps by staff regarding the surplus property next to Hidden Valley Park. He also recommended a future joint meeting with the Parks & Recreation Commission and representatives from the school districts to develop policy language on usage of open spaces at schools. The City Council provided consensus for staff to schedule a City Council Study Session on the Parks Master Plan, followed by a joint meeting, and then have a discussion on the surplus property.

ADJOURNMENT:

Mayor Ayers adjourned the meeting at 8:28 p.m.

Respectfully submitted,

Jennifer Gomez
City Clerk

Attachment: 101717 Minutes (Minutes 101717)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: B
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SUBJECT:

Administration: Approve the request from Koinonia Christian Fellowship for a city donation for the Party-4-Life event scheduled for December 31, 2017.

RECOMMENDATION:

That the City Council, by motion, approve the request from Koinonia Christian Fellowship for a city donation to help defray costs for the Party-4-Life event scheduled for December 31, 2017 in the amount of \$600.00.

BACKGROUND:

Party-4-Life began in 1996 as a small New Year's Eve party for area teens. Their goal was to provide a safe environment to celebrate New Year's Eve without alcohol, drugs, violence or crime. Over the years, the Party has grown to include multiple venues throughout Hanford and Lemoore with over 650 youth and 80 volunteers.

In the past, the City Council has donated \$600.00 towards this event.

FISCAL IMPACT:

Historically, this donation is paid out of the City Council's Advertising & Public Relations account. The budget for this account is \$4,500.

ATTACHMENTS:

Correspondence



Dear City of Hanford,

It's that time of year again! **Party-4-Life** is coming up and we need your help. The purpose of this event is to be a safe-house to the community's youth during New Years Eve. And we have been doing it successfully since 1996. Party4Life has an excellent reputation in our community and we would like to keep this tradition alive.

This event is an all-night event with multiple venues throughout Hanford and Lemoore. Each venue includes fun activities for the Youth of Hanford and Lemoore to enjoy all night. It's a great way for teens to bring in the New Year! We also provide volunteers, security, and transportation.

Our goal is a simple one: keep kids safe while they have fun. Especially during a holiday that is associated with excessive drinking and drug use. We want to give teens an opportunity to have fun in a safe environment. Every year Party4Life has grown and last year was a huge success having over 650 Youth and close to 80 Volunteers!

We are expecting an even bigger event this year, so we would like to partner with you! We would love your sponsorship for this year's Party-4-Life event. This event can cost between \$15,000-\$20,000 and would not be manageable without the community's help. It is through the generosity and commitment to the safety of our youth by organizations and businesses that we have been able to continue this event in Kings County.

Please consider being a part of Party-4-Life by being a sponsor.

Contact me at candace@kcfchurch.org or 559-582-1528

Thank You,



Candace Cortez

Attachment: Correspondence (Party-4-Life Sponsorship)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: C
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SUBJECT:

City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to Reyna Reyes

RECOMMENDATION:

That the City Council denies the following claim for damages and direct the City Clerk to send out notification of such to the claimant.

BACKGROUND:

A claim for damages against the City was received by the following claimant: Reyna Reyes.

After review by the Third Party Administrator, it is Staff's recommendation to deny the claim.

FISCAL IMPACT:

ATTACHMENTS:



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: D
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SUBJECT:

City Clerk: Deny claim for damages and direct the City Clerk to send out notification of such to Laura Cervantes

RECOMMENDATION:

That the City Council denies the following claim for damages and direct the City Clerk to send out notification of such to the claimant.

BACKGROUND:

A claim for damages against the City was received by the following claimant: Laura Cervantes.

After review by the Third Party Administrator, it is Staff's recommendation to deny the claim.

FISCAL IMPACT:

ATTACHMENTS:



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: E
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SUBJECT:

Public Works: Approval of Resolutions 17-55-R, 17-56-R, and 7-57-R regarding Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities.

RECOMMENDATION:

That the City Council, by motion, approve resolutions adopting updated infrastructure master plans for City Water (Resolution # 17-55-R), Sewer (Resolution # 17-56-R) and Storm Drainage Facilities (Resolution # 17-57-R).

BACKGROUND:

The City's Water, Sewer and Storm Drainage facility master plans were previously prepared in 1996, 1990 and 1995 respectively. The master plans were developed to quantify and prioritize system capacity improvements for existing users and to provide service for future growth.

In July of 2013, the City hired the firms of Quad-Knopf, Inc., and Zumwalt-Hansen & Associates to update the City's infrastructure master plans concurrent with the 2035 General Plan update process. The firm of Akel Engineering Group, Inc., was hired as a sub-consultant to perform the master plan updates and related studies. The completed master plan reports were reviewed with the City Council during a study session on October 17, 2017. The updated master plans were prepared to be consistent with the 2035 General Plan and provide a detailed analysis of infrastructure needs to support the future growth of the City. The plans also provide estimates of cost to construct necessary improvements to correct existing system deficiencies as well to provide infrastructure system capacity to support planned growth. This information will be used to support the preparation of updated development impact fees for water, sewer and storm drainage facilities.

FISCAL IMPACT:

The FY 13 /14 Capital Improvement Budget provided \$273,562.00 in enterprise funds to update the City's Water, Sewer and Storm Drainage Master Plans.

ATTACHMENTS:

Resolution # 17-55-R (Water)

Resolution # 17-56-R (Sewer)

Resolution # 17-57-R (Storm Drainage)

Water System Master Plan

Sewer System Master Plan

Storm Drainage System Master Plan

RESOLUTION NO. 17-55-R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
ADOPTING THE HANFORD WATER SYSTEM MASTER PLAN, DATED SEPTEMBER 2017

At a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017 at 7:00 P.M., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, to ensure that water system facilities are properly planned and constructed, the City of Hanford contracted with the consulting firms of Quad Knopf, Inc. and Zumwalt-Hansen & Associates to develop a Water System Master Plan to facilitate future urban growth; and

WHEREAS, the firms of Quad Knopf, Inc., and Zumwalt-Hansen & Associates, subcontracted with the firm of Akel Engineering Group, Inc., to prepare the Water System Master Plan and related studies; and

WHEREAS, the Water System Master Plan Report is organized in eight sections (1) Introduction; (2) Planning Area Characteristics; (3) System Performance and Design Criteria; (4) Existing Domestic Water Facilities; (5) Water Demands and Supply Characteristics; (6) Hydraulic Model Development; (7) Evaluation and Proposed Improvements; (8) Capital Improvement Program; and

WHEREAS, the Land Use Element, and the Public Facilities Element of the 2035 Hanford General Plan, adopted on April 24, 2017 by Resolution 17-21-R, provide specific statements supporting the development and implementation of a Water System Master Plan for planned urban growth; and

WHEREAS, THE City Council of the City of Hanford has determined that the proposed Water System Master Plan will incorporate and implement the new policies and concepts established in the adopted 2035 Hanford General Plan and is necessary for planned urban growth and development in the City of Hanford consistent with the 2035 General plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hanford has determined that as a result of the proposed Master Plan, no new effects could occur, or new mitigation measures would be required that have not been addressed within the scope of the certified Environmental

Impact Report (SCH No. 2015041024) prepared for the 2035 General Plan Update. The Environmental Impact Report prepared for the 2035 General Plan was certified by Resolution 17-20-R, adopted on April 24, 2017, which included a Statement of Overriding Considerations and a Mitigation and Monitoring Program, herein incorporated by reference. The Program Environmental Impact Report adequately analyzed and addressed the Water System Master Plan.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of Hanford hereby adopts the Water System Master Plan dated September 2017.

This Resolution supersedes Resolution No. 96-60-R adopted November 19, 1996.

PASSED, ADOPTED, and APPROVED this 7th day of November, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS,
MAYOR of the City of Hanford

ATTEST: _____
JENNIFER GOMEZ,
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, JENNIFER GOMEZ, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 7th day of November, 2017.

Dated: _____, 2017

JENNIFER GOMEZ,
CITY CLERK

RESOLUTION NO. 17-56-R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
ADOPTING THE HANFORD SEWER SYSTEM MASTER PLAN, DATED SEPTEMBER 2017

At a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017 at 7:00 P.M., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, to ensure that sewer system facilities are properly planned and constructed, the City of Hanford contracted with the consulting firms of Quad Knopf, Inc. and Zumwalt-Hansen & Associates to develop a Sewer System Master Plan to facilitate future urban growth; and

WHEREAS, the firms of Quad Knopf, Inc., and Zumwalt-Hansen & Associates, subcontracted with the firm of Akel Engineering Group, Inc., to prepare the Sewer System Master Plan and related studies; and

WHEREAS, the Sewer System Master Plan Report is organized in eight sections (1) Introduction; (2) Planning Area Characteristics; (3) System Performance and Design; (4) Existing Sewer Collection Facilities; (5) Sewer Flows; (6) Hydraulic Model Development; (7) Evaluation and Proposed Improvements; (8) Capital Improvement Program; and

WHEREAS, the Land Use Element, and the Public Facilities Element of the 2035 Hanford General Plan adopted on April 24, 2017 by Resolution 17-21-R, provide specific statements supporting the development and implementation of a Sewer System Master Plan for planned urban growth; and

WHEREAS, THE City Council of the City of Hanford has determined that the proposed Sewer System Master Plan will incorporate and implement the new policies and concepts established in the adopted 2035 Hanford General Plan and is necessary for planned urban growth and development in the City consistent with the 2035 General plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hanford has determined that as a result of the proposed Master Plan, no new effects could occur, or new mitigation measures would be required that have not been addressed within the scope of the certified Environmental

Impact Report (SCH No. 2015041024) prepared for the 2035 General Plan Update. The Environmental Impact Report prepared for the 2035 General Plan was certified by Resolution 17-20-R, adopted on April 24, 2017, which included a Statement of Overriding Considerations and a Mitigation and Monitoring Program, herein incorporated by reference. The Program Environmental Impact Report adequately analyzed and addressed the Sewer System Master Plan.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of Hanford hereby adopts the Sewer System Master Plan dated September 2017.

PASSED, ADOPTED, and APPROVED this 7th day of November, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS,
MAYOR of the City of Hanford

ATTEST: _____
JENNIFER GOMEZ,
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, JENNIFER GOMEZ, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 7th day of November, 2017.

Dated: _____, 2017

JENNIFER GOMEZ,
CITY CLERK

RESOLUTION NO. 17-57-R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
ADOPTING THE HANFORD STORM DRAINAGE SYSTEM MASTER PLAN, DATED
SEPTEMBER 2017

At a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017 at 7:00 P.M., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, to ensure that storm drainage system facilities are properly planned and constructed, the City of Hanford contracted with the consulting firms of Quad Knopf, Inc. and Zumwalt-Hansen & Associates to develop a Storm Drainage System Master Plan to facilitate future urban growth; and

WHEREAS, the firms of Quad Knopf, Inc., and Zumwalt-Hansen & Associates, subcontracted with the firm of Akel Engineering Group, Inc., to prepare the Storm Drainage System Master Plan and related studies; and

WHEREAS, the Storm Drainage System Master Plan Report is organized in six sections (1) Introduction; (2) Planning Area Characteristics; (3) System Performance and Design; (4) Existing Facilities and Model Development; (5) Evaluation and Proposed Improvements; (6) Capital Improvement Program; and

WHEREAS, the Land Use Element, and the Public Facilities Element of the 2035 Hanford General Plan, adopted on April 24, 2017 by Resolution 17-21-R, provide specific statements supporting the development and implementation of a Storm Drainage System Master Plan for planned urban growth; and

WHEREAS, THE City Council of the City of Hanford has determined that the proposed Storm Drainage System Master Plan will incorporate and implement the new policies and concepts established in the adopted 2035 Hanford General Plan and is necessary for planned urban growth and development in the City consistent with the 2035 General Plan.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Hanford has determined that as a result of the proposed Master Plan, no new effects could occur, or new mitigation

measures would be required that have not been addressed within the scope of the certified Environmental Impact Report (SCH No. 2015041024) prepared for the 2035 General Plan Update. The Environmental Impact Report prepared for the 2035 General Plan was certified by Resolution 17-20-R, adopted on April 24, 2017, which included a Statement of Overriding Considerations and a Mitigation and Monitoring Program, herein incorporated by reference. The Program Environmental Impact Report adequately analyzed and addressed the Storm Drainage System Master Plan.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council of the City of Hanford hereby adopts the Storm Drainage System Master Plan dated September 2017:

This resolution supercedes Resolution No. 95-41-R, adopted November 7, 1995.

PASSED, ADOPTED, and APPROVED this 7th day of November, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS,
MAYOR of the City of Hanford

ATTEST: _____
JENNIFER GOMEZ,
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, JENNIFER GOMEZ, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted by the City Council of the City of Hanford at a regular meeting thereof held on the 7th day of November, 2017.

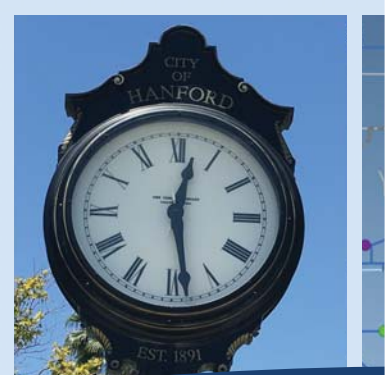
Dated: _____, 2017

JENNIFER GOMEZ,
CITY CLERK



SEPTEMBER 2017
FINAL

City of Hanford Water System Master Plan



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

AKEL
ENGINEERING GROUP, INC.



CITY OF HANFORD

2017

WATER SYSTEM MASTER PLAN

Final

September 2017



AKEL
ENGINEERING GROUP, INC.



Smart Planning Our Water Resources

September 29, 2017

City of Hanford
319 Douty Street
Hanford CA, 93230

Attention: Lou Camara, P.E.
Director of Public Works

Subject: 2017 Water System Master Plan – Final Report

Dear Lou:

We are pleased to submit the final report for the City of Hanford Water System Master Plan. This master plan is a standalone document, though it was prepared as part of the integrated infrastructure master plans for the water, sewer, and storm drainage master plans. The master plan documents the following:

- Existing distribution system facilities, acceptable hydraulic performance criteria, and projected water demands consistent with the Planned Area Boundary
- Development and update of the City's GIS-based hydraulic water model.
- Capacity evaluation of the existing water system with improvements to mitigate existing deficiencies and to accommodate future growth.
- Capital Improvement Program (CIP) with an opinion of probable construction costs and suggestions for cost allocations to meet AB 1600.

We extend our thanks to you; John Doyel, Director of Public Utilities / City Engineer; Darlene Mata, Community Development Director; and other City staff whose courtesy and cooperation were valuable components in completing this study.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.
Principal

Enclosure: Report



Acknowledgements

City Council

David Ayers, Mayor

Sue Sorensen, Vice Mayor

Martin Devine

Francisco Ramirez

Justin Mendes

Management Personnel

Lou Camara, Director of Public Works

John Doyel, Director of Public Utilities / City Engineer

Darlene Mata, Community Development Director

Mike Cosenza, Utilities Superintendent

Other City Engineering, Planning, and Operations Staff

City of Hanford

Water System Master Plan

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City of Hanford

Water System Master Plan

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City of Hanford Water System Master Plan

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City of Hanford **Water System Master Plan**

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APPENDICES

Appendix A General Plan Land Use Map

EXECUTIVE SUMMARY

This executive summary presents a brief background of the City's water distribution system, the planning area characteristics, the system performance and design criteria, the hydraulic model, and a capital improvement program.

The hydraulic model was used to evaluate the capacity adequacy of the existing distribution system and for recommending improvements to mitigate existing deficiencies, as well as servicing future growth. The prioritized capital improvement program accounts for growth throughout the Hanford Planning Area.

ES.1 STUDY OBJECTIVES

The City of Hanford recognizes the importance of planning, developing, and financing system facilities to provide reliable water service to existing customers and for servicing anticipated growth within the Hanford Planning Area, the City initiated the preparation of the 2017 Water System Master Plan (WSMP).

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. This 2017 WSMP is intended to serve as a tool for planning and phasing the construction of future domestic water system infrastructure for the projected buildout of the City of Hanford. The 2017 WSMP evaluates the City's water system and recommends capacity improvements necessary to service the needs of existing users and for servicing the future growth of the City.

The planning boundary and horizon for the master plan were developed in accordance with the City's recently adopted General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

This master plan included the following tasks:

- Summarize the City's existing domestic water system facilities.
- Document growth planning assumptions and known future developments.
- Update the domestic water system performance criteria.
- Project future domestic water demands.
- Update the hydraulic model using available data.
- Evaluate the domestic water facilities to meet existing and projected demand requirements and fire flows.
- Perform a capacity analysis for major distribution mains.

- Perform a fire flow analysis.
- Recommend a capital improvement program (CIP) with an opinion of probable costs.
- Perform a capacity allocation analysis for cost sharing purposes.
- Develop a 2017 Water System Master Plan report.

ES.2 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer System Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, they have been coordinated for consistency with the City's General Plan. Additionally, each document has been cross referenced to reflect relevant analysis results with the other documents.

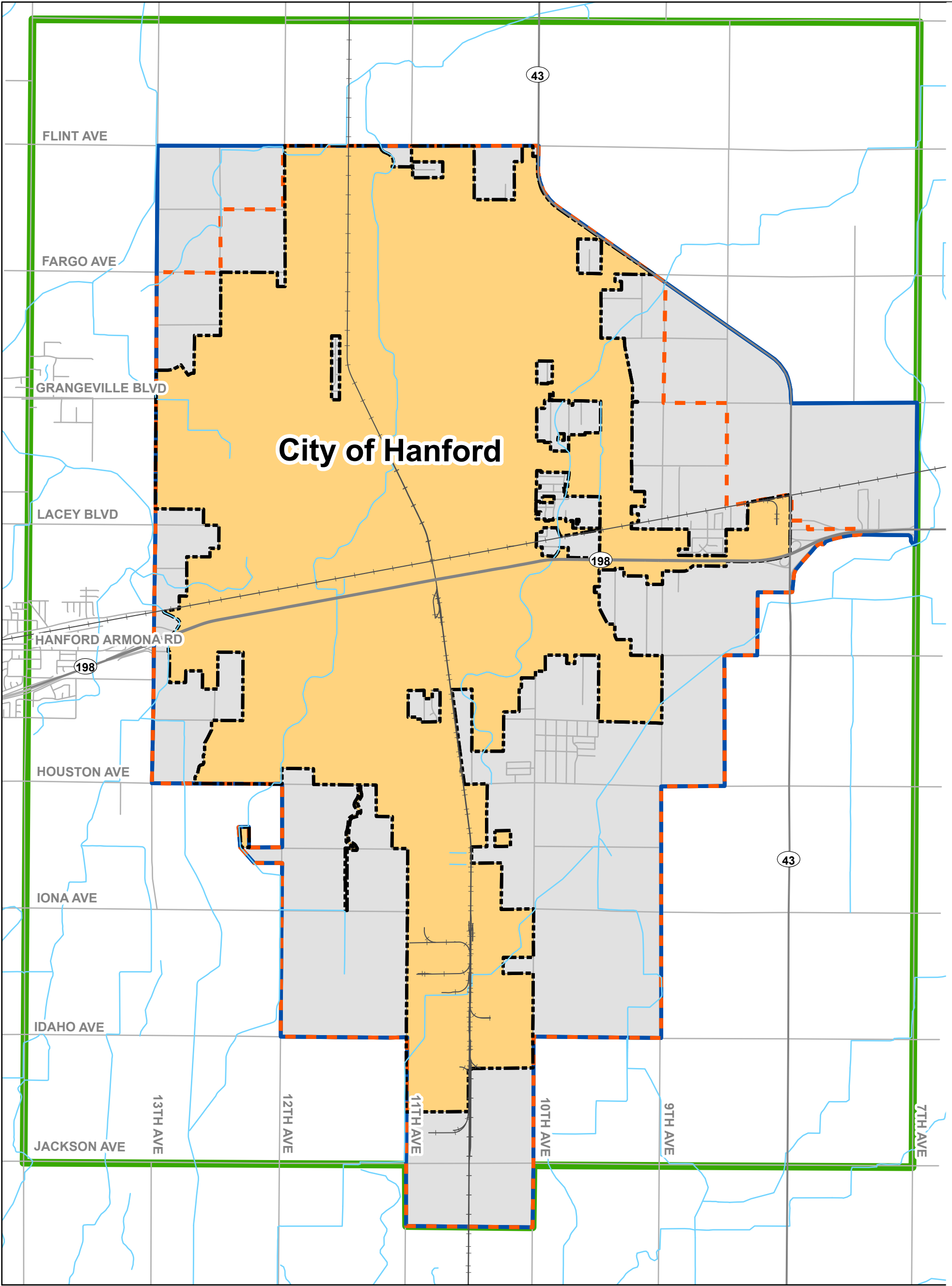
ES.3 STUDY AREA DESCRIPTION

The City is located in Kings County, approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure ES.1](#)). The City's closest neighbor, the City of Lemoore, is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east-west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City service area.

The City operates and maintains a domestic water system that covers the majority of the area within the City Limits. Currently, water is supplied to the City's customers via groundwater wells located throughout the City.

ES.4 SYSTEM PERFORMANCE AND DESIGN CRITERIA

This report documents the City's performance and design criteria that were used for evaluating the domestic water system. The system performance and design criteria are used to establish guidelines for determining future water demands, evaluating existing domestic water facilities, and for sizing future facilities. [Table ES.1](#) documents the system performance and design criteria for the domestic water system. This criterion was used in the capacity evaluation and for sizing recommended improvements.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



Update: September 1, 2016 0 0.25 0.5 1 Mile

File Path: P:\xGIS\GIS_Projects\Hanford\2016\Water\Final\ES\HF_ES-1_PlanningArea_090116.mxd



ES. 1
Planning Area
Water System Master Plan
City of Hanford



Table ES.1 Planning and Design Criteria
Water System Master Plan
City of Hanford

Design Parameter	Criteria		
Supply	Supply to meet the greater of Maximum Day Demands plus Fire Flows or Peak Hour Demands		
	Firm capacity excludes largest well for possible maintenance and emergency		
Storage	Underground Aquifer with Adequate Power Generators at Wells		
	Main Pressure Zone: 25% of Maximum Day Demand		
	Industrial Pressure Zone: 14% of Maximum Day Demand + 3,500 gpm for 3 hours		
Distribution Mains	Distribution mains should be designed to meet the greater of:		
	1) Peak Hour Demand, or 2) Maximum Day Demand + Fire Flow		
	Criteria for existing and future pipelines include:		
	Maximum Pipeline Velocity: 10 feet per second (ft/sec)		
	Maximum Desirable Headloss: 8 feet per 1,000 feet (ft/kft)		
	Minimum pipe size of 8-inches for future		
Service Pressures	Maximum System Pressure	80	psi
	Minimum Pressure during Maximum Day Demand	40	psi
	Minimum Pressure during Peak Hour	30	psi
	Minimum Residual Pressure (Fire Flow)	20	psi
	Industrial Area Recommended Pressure	80	psi
Demand Peaking Factors	Main Pressure Zone		
	Maximum Day Demand	1.75 x Average Day Demand	
	Peak Hour Demand	2.50 x Average Day Demand	
	Industrial Pressure Zone		
	Maximum Day Demand	2.00 x Average Day Demand	
	Peak Hour Demand	2.78 x Average Day Demand	
Fire Flows	Residential Existing development	1,000 gpm for 2 hours	
	Recent and future developments	1,500 gpm for 2 hours	
	Commercial Recent and future developments	2,500 gpm for 3 hours	
	Older developments near downtown	3,000 gpm for 3 hours	
	Industrial Recent and future developments	3,000 gpm for 3 hours	
	Industrial park	3,500 gpm for 3 hours	
Urban Water Use Targets	2010 Baseline	215	gpcd
2015 Urban Water Management Plan	2015 Interim Target	197	gpcd
	2020 Target	179	gpcd
Demand Coefficients	<u>Land Use Category</u>	<u>2016 WSMP</u>	
		(gpd/net acre)	
	Residential		
	Low Density Residential	1,810	gpd/acre
	Medium Density Residential	2,450	gpd/acre
	High Density Residential	3,260	gpd/acre
	Mixed Use		
	Office Residential	1,710	gpd/acre
	Neighborhood Mixed Use	1,550	gpd/acre
	Corridor Mixed Use	1,100	gpd/acre
	Downtown Mixed Use	3,510	gpd/acre
	Non-Residential		
	Neighborhood Commercial	650	gpd/acre
	Regional Commercial	820	gpd/acre
	Service Commercial	530	gpd/acre
	Highway Commercial	650	gpd/acre
	Office	1,060	gpd/acre
	Public Facilities	530	gpd/acre
	Light Industrial	610	gpd/acre
	Heavy Industrial	690	gpd/acre
	Educational Facilities	1,630	gpd/acre
	Open Space	2,690	gpd/acre

ES.5 EXISTING WATER SYSTEM OVERVIEW

The City's municipal water system consists of 14 active groundwater wells, 3 storage reservoirs that have a cumulative capacity of 3.50 MG, distribution mains, and fire hydrants. The City's generally flat topography slopes from northeast to southwest from approximately 255 feet in the northeast to approximately 225 feet in the southwest. With this generally flat topography, the City operates two pressure zones, with the primary pressure zone covering areas north of the Kings Industrial park and the remaining pressure zone serving the Kings Industrial park, located south of Iona Avenue.

The City's existing domestic water distribution system is shown in [Figure ES.2](#), which displays the existing system by pipe sizes. This figure provides a general color coding for the distribution mains, as well as labeling the existing wells and the storage reservoir.

ES.6 EXISTING AND FUTURE DOMESTIC WATER DEMANDS

The existing demand distribution was obtained from the water billing records. Using GIS, each customer account was associated with parcel for the account and spatially joined to location in the hydraulic model representing the service location. The City's 2013 the average daily production was calculated at 12.1 MGD.

Future demands were projected using the unit factors discussed in a previous chapter for residential and non-residential land uses and for development in the Planned Area Boundary. [Table ES.2](#) organizes the future land use categories and their corresponding domestic water demands. The average day domestic water demands from existing and future developments is calculated at 22.3 MGD. These demands were used in sizing the future infrastructure facilities, including transmission mains, storage reservoirs, and pump stations. Demands were also used for allocating and reserving capacities in the existing or proposed facilities.

ES.7 HYDRAULIC MODEL DEVELOPMENT

Hydraulic network analysis has become an effectively powerful tool in many aspects of water distribution planning, design, operation, management, emergency response planning, system reliability analysis, fire flow analysis, and water quality evaluations. The City's hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

The City's previous model was developed using the Environmental Protection Agency's EPANET, which allows the use of a single modeling scenario, and basic simulation options for steady-state and extended period simulations. As part of this master plan, the hydraulic model has been updated and redeveloped into the GIS-based hydraulic model InfoWater by Innovyze. The model

Table ES.2 Average Daily Water Demands

Water System Master Plan
City of Hanford

Land Use Classifications	Buildout Water Demands											
	Existing Development			Future Development to be Serviced within Planned Area Boundary								
	Within Service Area			Within Service Area			Planned Area Boundary				Total	
	Existing Development (net acre)	Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	New Development (net acre)	Future Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	Existing Development (net acre)	New Development (net acre)	Future Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	Total Development within PAB (net acre)	Average Daily Demand (gpd)
Residential												
Low Density	2,837	1,900	5,390,015	1,026	1,900	1,949,510	539	1,401	1,900	3,687,132	5,804	11,026,658
Medium Density	498	2,240	1,115,209	225	2,240	504,025	35	312	2,240	777,612	1,070	2,396,845
High Density	84	3,100	261,950	73	3,100	227,202	0	64	3,100	198,130	222	687,282
<i>Subtotal Residential</i>	3,419		6,767,174	1,324		2,680,737	574	1,777		4,662,874	7,095	14,110,785
Mixed Use												
Office Residential	89	1,800	159,750	25	1,800	45,144	0	0	1,800	0	114	204,894
Neighborhood Mixed Use	12	1,450	17,951	42	1,450	60,656	0	15	1,450	22,407	70	101,014
Corridor Mixed Use	250	1,060	265,467	225	1,060	238,707	10	3	1,060	14,098	489	518,272
Downtown Mixed Use	81	3,430	276,218	42	3,430	145,363	0	0	3,430	0	123	421,581
<i>Subtotal Mixed Use</i>	432		719,386	334		489,871	10	18		36,505	795	1,245,762
Non-Residential												
Neighborhood Commercial	27	660	17,886	26	660	17,198	8	12	660	13,114	73	48,198
Regional Commercial	216	820	177,327	160	820	130,833	18	169	820	153,962	564	462,121
Service Commercial	103	530	54,325	54	530	28,397	56	63	530	63,048	275	145,771
Highway Commercial	48	660	31,416	68	660	44,609	16	16	660	21,193	147	97,218
Office	88	1,060	93,503	30	1,060	32,213	0	0	1,060	0	119	125,716
Light Industrial	105	610	64,209	61	610	36,911	83	557	610	390,449	806	491,569
Heavy Industrial	376	690	259,212	568	690	391,672	211	2,607	690	1,944,041	3,761	2,594,924
Airport Protection	0	0	0	125	0	0	111	563	0	0	799	0
Educational Facilities	445	1,630	725,872	117	1,630	190,123	11	97	1,630	175,078	669	1,091,073
Public Facilities	438	530	232,193	56	530	29,675	3	13	530	8,454	510	270,321
Open Space with Irrigation	16	2,690	42,314	45	2,690	119,866	0	121	2,690	326,674	182	488,854
Open Space without Irrigation	346	0	0	65	0	0	41	54	0	0	507	0
Interest Area	0	1,800	0	0	1,800	0	49	552	1,800	1,082,466	601	1,082,466
<i>Subtotal Non-Residential</i>	2,208		1,698,255	1,372		1,021,497	607	4,825		4,178,477	9,012	6,898,230
Totals	6,059		9,184,815	3,031		4,192,105	1,192	6,621		8,877,856	16,903	22,254,777

has an intuitive graphical interface and is directly integrated with ESRI's ArcGIS (GIS), providing a useful modeling tool linked to the newly developed City GIS.

ES.8 FIRE FLOW ANALYSIS

The fire flow analysis consisted of using the maximum day demand in the hydraulic model and applying hypothetical fire flows. The magnitude and duration of each fire flow was based on the governing land use type within proximity to the fire location. The criterion for fire flows was also summarized in the System Performance and Design Criteria chapter. The hydraulic model indicates that the City's existing distribution system performed adequately during the fire flow analysis, with the exceptions noted in the Evaluation and Proposed Improvements Chapter.

ES.9 STORAGE AND SUPPLY EVALUATION

The existing and future supply requirements were evaluated in accordance with the City's System Performance and Design Criteria. Based on the City's existing firm groundwater well capacity, the City is capable of meeting the existing maximum day demand; based on the anticipated future growth, the City will be required to construct 11 new wells by the buildout horizon of the Master Plan.

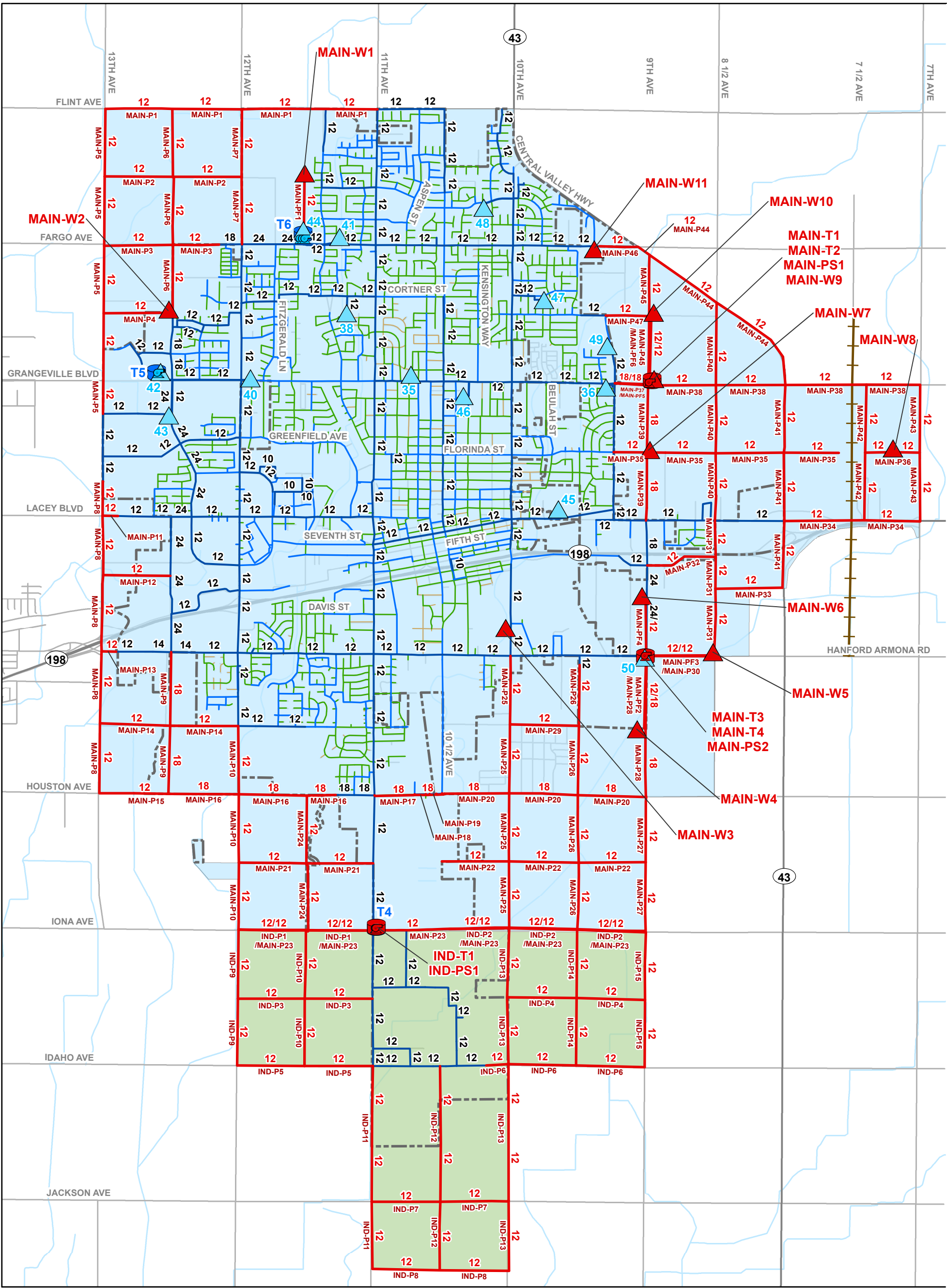
Existing storage requirements were identified for the City's two pressure zones and included the operational and fire storage components. The total City-wide required storage for existing domestic water demands is calculated at 5.8 MG. Future storage requirements were identified based on the anticipated future growth and will require an additional 5.4 MG of operational storage capacity.

ES.10 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program costs for the projects identified in this master plan for mitigating existing system deficiencies and for serving anticipated future growth throughout the City are summarized on [Table ES.3](#) and are graphically represented on [Figure ES.3](#).

The estimated construction costs include the baseline costs plus **15 percent** contingency allowance to account for unforeseen events and unknown field conditions. Capital improvement costs include the estimated construction costs plus **15 percent** project-related costs (engineering design, project administration, construction management and inspection, and legal costs).

The costs in this Water System Master Plan were benchmarked using a 20-City national average Engineering News Record (ENR) Construction Cost Index (CCI) of 10,532, reflecting a date of January 2017. In total, the CIP includes approximately 70 miles of pipeline improvements, 11 new wells, five new storage reservoirs, and three new booster stations, with a project cost totaling over \$95.2 million dollars.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Proposed Improvements**
- Tanks
 - Wells
 - Pump Stations
 - Pipes
 - High Speed Rail Alignment

- Pressure Zones**
- Main
 - Industrial Park

- Existing System**
- Tanks
 - Wells
 - Pump Stations

- Pipes By Size**
- 4" and Smaller
 - 6"
 - 8"
 - 10" and Larger

- City Limits**
- Streets
 - Highways
 - Waterways



ES. 3
Capital Improvement
Program
Water System Master Plan
City of Hanford



Table ES.3 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Railroad	Number of Casings ¹		Unit Cost ²	Infr. Cost	Baseline Construction Costs	Estimated Construction Costs ³	Land Acquisition Costs ⁴	Capital Improvement Costs ⁵	Existing Users	Future Users	Existing Users	Future Users
									(in)	(ft)										
Pipeline Improvements																				
Main Pressure Zone																				
MAIN-P1	Pipeline	Flint Ave	From 11th Ave to 13th Ave	-	New	12	10,600	1		2	83	1,306,372	1,306,372	1,502,327		1,727,677	0%	100%	0	1,727,677
MAIN-P2	Pipeline	ROW	From approx 12th Ave to 13th Ave	-	New	12	5,350			1	83	586,956	586,956	674,999		776,249	0%	100%	0	776,249
MAIN-P3	Pipeline	Fargo Ave	From approx 270 ft w/o Corvina Pl to 13th Ave	-	New	12	4,475			1	83	513,986	513,986	591,084		679,747	0%	100%	0	679,747
MAIN-P4	Pipeline	ROW	From Centennial Dr to 13th Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P5	Pipeline	13th Ave	From Flint Ave to approx 1,300 ft s/o Grangeville Blvd	-	New	12	11,900			2	83	1,273,983	1,273,983	1,465,081		1,684,843	0%	100%	0	1,684,843
MAIN-P6	Pipeline	Centennial Dr	From Flint Ave to approx 2,600 ft n/o Grangeville Blvd	-	New	12	7,975			2	83	946,664	946,664	1,088,663		1,251,963	0%	100%	0	1,251,963
MAIN-P7	Pipeline	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,275			1	83	580,701	580,701	667,806		767,977	0%	100%	0	767,977
MAIN-P8	Pipeline	13th Ave	From approx 1,350 ft n/o Lacey Blvd to Houston Ave	-	New	12	12,200		1	3	83	1,862,201	1,862,201	2,141,532		2,462,761	0%	100%	0	2,462,761
MAIN-P9	Pipeline	12 1/2 Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,525				159	880,543	880,543	1,012,625		1,164,519	40%	60%	465,807	698,711
MAIN-P10	Pipeline	12th Ave	From Hume Ave to Iona Ave	-	New	12	7,950			1	83	803,779	803,779	924,346		1,062,997	0%	100%	0	1,062,997
MAIN-P11	Pipeline	Lacey Blvd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	600				83	50,036	50,036	57,542		66,173	0%	100%	0	66,173
MAIN-P12	Pipeline	ROW	From 12 1/2 Ave to 13th Ave	-	New	12	2,625				83	218,908	218,908	251,744		289,506	0%	100%	0	289,506
MAIN-P13	Pipeline	Hanford Armona Rd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	575				83	47,951	47,951	55,144		63,416	0%	100%	0	63,416
MAIN-P14	Pipeline	Hume Ave	From 12th Ave to 13th Ave	-	New	12	5,400				83	450,325	450,325	517,874		595,555	0%	100%	0	595,555
MAIN-P15	Pipeline	Houston Ave	From approx 12 1/2 Ave to 13th Ave	-	New	12	2,700			1	83	365,963	365,963	420,857		483,986	40%	60%	193,594	290,391
MAIN-P16	Pipeline	Houston Ave	From 12 1/2 Ave to approx 700 ft w/o Courtright Dr	-	New	18	6,525			2	159	1,374,318	1,374,318	1,580,465		1,817,535	40%	60%	727,014	1,090,521
MAIN-P17	Pipeline	Houston Ave	From 11th Ave to approx 1,600 ft e/o 11th Ave	6	Replace	18	1,600				159	254,999	254,999	293,249		337,236	40%	60%	134,894	202,342
MAIN-P18	Pipeline	Houston Ave	From approx 1,600 ft e/o 11th Ave to approx 2,000 ft e/o 11th Ave	12	Replace	18	475				159	75,703	75,703	87,058		100,117	40%	60%	40,047	60,070
MAIN-P19	Pipeline	Houston Ave	From approx 2,000 ft e/o 11th Ave to 10 1/2 Ave	8	Replace	18	925				159	147,421	147,421	169,534		194,965	40%	60%	77,986	116,979
MAIN-P20	Pipeline	Houston Ave	From 10 1/2 Ave to 9th Ave	-	New	18	7,875			1	159	1,422,273	1,422,273	1,635,614		1,880,956	0%	100%	0	1,880,956
MAIN-P21	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250			2	83	719,416	719,416	827,329		951,428	20%	80%	190,286	761,142
MAIN-P22	Pipeline	ROW	From 9th Ave to 10 1/2 Ave	-	New	12	7,950	1		1	83	944,579	944,579	1,086,266		1,249,205	0%	100%	0	1,249,205
MAIN-P23	Pipeline	Iona Ave	From 9th Ave to 12th Ave	-	New	12	16,100	1		2	83	1,765,036	1,765,036	2,029,792		2,334,261	25%	75%	583,565	1,750,695
MAIN-P24	Pipeline	ROW	From Houston Ave to Iona Ave	-	New	12	5,275			1	83	580,701	580,701	667,806		767,977	0%	100%	0	767,977
MAIN-P25	Pipeline	10th Ave	From Hanford Armona Rd to Iona Ave	-	New	12	10,600				83	883,972	883,972	1,016,567		1,169,053	0%	100%	0	1,169,053
MAIN-P26	Pipeline	ROW	From approx 370 ft s/o Hanford Armona Rd to Iona Ave	-	New	12	10,325			3	83	1,283,439	1,283,439	1,475,954		1,697,347	40%	60%	678,939	1,018,408
MAIN-P27	Pipeline	9th Ave	From Houston Ave to Iona Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P28	Pipeline	9th Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,500			1	159	1,043,759	1,043,759	1,200,323		1,380,371	0%	100%	0	1,380,371
MAIN-P29	Pipeline	ROW	From approx 700 ft e/o 9 3/4 Ave to 10th Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P30	Pipeline	Hanford Armona Rd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650			1	83	361,793	361,793	416,062		478,471	0%	100%	0	478,471
MAIN-P31	Pipeline	ROW	From Lacey Blvd to Hanford Armona Rd	-	New	12	5,300		1	1	83	1,005,186	1,005,186	1,155,964		1,329,358	0%	100%	0	1,329,358
MAIN-P32	Pipeline	Third St	From 9th Ave to 8 1/2 Ave	-	New	12	2,800				83	233,502	233,502	268,527		308,806	0%	100%	0	308,806
MAIN-P33	Pipeline	ROW	From HWY 43 to 8 1/2 Ave	-	New	12	2,625				83	218,908	218,908	251,744		289,506	0%	100%	0	289,506

Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Table ES.3 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Railroad	Number of Casings ¹		Unit Cost ²	Infr. Cost	Baseline Construction Costs (\$)	Estimated Construction Costs ³ (\$)	Land Acquisition Costs ⁴ (\$)	Capital Improvement Costs ⁵ (\$)	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
									(in)	(ft)										
MAIN-P34	Pipeline	Lacey Blvd	From approx 7th Ave to HWY 43	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
MAIN-P35	Pipeline	ROW	From 7th Ave to 9 1/4 Ave	-	New	12	8,775				83	731,778	731,778	841,545		967,777	0%	100%	0	967,777
MAIN-P36	Pipeline	ROW	From 7th Ave to approx 2,600 ft e/o HWY 43	-	New	12	2,125				83	177,211	177,211	203,793		234,362	0%	100%	0	234,362
MAIN-P37	Pipeline	Grangeville Blvd	From approx 1,300 ft e/o 9 1/4 Ave to 9 1/4 Ave	-	New	18	1,300				159	207,187	207,187	238,265		274,004	40%	60%	109,602	164,403
MAIN-P38	Pipeline	Grangeville Blvd	From 7th Ave to approx 1,300 ft e/o 9 1/4 Ave	-	New	12	10,625				83	886,057	886,057	1,018,965		1,171,810	0%	100%	0	1,171,810
MAIN-P39	Pipeline	9th Ave	From Grangeville Blvd to Lacey Blvd	-	New	18	5,300				159	844,684	844,684	971,387		1,117,095	0%	100%	0	1,117,095
MAIN-P40	Pipeline	8 1/2 Ave	From HWY 43 to Lacey Blvd	-	New	12	8,525	1			83	851,730	851,730	979,490		1,126,413	0%	100%	0	1,126,413
MAIN-P41	Pipeline	HWY 43	From Grangeville Blvd to approx 2,600 ft s/o Lacey Blvd	-	New	12	7,925	1	1		83	1,224,094	1,224,094	1,407,708		1,618,864	0%	100%	0	1,618,864
MAIN-P42	Pipeline	ROW	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			83	582,786	582,786	670,204		770,734	0%	100%	0	770,734
MAIN-P43	Pipeline	7th Ave	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			83	582,786	582,786	670,204		770,734	0%	100%	0	770,734
MAIN-P44	Pipeline	HWY 43	From Fargo Ave to Grangeville Blvd	-	New	12	8,250			1	83	828,797	828,797	953,116		1,096,084	0%	100%	0	1,096,084
MAIN-P45	Pipeline	9th Ave	From HWY 43 to Grangeville Blvd	-	New	12	5,100			1	83	566,107	566,107	651,023		748,677	0%	100%	0	748,677
MAIN-P46	Pipeline	Fargo Ave	From HWY 43 to approx 200 ft e/o Meadow View Rd	-	New	12	1,500				83	125,090	125,090	143,854		165,432	0%	100%	0	165,432
MAIN-P47	Pipeline	Leland Wy	From approx 1,700 ft e/o 9 1/4 Ave to 9th Ave	-	New	12	1,700				83	141,769	141,769	163,034		187,490	0%	100%	0	187,490
						Subtotal - Main Pressure Zone						31,070,923	35,731,561	41,091,295			3,201,734	37,889,561		
Industrial Park Pressure Zone																				
IND-P1	Pipeline	Iona Ave	From 11th Ave to 12th Ave	-	New	12	5,250				83	437,816	437,816	503,489		579,012	0%	100%	0	579,012
IND-P2	Pipeline	Iona Ave	From 9th Ave to approx 2,340 ft w/o 10th Ave	-	New	12	7,675			2	83	921,646	921,646	1,059,892		1,218,876	0%	100%	0	1,218,876
IND-P3	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250				83	437,816	437,816	503,489		579,012	0%	100%	0	579,012
IND-P4	Pipeline	ROW	From 9th Ave to 10th Ave	-	New	12	5,375			1	83	589,040	589,040	677,396		779,006	0%	100%	0	779,006
IND-P5	Pipeline	Idaho Ave	From 11th Ave to 12th Ave	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
IND-P6	Pipeline	Idaho Ave	From 9th Ave to approx 860 ft w/o 10th Ave	-	New	12	6,175			1	83	655,755	655,755	754,119		867,236	0%	100%	0	867,236
IND-P7	Pipeline	Jackson Ave	From 10th Ave to 11th Ave	-	New	12	5,350	1			83	586,956	586,956	674,999		776,249	0%	100%	0	776,249
IND-P8	Pipeline	ROW	From 10th Ave to 11th Ave	-	New	12	5,325	1			83	584,871	584,871	672,601		773,492	0%	100%	0	773,492
IND-P9	Pipeline	12th Ave	From Iona Ave to Idaho Ave	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
IND-P10	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,375				83	448,240	448,240	515,476		592,798	0%	100%	0	592,798
IND-P11	Pipeline	11th Ave	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,925			1	83	801,694	801,694	921,948		1,060,240	0%	100%	0	1,060,240
IND-P12	Pipeline	ROW	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,975				83	665,064	665,064	764,823		879,547	0%	100%	0	879,547
IND-P13	Pipeline	10th Ave	From Iona Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	13,400			1	83	1,258,274	1,258,274	1,447,015		1,664,067	0%	100%	0	1,664,067
IND-P14	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,325				83	444,071	444,071	510,681		587,284	0%	100%	0	587,284
IND-P15	Pipeline	9th Ave	From Iona Ave to Idaho Ave	-	New	12	5,275			2	83	721,501	721,501	829,726		954,185	0%	100%	0	954,185
						Subtotal - Industrial Pressure Zone						9,436,715	10,852,222	12,480,056			0	12,480,056		

Table ES.3 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Railroad	Number of Casings ¹		Unit Cost ²	Infr. Cost	Baseline Construction Costs (\$)	Estimated Construction Costs ³ (\$)	Land Acquisition Costs ⁴ (\$)	Capital Improvement Costs ⁵ (\$)	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
									(in)	(ft)										
Tank Feed Pipelines																				
MAIN-PF1	Pipeline	ROW	From approx 800 ft w/o the intersection of Julia Wy and Glacier Wy to approx 400 ft n/o Fargo Ave	-	New	12	2,325				83	193,890	193,890	222,974		256,420	0%	100%	0	256,420
MAIN-PF2	Pipeline	9th Ave	From Hanford Armona Rd to approx 2,800 ft s/o Hanford Armona Rd	-	New	12	2,825				83	235,587	235,587	270,925		311,564	0%	100%	0	311,564
MAIN-PF3	Pipeline	Hanford Armona Rd	From approx 2,700 ft e/o 9th Ave to 9th Ave	-	New	12	2,675				83	223,078	223,078	256,539		295,020	0%	100%	0	295,020
MAIN-PF4	Pipeline	9th Ave	From approx 2,400 ft n/o Hanford Armona Rd to Hanford Armona Rd	-	New	12	2,400				83	200,145	200,145	230,166		264,691	0%	100%	0	264,691
MAIN-PF5	Pipeline	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,575				83	131,345	131,345	151,047		173,704	0%	100%	0	173,704
MAIN-PF6	Pipeline	9th Ave	From approx 2,600 ft n/o Grangeville Blvd to Grangeville Blvd	-	New	18	2,625				159	418,358	418,358	481,111		553,278	0%	100%	0	553,278
						Subtotal - Industrial Pressure Zone						1,402,402	1,612,762		1,854,676			0	1,854,676	
						Subtotal - Pipeline Improvements						41,910,039	48,196,545		55,426,027			3,201,734	52,224,293	
Groundwater Well Improvements																				
Pump Capacity (gpm)																				
MAIN-W1	Groundwater Well	Approx 800 ft w/o the intersection of Julia Wy and Glacier Wy			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W2	Groundwater Well	Centennial Dr approx 2,600 ft n/o Grangeville Blvd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W3	Groundwater Well	10th Ave approx 1,100 ft n/o Hanford Armona Rd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W4	Groundwater Well	9th Ave approx 2,800 ft s/o Hanford Armona Rd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W5	Groundwater Well	8 1/2 Ave and Hanford Armona Rd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W6	Groundwater Well	9th Ave approx 2,400 ft n/o Hanford Armona Rd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W7	Groundwater Well	9th Ave and approx 2,600 ft s/o Grangeville Blvd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W8	Groundwater Well	ROW Approx 4,200 ft e/o 8th Avenue s/o Grangeville Blvd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W9	Groundwater Well	Grangeville Blvd and 9th Ave			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W10	Groundwater Well	Leland Way and 9th Ave			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
MAIN-W11	Groundwater Well	Fargo Ave and Meadow View Rd			New		1,500				-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259
						Subtotal - Groundwater Well Improvements						9,958,300	11,452,045	220,000	13,422,852			0	13,422,852	
Pump Station Improvements																				
Firm Pump Station Capacity (gpm)																				
Main Pressure Zone																				
MAIN-PS1	Pump Station	Grangeville Blvd and 9th Ave			New		3 @ 3,100 gpm				-	3,041,965	3,041,965	3,498,260		4,022,999	60%	40%	2,413,799	1,609,200
MAIN-PS2	Pump Station	Hanford Armona Rd and 9th Ave			New		3 @ 3,100 gpm				-	3,041,965	3,041,965	3,498,260		4,022,999	0%	100%	0	4,022,999
						Subtotal - Main Pressure Zone						6,083,930	6,996,520		8,045,998			2,413,799	5,632,198	
Industrial Park Pressure Zone																				
Firm Pump Station Capacity (gpm)																				
IND-PS1	Pump Station	11th Ave and Iona Ave			Additional Capacity		4 @ 1,400 gpm				-	2,070,640	2,070,640	2,381,236		2,738,421	25%	75%	684,605	2,053,816
						Subtotal - Industrial Pressure Zone						2,070,640	2,381,236		2,738,421			684,605	2,053,816	
						Subtotal - Pump Station Improvements						8,154,570	9,377,756		10,784,419			3,098,405	7,686,014	

Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Table ES.3 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings ¹			Unit Cost ²	Infr. Cost	Baseline Construction Costs	Estimated Construction Costs ³	Land Acquisition Costs ⁴	Capital Improvement Costs ⁵	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)	Railroad	Highway	Canal/Slough	(\$/unit)	(\$)	(\$)	(\$)	(\$)	(\$)	(%)	(%)	(\$)	(\$)
Tank Improvements																				
Main Pressure Zone																				
MAIN-T1	Storage Tank	Grangeville Blvd and 9th Ave		New		1.5			-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	100%	0%	3,479,975	0		
MAIN-T2	Storage Tank	Grangeville Blvd and 9th Ave		New		1.5			-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
MAIN-T3	Storage Tank	Hanford Armona Rd and 9th Ave		New		1.5			-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
MAIN-T4	Storage Tank	Hanford Armona Rd and 9th Ave		New		1.5			-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
					Subtotal - Main Pressure Zone						10,316,748	11,864,260	240,000	13,919,899			3,479,975	10,439,924		
Industrial Park Pressure Zone																				
Storage Tank Capacity (MG)																				
IND-T1	Storage Tank	11th Ave and Iona Ave		New		0.7			-	1,203,621	1,203,621	1,384,164	60,000	1,660,788	6%	94%	99,647	1,561,141		
					Subtotal - Industrial Pressure Zone						1,203,621	1,384,164	60,000	1,660,788			99,647	1,561,141		
					Subtotal - Storage Tank Improvements						11,520,368	13,248,424	300,000	15,580,687			3,579,622	12,001,065		
Total Improvement Cost																				
					Pipeline Improvements						41,910,039	48,196,545	0	55,426,027			3,201,734	52,224,293		
					Groundwater Wells						9,958,300	11,452,045	220,000	13,422,852			0	13,422,852		
					Pump Stations						8,154,570	9,377,756	0	10,784,419			3,098,405	7,686,014		
					Storage Tanks						11,520,368	13,248,424	300,000	15,580,687			3,579,622	12,001,065		
					Total Improvement Costs						71,543,278	82,274,769	520,000	95,213,985			9,879,761	85,334,224		



Notes:

1. Casing diameter assumed at 20 inches greater than carrier pipe. Railroad and canal/slough casings assumed at a length of 200 feet; highway casings assumed at a length of 600 feet.

2. Unit costs based on a January 2017 ENR CCI of 10,532.

3. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.

4. It was assumed that new storage reservoirs would require 1.5 acres of land acquisition while new groundwater wells would require 0.5 acres of land acquisition.

5. Estimated construction cost and land acquisition cost plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs

CHAPTER 1 - INTRODUCTION

This chapter provides a brief background of the City of Hanford's domestic water system, the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

1.1 BACKGROUND

The City of Hanford (City) is located approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure 1.1](#)). The City provides potable water service to approximately 56,000 residents, as well as commercial, industrial, and institutional accounts. The City operates a domestic water distribution system that consists of 14 groundwater wells, three storage reservoirs providing 3.5 million gallons (MG) total storage, and approximately 217 miles of distribution pipelines.

In 1996, the City developed a Water System Master Plan (WSMP) that identified capacity deficiencies in the existing water system and recommended improvements to alleviate existing deficiencies and serve future developments in the Hanford Planning Area.

Recognizing the importance of planning, developing, and financing system facilities to provide reliable water service to existing customers and for servicing anticipated growth within the Hanford Planning Area, the City initiated updating elements of the 1996 WSMP, to reflect current land use conditions.

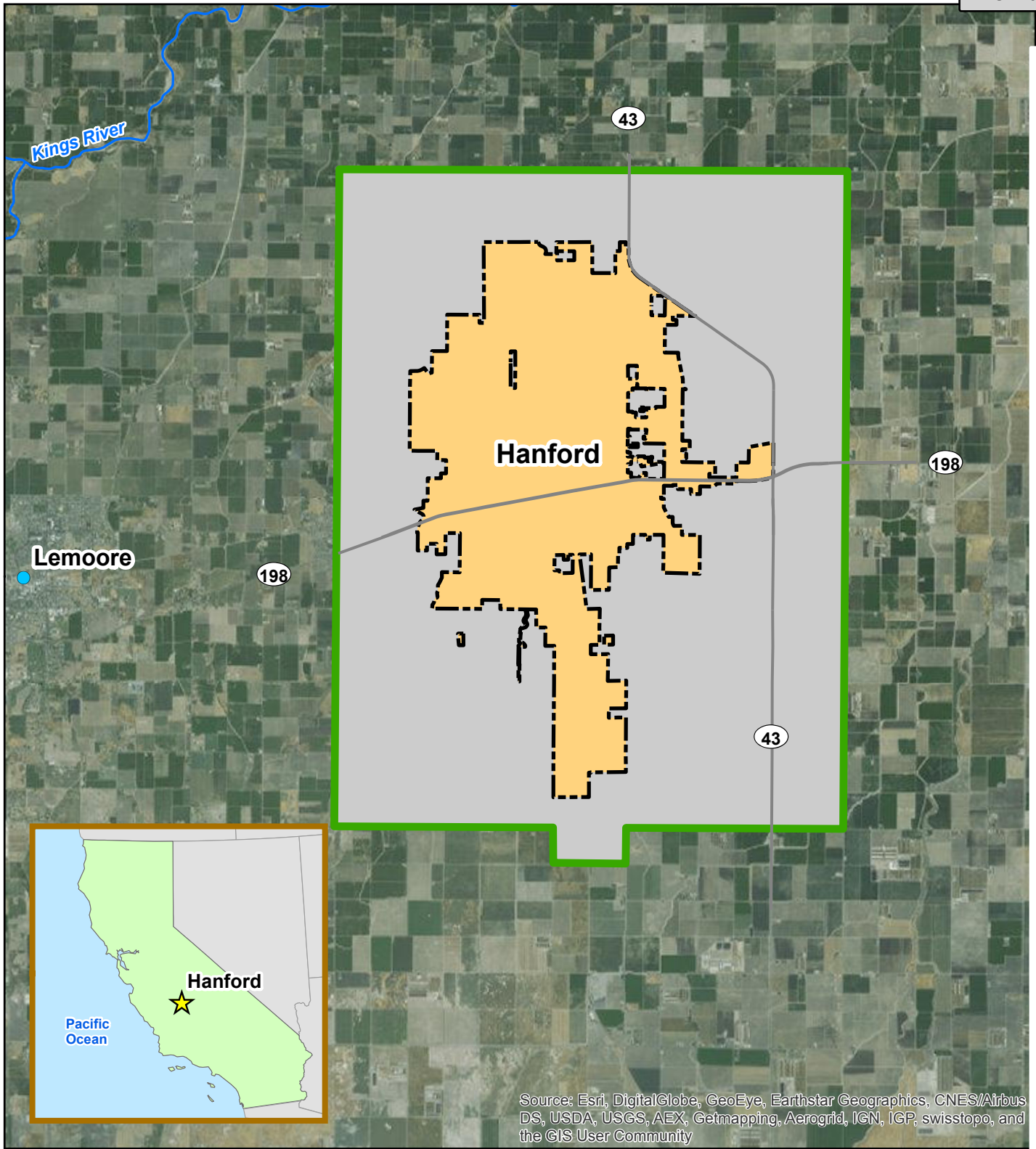
1.2 SCOPE OF WORK

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. This 2017 WSMP is intended to serve as a tool for planning and phasing the construction of future domestic water system infrastructure for the projected buildout of the City of Hanford. The 2017 WSMP evaluates the City's water system and recommends capacity improvements necessary to service the needs of existing users and for servicing the future growth of the City.

The planning boundary and horizon for the master plan were developed in accordance with the City's recently adopted General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

This master plan included the following tasks:

- Summarize the City's existing domestic water system facilities
- Document growth planning assumptions and known future developments



Legend

- Cities
- City Limits Area
- General Plan Area
- Highways
- ~ River

AKEL
ENGINEERING GROUP, INC.

Update: January 18, 2016

0 0.5 1 2 Miles



Figure 1.1
Regional Location Map
Water System Master Plan
City of Hanford



- Update the domestic water system performance criteria
- Project future domestic water demands
- Update the hydraulic model using available data
- Evaluate the domestic water facilities to meet existing and projected demand requirements and fire flows
- Perform a capacity analysis for major distribution mains
- Perform a fire flow analysis
- Recommend a capital improvement program (CIP) with an opinion of probable costs
- Perform a capacity allocation analysis for cost sharing purposes
- Develop a 2017 Water System Master Plan report

1.3 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, they have been coordinated for consistency with the City's General Plan. Additionally, each document has been cross referenced to reflect relevant analysis results with the other documents.

1.4 PREVIOUS MASTER PLANS

The City's most recent water master plan was completed in 1996. This master plan included an evaluation of servicing growth to the Planned Area Boundary, evaluated existing demands and projected future demands, evaluated groundwater conditions and management, and recommended phased improvements to the water system for a horizon year of 2020.

1.5 RELEVANT REPORTS

The following lists relevant reports that were used in the completion of this master plan, as well as a brief description of each document:

- **2010 and 2015 Urban Water Management Plan (2010 UWMP and 2015 UWMP).** These plans establish benchmark per capita water usage and targets to achieve higher levels of water conservation for the sustainability of water supply sources. This includes adopting

an updated water shortage contingency plan, defining sources of supply, addressing supply reliability, and projecting sustainable supply yields and future demands.

1.6 REPORT ORGANIZATION

The water system master plan report contains the following chapters:

Chapter 1 - Introduction. This chapter provides a brief background of the City of Hanford's domestic water system, the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

Chapter 2 - Planning Areas Characteristics. This chapter presents a discussion of the planning area characteristics for this master plan and defines the land use classifications. The planning area is divided into several planning sub-areas, as established by the City's planning division.

Chapter 3 - System Performance and Design Criteria. This chapter provides a description of the City's existing domestic water system and facilities including the distribution mains, storage reservoirs, and existing wells.

Chapter 4 - Existing Domestic Water Facilities. This chapter presents the City's performance and design criteria, which was used in this analysis for identifying current system capacity deficiencies and for sizing proposed distribution mains, storage reservoirs, and wells.

Chapter 5 - Water Demands and Supply Characteristics. This chapter summarizes the existing and future domestic water demands, and the diurnal pattern used for the hydraulic analysis.

Chapter 6 - Hydraulic Model Development. This chapter describes the development and calibration of the City's domestic water distribution system hydraulic model. The hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

Chapter 7 - Evaluation and Proposed Improvements. This section presents a summary of the domestic water system evaluation and identifies improvements needed to mitigate existing deficiencies, as well as improvements needed to expand the system and service growth.

Chapter 8 - Capital Improvement Program. This chapter provides a summary of the recommended domestic water system improvements to mitigate existing capacity deficiencies and to accommodate anticipated future growth. The chapter also presents the cost criteria and methodologies for developing the capital improvement program. Finally, a capacity allocation analysis, usually used for cost sharing purposes, is also included.

1.7 ACKNOWLEDGEMENTS

Obtaining the necessary information to successfully complete the analysis presented in this report, and developing the long-term strategy for mitigating the existing system deficiencies and

for accommodating future growth, was accomplished with the strong commitment and very active input from dedicated team members including:

- [Lou Camara](#), Director of Public Works
- [John Doyel](#), Director of Public Utilities / City Engineer
- [Darlene Mata](#), Community Development Director
- [Mike Cosenza](#), Utilities Superintendent
- [QK Inc](#), General Plan Consultant
- [John Zumwalt](#), City of Hanford Consultant

This report was prepared in conjunction with the General Plan Update, and included coordination with the QK and John Zumwalt, who were the General Plan consultants.

1.8 UNIT CONVERSIONS AND ABBREVIATIONS

Engineering units were used in reporting flow rates and volumes pertaining to the design and operation of various components of the domestic water distribution system. Where it was necessary to report values in smaller or larger quantities, different sets of units were used to describe the same parameter. Values reported in one set of units can be converted to another set of units by applying a multiplication factor. A list of multiplication factors for units used in this report is shown on [Table 1.1](#).

Various abbreviations and acronyms were also used in this report to represent relevant water system terminologies and engineering units. A list of abbreviations and acronyms is included in [Table 1.2](#).

1.9 GEOGRAPHIC INFORMATION SYSTEMS

This master planning effort made extensive use of Geographic Information Systems (GIS) technology, for completing the following tasks:

- Develop the physical characteristics of the hydraulic model (pipes and junctions, wells, and storage reservoirs).
- Allocate existing water demands, as extracted from the water billing records, and based on each user's physical address.
- Calculate and allocating future water demands, based on future developments water use.
- Extract ground elevations along the distribution mains from available contour maps.
- Generate maps and exhibits used in this master plan.

Table 1.1 Unit Conversions
 Water System Master Plan
 City of Hanford

Volume Unit Calculations		
To Convert From:	To:	Multiply by:
acre feet	gallons	325,851
acre feet	cubic feet	43,560
acre feet	million gallons	0.3259
cubic feet	gallons	7.481
cubic feet	acre feet	2.296×10^{-5}
cubic feet	million gallons	7.481×10^{-6}
gallons	cubic feet	0.1337
gallons	acre feet	3.069×10^{-6}
gallons	million gallons	1×10^{-6}
million gallons	gallons	1,000,000
million gallons	cubic feet	133,672
million gallons	acre feet	3.069
Flow Rate Calculations		
To Convert From:	To:	Multiply By:
ac-ft/yr	mgd	8.93×10^{-4}
ac-ft/yr	cfs	1.381×10^{-3}
ac-ft/yr	gpm	0.621
ac-ft/yr	gpd	892.7
cfs	mgd	0.646
cfs	gpm	448.8
cfs	ac-ft/yr	724
cfs	gpd	646300
gpd	mgd	1×10^{-6}
gpd	cfs	1.547×10^{-6}
gpd	gpm	6.944×10^{-4}
gpd	ac-ft/yr	1.12×10^{-3}
gpm	mgd	1.44×10^{-3}
gpm	cfs	2.228×10^{-3}
gpm	ac-ft/yr	1.61
gpm	gpd	1,440
mgd	cfs	1.547
mgd	gpm	694.4
mgd	ac-ft/yr	1,120
mgd	gpd	1,000,000

Table 1.2 Abbreviations and Acronyms
 Water System Master Plan
 City of Hanford

Abbreviation	Expansion	Abbreviation	Expansion
2010 UWMP	2010 Urban Water Management Plan	GIS	Geographic Information Systems
2015 UWMP	2015 Urban Water Management Plan	gpd	gallons per day
1996 WSMP	1996 Water System Master Plan	gpcd	gallons per day per capita
2017 WSMP	2017 Water System Master Plan	gpm	gallons per minute
AACE International	Association for the Advancement of Cost Engineering	hp	horsepower
AC	acre	HGL	hydraulic grade line
ACP	Asbestos Cement Pipe	HWL	high water level
ADD	average day demand	in	inch
Akel	Akel Engineering Group, Inc.	KCWD	Kings County Water District
CCI	Construction Cost Index	LAFCO	Local Agency Formation Commission
CDPH	California Department of Public Health	LF	linear feet
cfs	cubic feet per second	MDD	maximum day demand
CI	cast iron pipe	MG	million gallons
CIB	Capital Improvement Budget	MGD	million gallons per day
CIP	Capital Improvement Program	MMD	maximum month demand
City	City of Hanford	NFPA	National Fire Protection Association
DIP	Ductile Iron Pipe	PHD	peak hour demand
DU	dwelling unit	PRV	pressure reducing valve
EDU	equivalent dwelling unit	psi	pounds per square inch
ENR	Engineering News Record	ROW	Right of Way
EPA	Environmental Protection Agency	SCADA	Supervisory Control and Data Acquisition
EPS	Extended Period Simulation	SOI	Sphere of Influence
FRC	Facility Reserve Charge	TBD	to be determined
ft	feet	ULL	Urban Limit Line
fps	feet per second	WSMP	Water System Master Plan
FY	Fiscal Year		

CHAPTER 2 - PLANNING AREA CHARACTERISTICS

This chapter presents a discussion of the planning area characteristics for this master plan and defines the land use classifications. The planning area is divided into several planning sub-areas, as established by the City's 2017 General Plan update.

2.1 STUDY AREA DESCRIPTION

The City is located in Kings County, approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure 2.1](#)). The City's closest neighbor, the City of Lemoore, is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east-west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City service area.

The City operates and maintains a domestic water system that covers the majority of the area within the City Limits. Currently, water is supplied to the City's customers via groundwater wells located throughout the City.

2.2 PLANNING AREA BOUNDARIES

The City's 2017 General Plan update designates two boundaries for defining urban expansion:

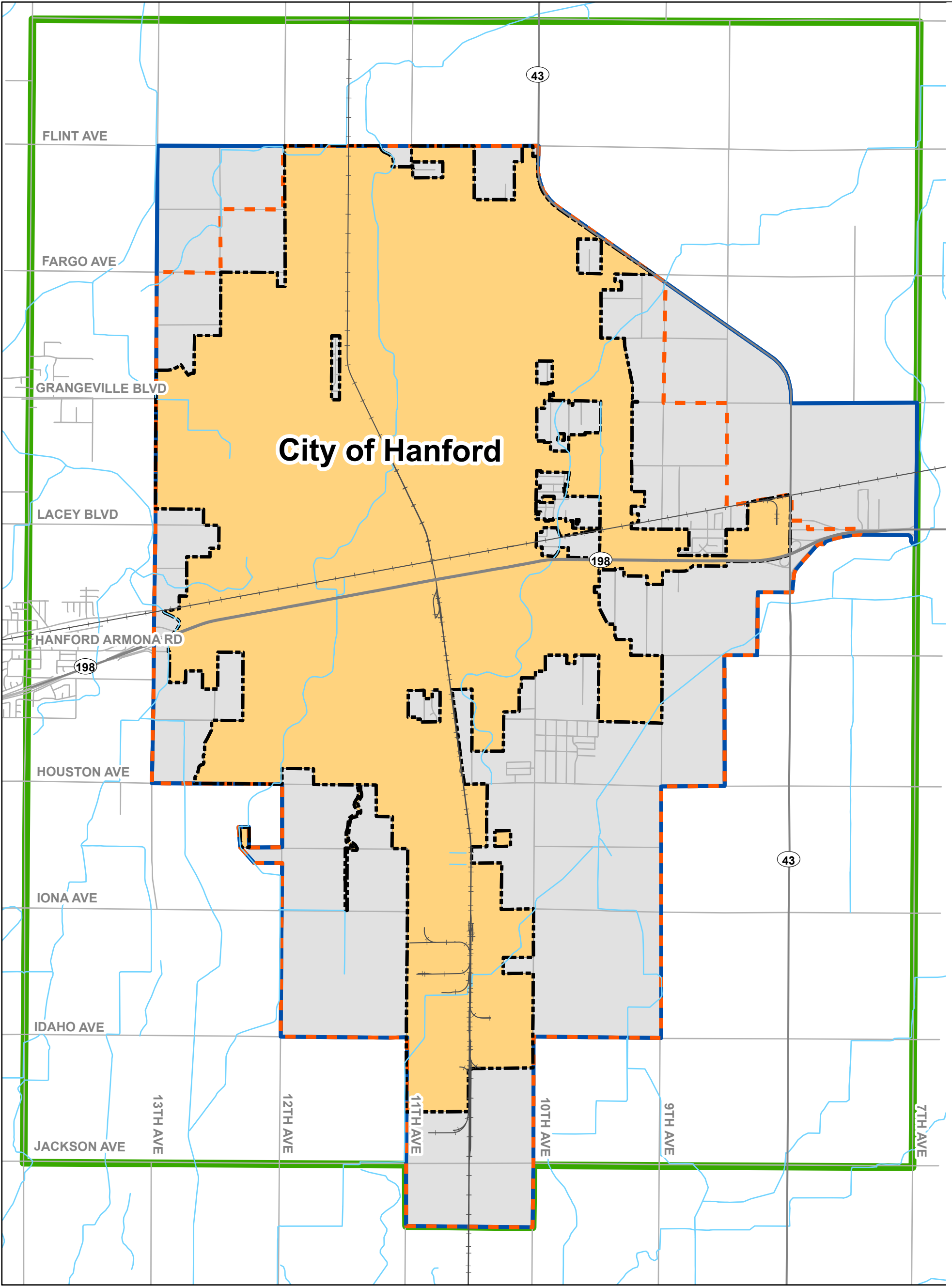
- **Planned Area Boundary:** This boundary serves as the maximum extent of the area planned for urban development.
- **2035 Growth Boundary:** This boundary serves as the extent of development with urban uses planned to occur during the 2015 to 2035 planning period.

It should be noted that for the purposes of this master plan, City Staff has requested improvements to be sized to account for the development of the Planned Area Boundary. Based on growth assumptions consistent with the 2017 General Plan Update, buildout of the Planned Area Boundary is not expected until approximately 2050.

2.3 WATER SERVICE AREA AND LAND USE

The City's water system services residential and non-residential lands within the City limits, as summarized on [Table 2.1](#). This service area includes:

- 6,059 net acres of developed lands inside the City limits.
- 2,765 net acres of undeveloped lands inside the City limits.
- 265 net acres of underutilized lands inside the City limits that are expected to redevelop.



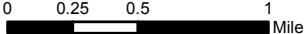
Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



Update: September 1, 2016



File Path: P:\wGIS\GIS_Projects\Hanford\2016\Water\Final\Hardcopy\HF_Fig2-1_PlanningArea_090116.mxd



Figure 2.1
Planning Area
Water System Master Plan
City of Hanford



Table 2.1 Existing and Future Development

Water System Master Plan
City of Hanford

Land Use Classification	Existing Service Area				2035 Growth Boundary				Planned Area Boundary				Total in 2035 Growth Boundary	Total in Planned Area Boundary
	Developed (net acres)	Undeveloped (net acres)	Underutilized (net acres)	Subtotal (net acres)	Developed (net acres)	Undeveloped (net acres)	Underutilized (net acres)	Subtotal (net acres)	Developed (net acres)	Undeveloped (net acres)	Underutilized (net acres)	Subtotal (net acres)		
Residential														
Low Density	2,837	991	35	3,863	476	790	82	1,348	63	529	0	592	5,211	5,804
Medium Density	498	220	5	723	35	215	21	271	0	72	4	76	994	1,070
High Density	84	65	8	158	0	38	0	38	0	26	0	26	196	222
Subtotal - Residential	3,419	1,276	48	4,744	511	1,043	103	1,657	63	627	4	694	6,401	7,095
Mixed Use														
Office Residential	89	20	5	114	0	0	0	0	0	0	0	0	114	114
Neighborhood Mixed Use	12	42	0	54	0	15	0	15	0	0	0	0	70	70
Corridor Mixed Use	250	139	86	476	10	3	0	13	0	0	0	0	489	489
Downtown Mixed Use	81	15	28	123	0	0	0	0	0	0	0	0	123	123
Subtotal - Mixed Use	432	216	119	767	10	18	0	29	0	0	0	0	795	795
Non-Residential														
Neighborhood Commercial	27	26	0	53	8	11	1	20	0	0	0	0	73	73
Regional Commercial	216	154	6	376	0	0	0	0	18	163	6	188	376	564
Service Commercial	103	47	7	156	56	63	0	119	0	0	0	0	275	275
Highway Commercial	48	68	0	115	16	4	12	32	0	0	0	0	147	147
Office	88	30	1	119	0	0	0	0	0	0	0	0	119	119
Light Industrial	105	20	40	166	83	520	36	640	0	0	0	0	806	806
Heavy Industrial	376	535	33	943	211	2,380	227	2,817	0	0	0	0	3,761	3,761
Airport Protection	0	125	0	125	111	501	63	674	0	0	0	0	799	799
Educational Facilities	445	110	7	562	11	17	0	28	0	80	0	80	590	669
Public Facilities	438	56	0	494	3	13	0	16	0	0	0	0	510	510
Open Space	362	105	4	471	41	159	0	200	0	17	0	17	671	688
Open Space with Irrigation	16	41	4		0	105	0		0	17	0			
Open Space without Irrigation	346	65	0		41	54	0		0	0	0			
Interest Area	0	0	0	0	0	0	0	0	49	509	43	601	0	601
Subtotal - Non-Residential	2,208	1,274	98	3,580	539	3,668	340	4,547	68	769	49	886	8,127	9,012
Total														
	6,059	2,765	265	9,090	1,060	4,729	443	6,233	131	1,396	53	1,580	15,323	16,903

The existing land use statistics were based on the land use information developed for the recently adopted General Plan ([Appendix A](#)). The land use is shown graphically on [Figure 2.2](#). The land use information included developed and undeveloped areas, which were classified into the following subtypes:

- Net Area. Net areas are typically fully developed, and exclude street and other associated right of ways.
- Gross Area. Gross areas are typically large undeveloped parcels, which may be subdivided in future developments. Part of these areas will include street and other right of ways.

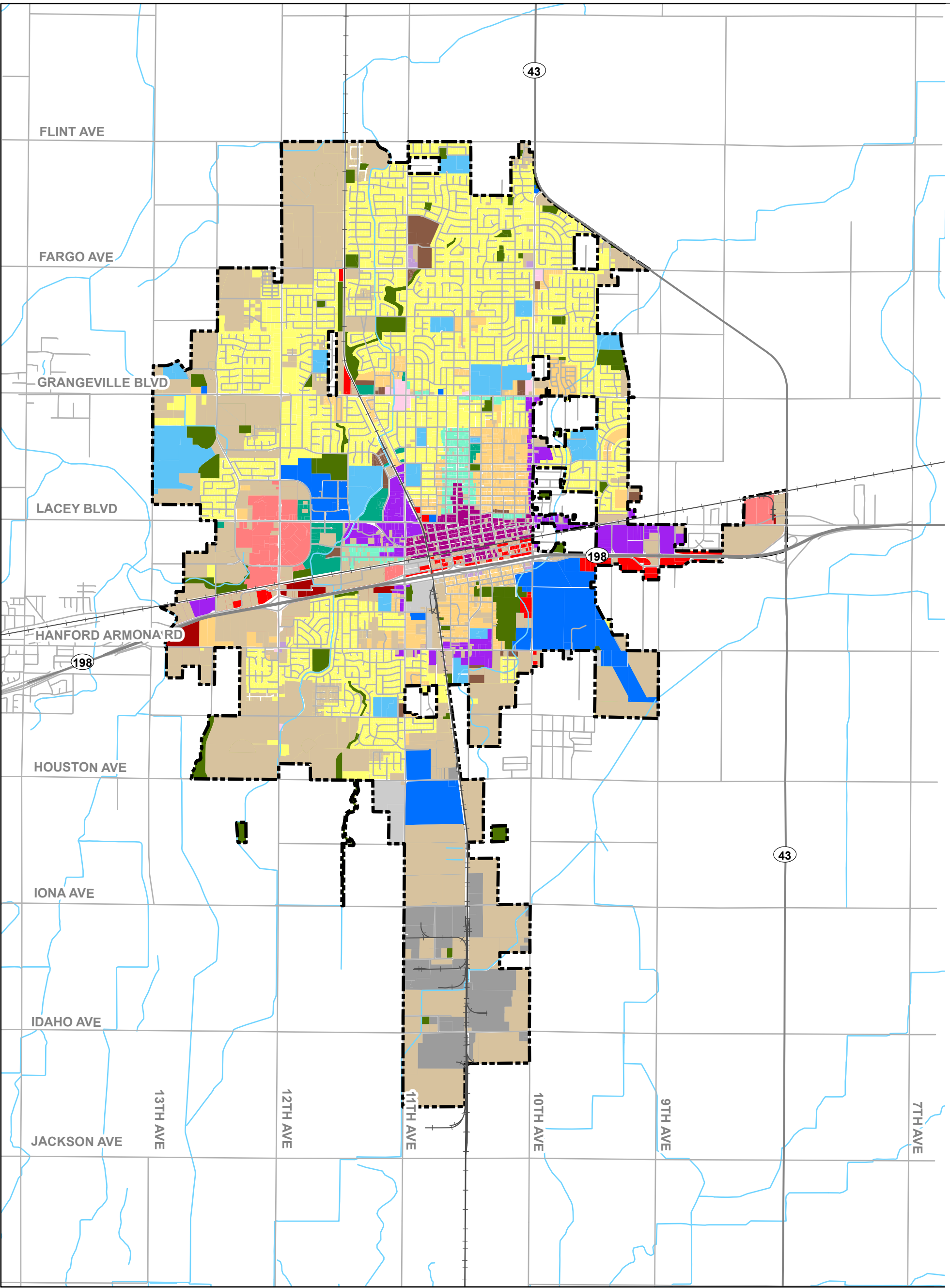
For the purpose of this master plan, existing and future land use was consolidated into net acres. In order to convert the areas that were identified as gross areas to net areas, the following reduction factors were applied:

- Single Family Residential land use types: 1 gross acre = 0.80 net acre
- Multi-Family Residential / Mixed Use land use types: 1 gross acre = 0.85 net acre
- Commercial / Industrial land use types: 1 gross acre = 0.90 net acre

The City's general plan anticipates approximately 16,900 net acres of residential and non-residential development at ultimate buildout of the Planned Area Boundary. The land use designations utilized in this master plan are consistent with the Land Use Element of the City's General Plan, as shown on [Figure 2.3](#).

2.4 HISTORICAL AND FUTURE GROWTH

The City's historical and projected population data are presented in [Table 2.2](#). The historical information was extracted from the previous master plan and California Department of Finance documents. The City's 2017 General Plan Update anticipates future growth of approximately 2.1 percent per year, which is slightly greater than historical trends approximately 2.0 percent per year. The 2017 General Plan Update is planning for a 2035 population of 90,000. [Table 2.2](#) documents the historical population from 2010 to 2015 and the projected population by year to the buildout master plan horizon of 2050. This horizon reflects the buildout of the Planned Area Boundary.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

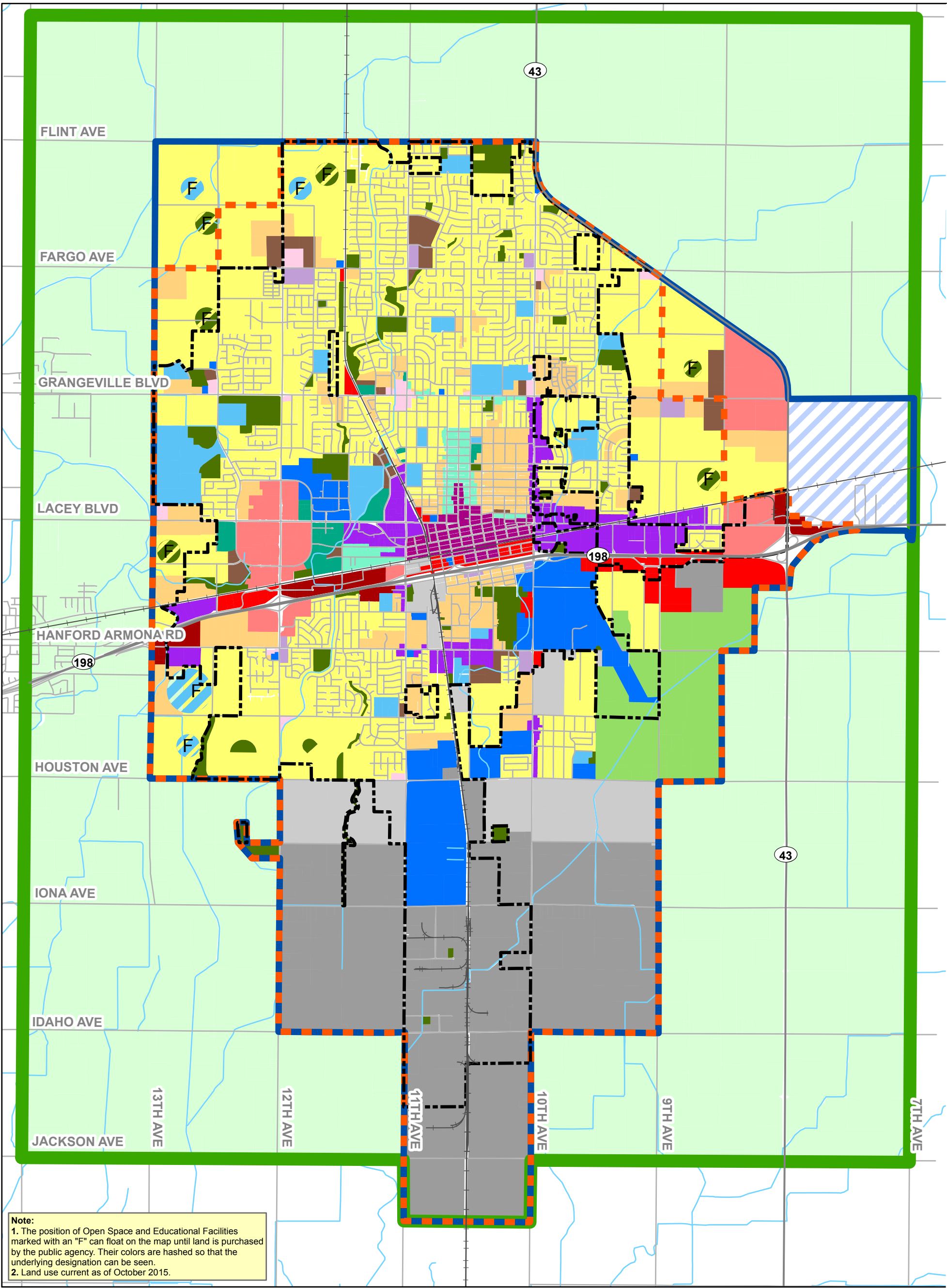
Legend

- | | | | |
|----------------------------|------------------------|------------------------|-----------|
| Low Density Residential | Office Residential | Airport Protection | Streets |
| Medium Density Residential | Office | Open Space | Waterways |
| High Density Residential | Light Industrial | Educational Facilities | |
| Neighborhood Commercial | Heavy Industrial | Public Facilities | |
| Regional Commercial | Neighborhood Mixed Use | Interest Area | |
| Service Commercial | Corridor Mixed Use | Vacant/Agriculture | |
| Highway Commercial | Downtown Mixed Use | City Limits | |



Figure 2.2
Existing Land Use
Water System Master Plan
City of Hanford





Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Note:
1. The position of Open Space and Educational Facilities marked with an "F" can float on the map until land is purchased by the public agency. Their colors are hashed so that the underlying designation can be seen.
2. Land use current as of October 2015.

- Legend**

Low Density Residential	Office Residential	Airport Protection	Planned Area Boundary
Medium Density Residential	Office	Open Space	General Plan Study Area Boundary
High Density Residential	Light Industrial	Educational Facilities	Streets
Neighborhood Commercial	Heavy Industrial	Public Facilities	Highways
Regional Commercial	Neighborhood Mixed Use	Interest Area	Waterways
Service Commercial	Corridor Mixed Use	City Limits	
Highway Commercial	Downtown Mixed Use	2035 Growth Boundary	



Figure 2.3
2035 General Plan
Land Use
Water System Master Plan
City of Hanford



Table 2.2 Historical and Projected Population

Water System Master Plan
City of Hanford

Year	Population	Annual Growth(%)
Historical		
2010	53,967	-
2011	54,146	0.3%
2012	54,541	0.7%
2013	54,513	-0.1%
2014	54,727	0.4%
2015	55,337	1.1%
Projected		
2016	57,070	3.1%
2017	58,803	3.0%
2018	60,536	2.9%
2019	62,270	2.9%
2020	64,003	2.8%
2021	65,736	2.7%
2022	67,469	2.6%
2023	69,202	2.6%
2024	70,935	2.5%
2025	72,669	2.4%
2026	74,402	2.4%
2027	76,135	2.3%
2028	77,868	2.3%
2029	79,601	2.2%
2030	81,334	2.2%
2031	83,067	2.1%
2032	84,801	2.1%
2033	86,534	2.0%
2034	88,267	2.0%
2035	90,000	2.0%
2036	91,890	2.1%
2037	93,820	2.1%
2038	95,790	2.1%
2039	97,801	2.1%
2040	99,855	2.1%
2041	101,952	2.1%
2042	104,093	2.1%
2043	106,279	2.1%
2044	108,511	2.1%
2045	110,790	2.1%
2046	113,116	2.1%
2047	115,492	2.1%
2048	117,917	2.1%
2049	120,393	2.1%
2050	122,922	2.1%

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Note :

1. 2035 population based on 2016 General Plan buildout population of 90,000.

CHAPTER 3 - SYSTEM PERFORMANCE AND DESIGN CRITERIA

This chapter presents the City's performance and design criteria, which was used in this analysis for identifying current system capacity deficiencies and for sizing proposed distribution mains, storage reservoirs, and wells.

3.1 HISTORICAL WATER USE TRENDS

The historical domestic water consumption per capita was calculated to determine the average water use per capita per day. This was accomplished by dividing the City's historical water production, based on production records received from City staff, by the historical population for the respective year.

The City's historical per capita consumption factors, for the period 2000-2015, are listed in [Table 3.1](#). The City's per capita consumption has generally remained unchanged during the 2000-2015 period. Recently, and due to the intense drought and corresponding water shortage measures from 2012-2015, water use per capita has decreased. It is expected that the water shortage contingency measures and the continued installation of water service meters will result in a continued downward trend in water use. [Table 3.2](#) lists the last three years of monthly water production in the City.

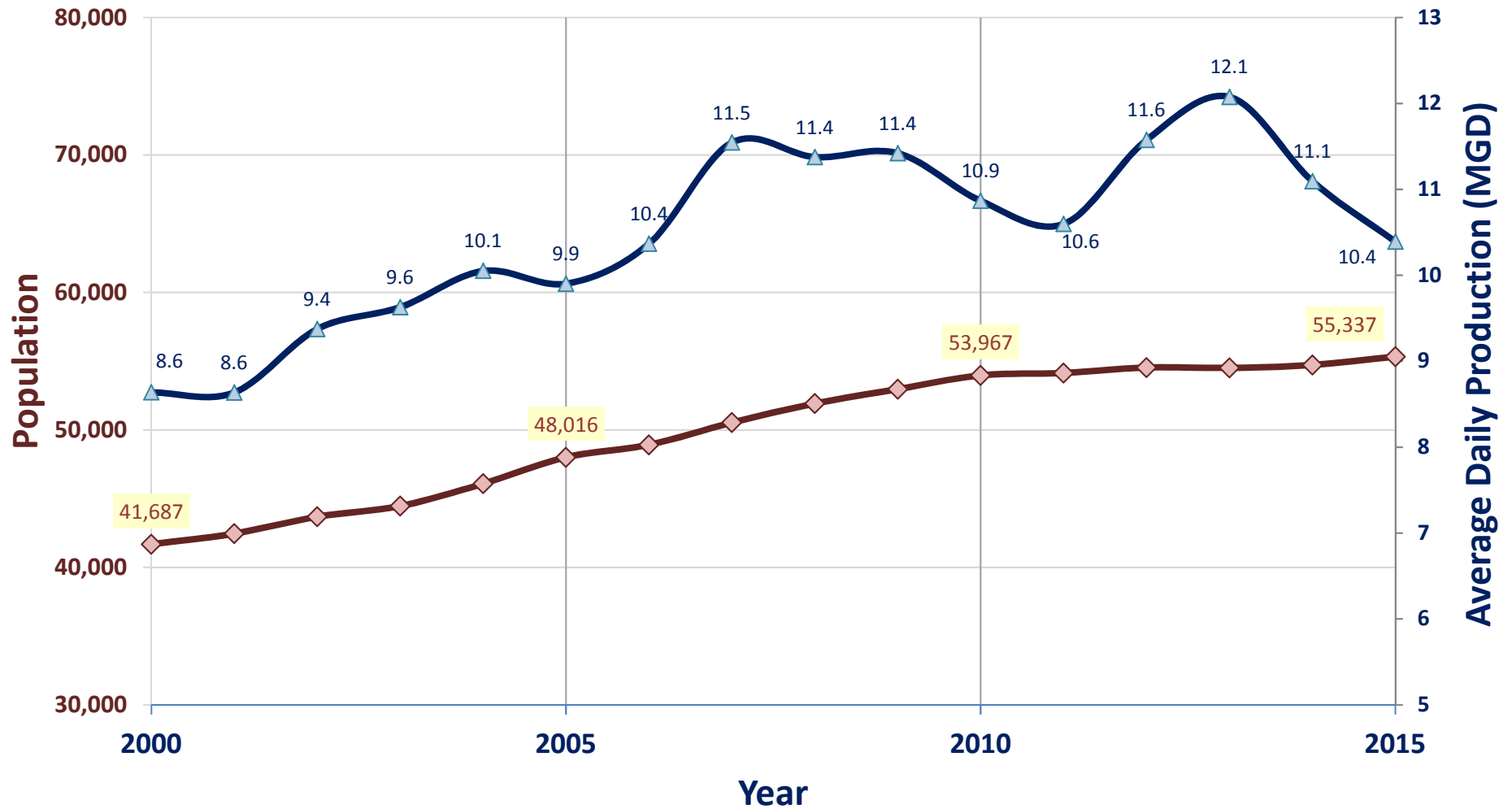
Consistent with the 1996 WSMP, this master plan did not use per capita consumption to project future domestic water demands, but rather calculated domestic water demands for residential and non-residential land uses based on land use demand factors and net acreages. To generalize trends in the City's water use, per capita water use was documented. [Figure 3.1](#) displays the historical population in relation to average daily water production. [Figure 3.2](#) displays a comparison in the per capita water use and average daily water production.

3.2 SUPPLY CRITERIA

In determining the adequacy of the domestic water supply facilities, the source must be large enough to meet the varying water demand conditions, as well as provide sufficient water during potential emergencies such as power outages and natural or created disasters.

Ideally, a water distribution system should be operated at a constant water supply rate with consistent supply from the water source. On the day of maximum demand, it is desirable to maintain a water supply rate equal to the maximum day rate. Water required for peak hour demands or for fire flows would come from storage.

As the City is currently using groundwater wells as a sole source of supply, groundwater should be viewed as a sustainable resource; supply wells should be capable of meeting the greater of

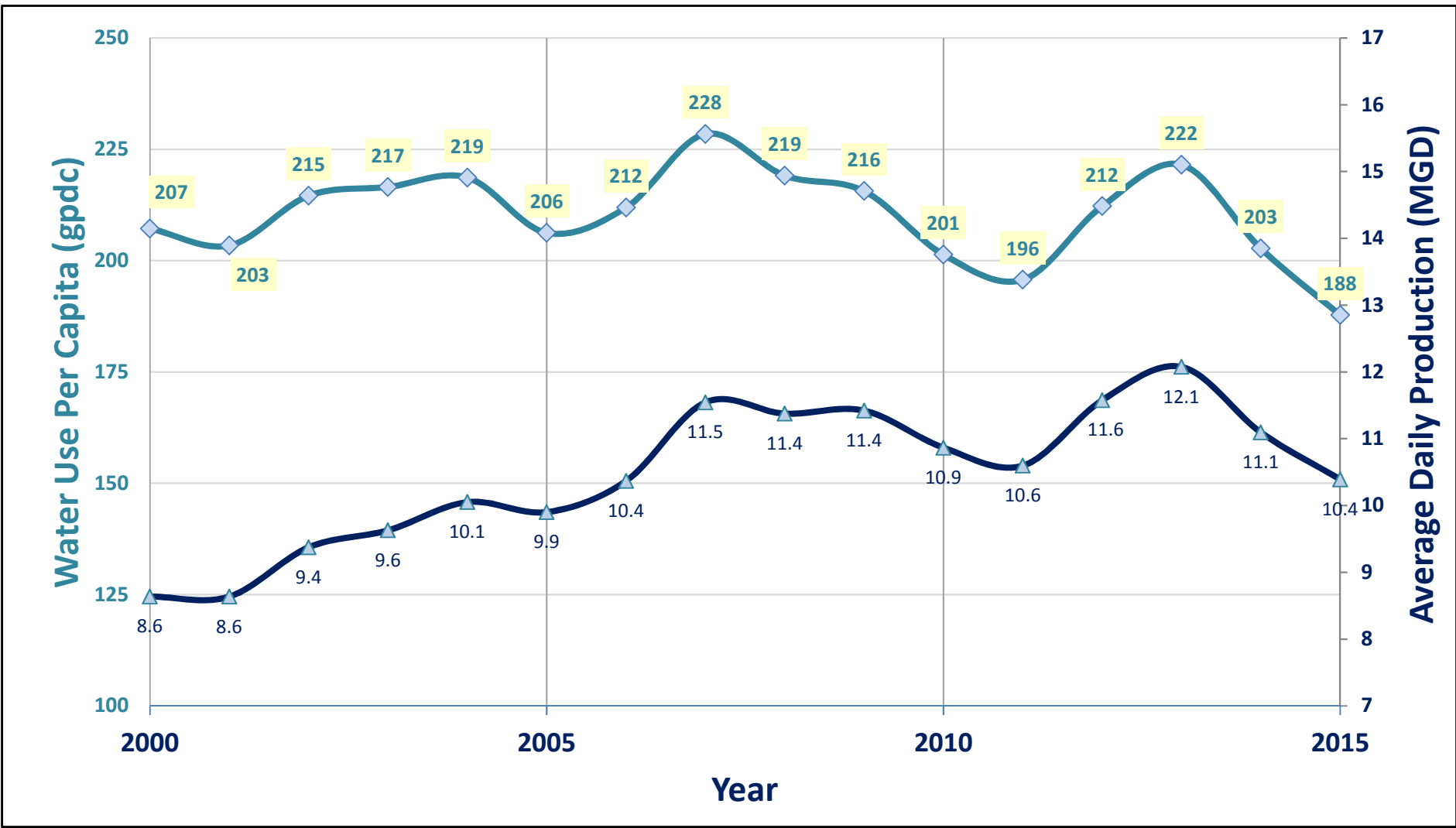


LEGEND

- ◆ Population
- ▲ Average Daily Production (MGD)

Figure 3.1
Historical Population vs.
Average Daily Production
 Water System Master Plan
 City of Hanford





LEGEND

- ◆ Water Use Per Capita (gpcd)
- ▲ Average Daily Production (MGD)

Figure 3.2
Water Use Per Capita vs.
Average Daily Production
Water System Master Plan
City of Hanford



Table 3.1 Historical Water Production and Maximum Day Peaking Factors (2000 - 2015)

Water System Master Plan
City of Hanford

Year Population ¹ % Increase			Historical Water Production										Average Daily Water Use per Capita ²	
			Annual Production ² % Increase				Monthly Production ²				Daily Production (Historical) ³			
											Average	Maximum		Max-to-Avg Ratio
			(AFY)	(MG)	(gpm)	(MGM)	(MGM)			(MGD)	(MGD)			
2000	41,687	1%	9,675	3,153	6,008	-2%	262	421	1.61	July	8.6			207
2001	42,462	2%	9,674	3,152	6,007	0%	263	418	1.59	August	8.6			203
2002	43,689	3%	10,501	3,422	6,521	9%	285	473	1.66	July	9.4			215
2003	44,466	2%	10,785	3,514	6,698	3%	293	496	1.69	July	9.6	17.3	1.79	217
2004	46,096	4%	11,289	3,679	7,011	5%	306	506	1.65	July	10.1	18.1	1.80	219
2005	48,016	4%	11,091	3,614	6,888	-2%	301	522	1.73	July	9.9	18.5	1.86	206
2006	48,920	2%	11,613	3,784	7,212	5%	315	496	1.57	July	10.4	18.3	1.76	212
2007	50,534	3%	12,932	4,214	8,030	11%	351	560	1.59	July	11.5	19.7	1.70	228
2008	51,922	3%	12,742	4,152	7,913	-1%	346	524	1.52	August	11.4	19.4	1.71	219
2009	52,970	2%	12,793	4,169	7,944	0%	347	561	1.62	July	11.4	20.1	1.76	216
2010	53,967	2%	12,171	3,966	7,558	-5%	331	561	1.70	July	10.9	19.8	1.82	201
2011	54,146	0%	11,870	3,868	7,371	-2%	322	529	1.64	July	10.6	18.9	1.78	196
2012	54,541	1%	12,966	4,225	8,052	9%	352	550	1.56	July	11.6	20.3	1.75	212
2013	54,513	0%	13,526	4,407	8,400	4%	367	569	1.55	July	12.1	20.3	1.68	222
2014	54,727	0%	12,427	4,049	7,717	-8%	337	563	1.67	June	11.1	25.9 ⁴	2.33	203
2015	55,337	1%	11,640	3,793	7,228	-6%	316	510	1.61	August	10.4	19.2	1.85	188
Maximum Day Demand Peaking Factor														
1996 Water System Master Plan											1.75			
2017 Water System Master Plan ⁵											1.75			

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Notes:

1. Source: California Department of Finance, Demographic Research Unit, E-5 and E-8
2. Source: City of Hanford, Public Water Systems Statistics Reports
3. Source: Water Production Reports received from City staff 10/27/2016.
4. Due to required extreme flushing during summer months this Maximum Daily Demand value does not reflect the City-wide domestic consumption.
5. After reviewing the historical peaking factors with City staff, Akel Engineering Group was directed to use the same maximum day demand peaking factors adopted in the previous master plan.

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Table 3.2 Historical Monthly Water Production (2013-2015)

Water System Master Plan
City of Hanford

Month	2013			2014			2015		
	Monthly Production (MGM)	Peaking Factor Percent of Annual (%)	Month to Avg Factor	Monthly Production (MGM)	Peaking Factor Percent of Annual (%)	Month to Avg Factor	Monthly Production (MGM)	Peaking Factor Percent of Annual (%)	Month to Avg Factor
January	181	4%	0.49	201	5%	0.55	177	4%	0.48
February	177	4%	0.48	168	4%	0.46	146	3%	0.40
March	259	6%	0.70	290	7%	0.79	239	5%	0.65
April	366	8%	1.00	340	8%	0.93	275	6%	0.75
May	471	11%	1.28	399	9%	1.09	420	10%	1.14
June	529	12%	1.44	563	13%	1.53	476	11%	1.30
July	569	13%	1.55	472	11%	1.29	496	11%	1.35
August	541	12%	1.47	399	9%	1.09	510	12%	1.39
September	461	10%	1.25	477	11%	1.30	389	9%	1.06
October	379	9%	1.03	284	6%	0.77	287	7%	0.78
November	267	6%	0.73	226	5%	0.62	199	5%	0.54
December	209	5%	0.57	229	5%	0.62	178	4%	0.48
Total	4,407			4,049			3,793		
Average Value	367			337			316		
Maximum Value	569		1.55	563		1.53	510		1.39
Average Daily (mgd)	12.1			11.1			10.4		

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Note:

1. Source: "Residential Water Worksheet" received from City staff April 22, 2016.

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Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer

maximum day demands plus fire flows or peak hour demand. Design criteria for water supply are documented on [Table 3.3](#).

3.3 STORAGE CRITERIA

The intent of domestic water storage is to provide supply for operational equalization, fire protection, and other emergencies, such as power outages or supply outages. Operational or equalization storage provides the difference in quantity between the customer's peak hour demands and the system's available reliable supply.

3.3.1 Typical Storage Criteria

Typical storage criteria consist of three main elements: operational, emergency, and fire flow.

- **Operational Storage**

Operational or equalization storage capacity is necessary to reduce the variations imposed on the supply system by daily demand fluctuations. Peak hour demands may require up to 2 times the amount of maximum day supply capacity. With storage in place, this increase in demand can be met by the operational storage rather than by increasing production from the supply sources.

Equalization storage also stabilizes system pressures for enhancing the service. Equalization storage requirements typically range from 25 percent to 50 percent of maximum day demand.

- **Emergency Storage**

Emergency storage is the volume of water stored to meet demand during emergency situations such as pipe failures, distribution main failures, pump failures, power outages, natural disasters, or other cases in which the supply sources are not able to meet the demand condition.

The amount of water reserved for emergencies is determined by policies adopted by the City and is based on an assessment of the costs and benefits including the desired degree of system reliability, risk during an emergency situation, economic considerations, and water quality concerns.

In California, the amount of emergency storage reserve in municipal water systems is usually between 50 percent and 100 percent of the maximum day demand.

- **Total Storage Requirement**

The total storage is the summation of operational (equalization), fire, and emergency storage requirements as follows:

$$Q_s = 25\% - 50\% \text{ MDD (operational)} + \text{fire flow (varies)} + 25\% - 50\% \text{ MDD (emergency)}$$

Table 3.3 Planning and Design Criteria
Water System Master Plan
City of Hanford

Design Parameter	Criteria		
Supply	Supply to meet the greater of Maximum Day Demands plus Fire Flows or Peak Hour Demands		
	Firm capacity excludes largest well for possible maintenance and emergency		
Storage	Underground Aquifer with Adequate Power Generators at Wells		
	Main Pressure Zone: 25% of Maximum Day Demand		
	Industrial Pressure Zone: 14% of Maximum Day Demand + 3,500 gpm for 3 hours		
Distribution Mains	Distribution mains should be designed to meet the greater of:		
	1) Peak Hour Demand, or 2) Maximum Day Demand + Fire Flow		
	Criteria for existing and future pipelines include:		
	Maximum Pipeline Velocity: 10 feet per second (ft/sec)		
	Maximum Desirable Headloss: 8 feet per 1,000 feet (ft/kft)		
	Minimum pipe size of 8-inches for future		
Service Pressures	Maximum System Pressure	80	psi
	Minimum Pressure during Maximum Day Demand	40	psi
	Minimum Pressure during Peak Hour	30	psi
	Minimum Residual Pressure (Fire Flow)	20	psi
	Industrial Area Recommended Pressure	80	psi
Demand Peaking Factors	Main Pressure Zone		
	Maximum Day Demand	1.75 x Average Day Demand	
	Peak Hour Demand	2.50 x Average Day Demand	
	Industrial Pressure Zone		
	Maximum Day Demand	2.00 x Average Day Demand	
	Peak Hour Demand	2.78 x Average Day Demand	
Fire Flows	Residential Existing development	1,000 gpm for 2 hours	
	Recent and future developments	1,500 gpm for 2 hours	
	Commercial Recent and future developments	2,500 gpm for 3 hours	
	Older developments near downtown	3,000 gpm for 3 hours	
	Industrial Recent and future developments	3,000 gpm for 3 hours	
	Industrial park	3,500 gpm for 3 hours	
Urban Water Use Targets	2010 Baseline	215	gpc
2015 Urban Water Management Plan	2015 Interim Target	197	gpc
	2020 Target	179	gpc
Demand Coefficients	<u>Land Use Category</u>	<u>2016 WSMP</u>	
		(gpd/net acre)	
	Residential		
	Low Density Residential	1,810	gpd/acre
	Medium Density Residential	2,450	gpd/acre
	High Density Residential	3,260	gpd/acre
	Mixed Use		
	Office Residential	1,710	gpd/acre
	Neighborhood Mixed Use	1,550	gpd/acre
	Corridor Mixed Use	1,100	gpd/acre
	Downtown Mixed Use	3,510	gpd/acre
	Non-Residential		
	Neighborhood Commercial	650	gpd/acre
	Regional Commercial	820	gpd/acre
	Service Commercial	530	gpd/acre
	Highway Commercial	650	gpd/acre
	Office	1,060	gpd/acre
	Public Facilities	530	gpd/acre
	Light Industrial	610	gpd/acre
	Heavy Industrial	690	gpd/acre
	Educational Facilities	1,630	gpd/acre
	Open Space	2,690	gpd/acre

where:

Qs is the Total Required Storage, in gallons

MDD is the Maximum Day Demand, in gallons

3.3.2 Main Pressure Zone Storage Criteria

For the City, the groundwater aquifer is considered available storage as long as the supply wells are designed to the greater of maximum day demand plus fire flow or peak hour demands. For the Main Pressure Zone, the City criteria require an additional storage capacity of 25% of maximum day demand ([Table 3.3](#)). The pressure zones are defined in detail in a later chapter. The City's Main Pressure Zone total storage requirement is summarized as follows:

$$Q_s = 25\% \text{ MDD (operational)}$$

3.3.3 Industrial Park Pressure Zone Storage Criteria

For the Industrial Park Pressure Zone the City requires the storage of a portion of maximum day demand plus fire flow demands. The pressure zones are defined in detail in a later chapter. The total storage requirement for the Industrial Park Pressure Zone is summarized as follows:

$$Q_s = 14\% \text{ MDD (operational)} + 3,500 \text{ gallons per minute (gpm) for 3 hours (fire flow)}$$

3.4 PRESSURE CRITERIA

Acceptable service pressures within distribution systems vary depending on City criteria and pressure zone topography. It is essential that the water pressure in a consumer's residence or place of business be maintained within an acceptable range. Low pressures below 30 psi can cause undesirable flow reductions when multiple faucets or water using appliances are used at once.

Excessively high pressures can cause faucets to leak and valve seats to wear out prematurely. Additionally, high service pressures can cause unnecessarily high flow rates, which can result in wasted water and high utility bills. The criteria for pressures in the domestic water system include the following:

- Maximum pressure, usually experienced during low demands and winter months
- Minimum pressure, usually experienced during peak hour demands and summer months
- Minimum pressure during fire flows and during the maximum day demand

The American Water Works Association Manual on Computer Modeling and Water Distribution System (AWWA M-32) indicates that maximum pressures are usually in the range of 90-110 pounds per square inch (psi). In some communities, the maximum pressure may be limited to 80 psi to mitigate the impact on internal plumbing. In this case, the distribution system is usually

sized for the higher pressures, and individual pressure-reducing valves are installed on service lines where the pressure may be exceeded.

The minimum acceptable pressure is usually in the range of 40-50 psi, which generally provides for sufficient pressures for second story fixtures. When backflow preventers are required, they may reduce the pressures by approximately 5-15 psi. The recommended minimum pressure during fire flows is 20 psi, as established by the National Fire Protection Association (NFPA).

The City's pressure criteria are summarized as follows:

City Pressure Zone

- Maximum pressure: 80 psi
- Minimum pressure:
 - o Maximum Day Demand: 40 psi
 - o Peak Hour Demand, existing development: 30 psi
 - o Peak Hour Demand, future development: 40 psi
 - o Maximum Day Demand + Fire Flow: 20 psi

Industrial Pressure Zone

- Recommended Operating Pressure: 80 psi

3.5 UNIT FACTORS

Domestic water demand unit factors are coefficients commonly used in planning level analysis to estimate future average daily demands for areas with predetermined land uses. The unit factors are multiplied by the number of dwelling units or net acreages for residential categories, and by the net acreages for non-residential categories, to yield the average daily demand projections.

There are several methods for developing the unit factors. This analysis relied on the City's 2013 water consumption billing records, which lists the monthly water consumption per customer account throughout the City, to estimate the unit factors within the City service area.

The total domestic water demand was calculated from the consumption data. The demand was adjusted to balance with current production records, and to account for transmission main losses and vacancies in existing land uses. The demand unit factor was then calculated using the total water production and total number of residential and non-residential land use acreages. The existing unit factor analysis is shown on [Table 3.4](#).

Table 3.4 Water Demand Unit Factor Analysis

Water System Master Plan
City of Hanford

Land Use Classification	Existing Development within Service Area (net acres)	Existing Demand Generating Development within Service Area (net acres)	Existing Average Daily Water Demand Unit factors						
			2013 Production		2013 Production at 100% Occupancy			2013 Water Unit Factor	
			Production (w/o Vacancy Rate)		Vacancy Rate ¹	Projected Production at 100% Occupancy		Recommended Factor	Balance Using Recommended Unit Factor
			(gpd/net acres)	(gpd)		(gpd/net acres)	(gpd)		
			(gpd/net acres)	(gpd)	(%)	(gpd/net acres)	(gpd)	(gpd/net acres)	(gpd)
Residential									
Low Density	2,837	2,837	2,325	6,595,676	6.4%	2,474	7,017,800	2,480	7,035,388
Medium Density	498	498	2,750	1,369,118	6.4%	2,926	1,456,741	2,930	1,458,733
High Density	84	84	3,800	321,100	6.4%	4,043	341,650	4,050	342,225
<i>Subtotal Residential</i>	3,419	3,419		8,285,894			8,816,191		8,836,346
Mixed use									
Office Residential	89	89	2,200	195,250	6.4%	2,341	207,746	2,350	208,563
Neighborhood Mixed Use	12	12	1,775	21,975	6.4%	1,889	23,381	1,890	23,398
Corridor Mixed Use	250	250	1,300	325,573	6.4%	1,383	346,410	1,390	348,113
Downtown Mixed Use	81	81	4,200	338,226	6.4%	4,469	359,872	4,470	359,969
<i>Subtotal Mixed Use</i>	432	432		881,024			937,409		940,043
Non-Residential									
Neighborhood Commercial	27	27	800	21,680	6.4%	851	23,068	860	23,306
Regional Commercial	216	216	1,000	216,252	6.4%	1,064	230,092	1,070	231,390
Service Commercial	103	103	650	66,625	6.4%	692	70,889	700	71,750
Highway Commercial	48	48	800	38,080	6.4%	851	40,517	860	40,936
Office	88	88	1,300	114,673	6.4%	1,383	122,012	1,390	122,612
Light Industrial	105	105	750	78,945	6.4%	798	83,997	800	84,208
Heavy Industrial	376	376	850	319,320	6.4%	904	339,756	910	341,860
Airport Protection	0	0	0	0	6.4%	0	0	0	0
Educational Facilities	445	445	2,000	890,640	6.4%	2,128	947,641	2,130	948,532
Public Facilities	438	438	650	284,765	6.4%	692	302,990	700	306,670
Open Space	346	260	3,300	857,068	0.0%	3,300	857,068	3,300	857,068
Interest Area	0	0	0	0	0.0%	0	0	0	0
<i>Subtotal Non-Residential</i>	2,192	2,106		2,888,047			3,018,030		3,028,331
AKEL	6,044	5,957		12,054,965			12,771,630		12,804,719

Note:

1. Residential vacancy rate extracted from California Department of Finance Sheet E-5 published 2016.

Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer

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It should be noted that additional water conservation is expected for residential land uses with the completion and implementation of water metering. Water conservation was taken into account for residential water uses, and the future water use factors were decreased accordingly.

Anticipated increases in land use densities, as identified in the General Plan, are assumed to be offset by future water conservation efforts. Existing non-residential factors were slightly lower than normal, and were adjusted for future scenarios to apply a level of conservancy when projecting future demands.

3.6 SEASONAL DEMANDS AND PEAKING FACTORS

Domestic water demands within municipal water systems vary with the time of day and month of the year. It is necessary to quantify this variability in demand so that the water distribution system can be evaluated and designed to provide reliable water service under these variable demand conditions.

Water use conditions that are of particular importance to water distribution systems include the average day demand (ADD), the maximum month demand (MMD), the maximum day demand (MDD), the peak hour demand (PHD), and the winter demand.

The average day demand represents the annual water demand, divided by 365 days, since it is expressed in daily units. The winter demand typically represents the low month water demands and is used for simulating water quality analysis.

3.6.1 Maximum Month Demand

The MMD is the highest demand that occurs within a calendar month during a year. The City's MMD usually occurs in the summer months in either July or August. The MMD is used primarily in the evaluation of supply capabilities.

Historical monthly water production records, obtained for the period between 2000 and 2015 ([Table 3.1](#)), indicate the maximum month to average month ratio ranging between 1.52 and 1.73. Over the reviewed period, this ratio neither showed significant increasing or decreasing trends. Therefore, an MMD factor of 1.70 was deemed representative of trends in the City of Hanford. This is a slight increase in the peaking factor of 1.60 used in the 1996 WSMP. The following equation is recommended for estimating the maximum month demand, given the average day demand:

$$\text{Maximum Month Demand} = 1.70 \times \text{Average Day Demand}$$

3.6.2 Maximum Day Demand

The MDD is the highest demand that occurs within a 24 hour day during a year. The City's MDD, which usually occurs during the summer months, is typically used for the evaluation and design of storage facilities, distribution mains, pump stations, and pressure reducing valves. The MDD,

when combined with fire flows, is one of the highest demands that these facilities should be able to service while maintaining acceptable pressures within the system.

The historical maximum day demands were obtained from the City's water production records. Groundwater well production records indicate the date of occurrence and magnitude of the maximum day demand for each calendar year, as listed in [Table 3.1](#). The maximum day to average day demand ratios for the period between 2003 and 2015 ranged from 1.68 to 2.33.

City staff indicated that the observed high peaking factor of 2.33 was attributed to a 2014 flushing event that coincided with peak demand periods. After reviewing the historical peaking factors with City staff, Akel Engineering Group was directed to use the same maximum day demand peaking factors adopted in the previous master plan. These factors for the Main Pressure Zone and the Industrial Park Pressure Zone are summarized as follows:

Main Pressure Zone. The following equation is then used to estimate the maximum day demand for the Main Pressure Zone, given the average day demand:

$$\text{Maximum Day Demand} = 1.75 \times \text{Average Day Demand}$$

Industrial Park Pressure Zone. The following equation is then used to estimate the maximum day demand for the Industrial Park Pressure Zone, given the average day demand:

$$\text{Maximum Day Demand} = 2.00 \times \text{Average Day Demand}$$

3.6.3 Peak Hour Demand

The PHD is another high demand condition that is used in the evaluation and design of water distribution systems. The peak hour demand is the highest demand that occurs within a one hour period during a year. The peak hour demand is considered to be the largest single measure of the maximum demand placed on the distribution system. The peak hour demand is often compared to the maximum day demand plus fire flow to determine the largest demand imposed on the system for the purpose of evaluating distribution mains.

Main Pressure Zone. For the Main Pressure Zone, an industry standard peak hour to maximum day ratio of 1.50 was applied to the maximum day demand to yield the peak hour demand ratio of 2.50, which is consistent with the 1996 WSMP. The peak hour demand can then be calculated using the average day demand and the following equation:

$$\text{Peak Hour Demand} = 2.50 \times \text{Average Day Demand}$$

Industrial Park Pressure Zone. For the Industrial Park Pressure Zone, a peak hour peaking factor of 2.78 was utilized, consistent with the 1996 WSMP. The following equation is then used to estimate the peak hour demand for the Industrial Park Pressure Zone, given the average day demand:

$$\text{Peak Hour Demand} = 2.78 \times \text{Average Day Demand}$$

3.7 FIRE FLOWS

Fire flows are typically based on land use, with the potential for increased fire flow based on the building type. The following are the criteria for fire flows:

- **Residential:** 1,000 gpm for two hours
- **Residential (Recent and Future Developments):** 1,500 gpm for two hours
- **Commercial (Recent and Future Developments):** 2,500 gpm for three hours
- **Commercial (Older Developments near Downtown):** 3,000 gpm for three hours
- **Industrial Park Area:** 3,500 gpm for three hours

It should be noted that following review with City staff, and receiving approval of the fire marshal, the master planning fire flow criteria for Industrial developments has been decreased from the 1996 WSMP requirement of 5,000 gpm.

3.8 TRANSMISSION AND DISTRIBUTION MAIN CRITERIA

Transmission and distribution mains are usually designed to convey the maximum expected flow condition. In municipal water systems, this condition is usually the greater of either the peak hour demand or the maximum day demand plus fire flow. The hydrodynamics of pipe flow create two additional parameters that are taken into consideration when evaluating or sizing water mains: head loss and velocity.

Head loss is a loss of energy within pipes that is caused by the frictional effects of the inside surface of the pipe and friction within the moving fluid itself. Head loss creates a loss in pressure which is undesirable in water distribution systems. Head loss, by itself, is not an important factor as long as the pressure criterion has not been violated. However, high head loss may be an indicator that the pipe is nearing the limit of its carrying capacity and may not have sufficient capacity to perform under stringent conditions. The maximum head loss in any pipe is 8 feet per 1,000 feet of pipe.

Since high flow velocities can cause damage to pipes and lead to high head loss, it is desirable to keep the velocity below a predetermined limit. The City criterion for maximum pipeline velocity is 10 feet per second while the City criterion for maximum desirable pipeline headloss is 8 feet per 1,000 feet. A summary of the criteria pertaining to transmission and distribution mains is included in [Table 3.3](#).

CHAPTER 4 - EXISTING DOMESTIC WATER FACILITIES

This chapter provides a description of the City's existing domestic water system and facilities including the distribution mains, storage reservoirs, and existing wells.

4.1 EXISTING WATER SYSTEM OVERVIEW

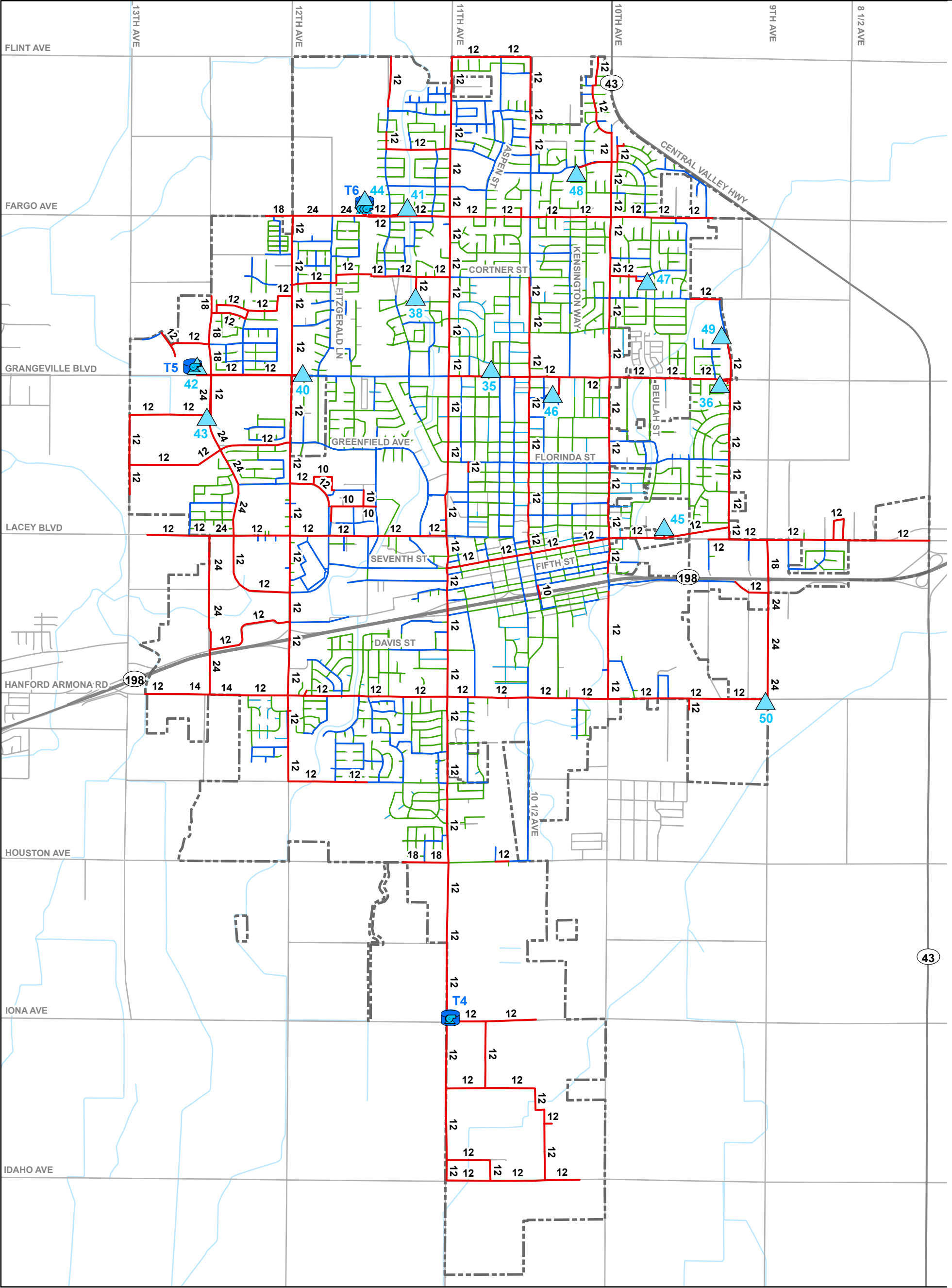
The City's municipal water system consists of 14 active groundwater wells, 3 storage reservoirs that have a cumulative capacity of 3.50 MG, distribution mains, and fire hydrants. The City's generally flat topography slopes from northeast to southwest from approximately 255 feet in the northeast to approximately 225 feet in the southwest. With this generally flat topography, the City operates two pressure zones, with the primary pressure zone covering areas north of the Kings Industrial park and the remaining pressure zone serving the Kings Industrial park, located south of Iona Avenue.

The City's existing domestic water distribution system is shown in [Figure 4.1](#), which displays the existing system by pipe sizes. This figure provides a general color coding for the distribution mains, as well as labeling the existing wells and the storage reservoir.

4.2 PRESSURE ZONES

The City's existing water system serves lands ranging in elevation from 255 feet in the northeast to approximately 225 feet in the southwest. The City is divided into two distinct pressure zones. The pressure zones allow operational flexibility within each unique service area. The pressures are described as follows:

- City Pressure Zone:** This pressure zone intended to serve existing and future users north of Iona Avenue. The hydraulic grade line for this pressure zone is controlled by various wells and the pump station sites located at the intersection of BNSF Railway and Fargo Avenue and 500 feet west of the intersection of Centennial Drive and Grangeville Boulevard. At buildout, this pressure zone serves elevation ranging from approximately 225 feet to 255 feet.
- Industrial Park Pressure Zone:** This pressure zone is bound to the north by Iona Avenue and extends to the boundary of the City's Planned Area Boundary in the south. This pressure zone is intended to serve existing and future industrial users, and is pressure controlled by a pump station site located at the intersection of 11th Avenue and Iona Avenue. At buildout, this pressure zone will serve elevations ranging from approximately 215 feet to 225 feet at buildout.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Existing System

- Tanks
- Wells
- Pump Stations

Pipes By Size

- 4" and Smaller
- 6"
- 8"
- 10" and Larger

- City Limits
- Streets
- Highways
- Waterways



Figure 4.1
Existing System by
Pipe Sizes
Water System Master Plan
City of Hanford



4.3 SOURCE OF SUPPLY

The City currently uses groundwater as the sole source of supply. There are currently 14 active groundwater wells in the City that have been used for supply ([Table 4.1](#)). The rated capacities for the existing groundwater wells were extracted from the City's 2010 UWMP as well as information provided by City staff. It should be noted that, over time, well efficiencies may vary based on equipment conditions and groundwater levels. In periods of prolonged drought, well efficiency ratings may decrease due to a decline in groundwater levels. The opposite may occur in wet periods; well efficiencies can increase while the groundwater levels recover. As such, the City should monitor the well efficiencies on a frequent basis to adequately manage the groundwater supply. If periods of prolonged drought persist, it may be necessary to construct additional wells to maintain adequate supply capacity. [Table 4.1](#) lists the City's current total rated supply at approximately 34.9 million gallons per day (mgd). Consistent with the system performance and design criteria the firm capacity was calculated as the capacity with the largest well out of service and is equal to 32.0 mgd.

4.4 TRANSMISSION AND DISTRIBUTION PIPELINES

Groundwater is pumped directly into the City's distribution system through more than 215 miles of pipeline. The City's sole source of supply is groundwater, which is distributed throughout the domestic water system. The distribution mains are generally 12-inches in diameter and smaller, and convey water to the consumer service connections. The City's transmission mains are generally 18-inches in diameter and larger, and convey water from the sources of supply to the distribution mains.

An inventory of the existing modeled pipes, extracted from the GIS-based hydraulic model, is included in [Table 4.2](#). For each pipe diameter, the inventory lists the length in feet, as well as the total length in units of miles.

4.5 STORAGE RESERVOIRS

Storage reservoirs are typically incorporated in the water system to provide water supply for operation during periods of high demand, for meeting fire flow requirements, and for other emergencies, as defined in the City's planning criteria. The City currently operates four storage reservoirs, with a combined storage volume of 3.5 MG ([Table 4.3](#)). Each tank is briefly discussed in the following:

- **Tank 4** is a 0.5 MG ground level steel storage tank at the intersection of 11th Avenue and Iona Avenue that serves the Industrial Park to satisfy normal domestic demands plus fire flows. The tank is filled from the Main Pressure Zone through an altitude valve connected to a 12-inch pipeline on 11th Avenue. Booster pumps supply the Industrial Park Pressure Zone from the tank, maintaining a downstream pressure of approximately 80 psi. The tank can be bypassed to serve the Industrial Park Pressure Zone in the event of an emergency or for normal tank maintenance.

Table 4.1 Existing Groundwater Supply Capacity

Water System Master Plan

City of Hanford

Supply Well	Rated Capacity ¹		Additional Information				
			Year Installed ¹	HP ¹	Head ²	Specific Yield	Casing Depth ¹
	(gpm)	(MGD)		(HP)	(ft)		(ft)
35	1,200	1.7	1987	100	416		1,500
36	1,200	1.7	1987	100			1,500
38	1,200	1.7	1993	150	299		1,460
40	2,000	2.9	1997	250	236		1,440
41	2,000	2.9	1998	250	284		1,440
42	2,000	2.9	2000	250	326		1,320
43	2,000	2.9	2006	250	278		1,530
44	2,000	2.9	2009	250	287		1,540
45	1,750	2.5	2008	250	434		1,580
46	2,000	2.9	2009	250	381		1,634
47	2,000	2.9	2009	250	399		1,700
48	1,800	2.6	2009	250	409		1,700
49	1,600	2.3	2009	250	426		1,550
50	1,500	2.2	2016	300	585		1,530
Total and Firm Supply Capacity							
Total Supply Capacity	24,250	34.9					
Firm Capacity (Excluding largest well)	22,250	32.0					

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Notes:

1. Source: City of Hanford, 2010 Urban Water Management Plan, Table 4.1.
2. Source: "Water Well Facilities Record", City of Hanford Utility Division, received March 8, 2014.
3. Source: Southern California Edison Tests received from City staff March 8, 2014.

Table 4.2 Existing Modeled Pipe Inventory

Water System Master Plan

City of Hanford

Pipe Size	Length	
	(feet)	(miles)
2	1,648	0.3
4	43,706	8.3
6	522,428	98.9
8	304,289	57.6
10	4,316	0.8
12	239,710	45.4
14	1,997	0.4
18	7,502	1.4
24	18,250	3.5
30	221	0.0
Total	1,144,067	216.7

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Table 4.3 Existing Storage Reservoirs

Water System Master Plan
City of Hanford

Reservoir	Location	Capacity ^{1,2} (MG)	Served Pressure Zone	Construction Type ^{1,2}	Tank Height ³ (ft)	Diameter ³ (ft)	Pump Station Capacity ² (gpm)	Ground Elevation (ft)
T-4	11th Ave. & Iona	0.5	Industrial	Ground-level Steel	24	60	2,800	231
T-5 ⁴	Grangeville Blvd & Centennial Dr.	2.0	City	2 Ground-level Steel	30	107	11,000	240
T-6	Fargo Ave. at the BNSF Railroad	1.0	City	Ground-level Steel	28	75	6,600	252
		3.50						

Notes:

1. Sources: City of Hanford, 1996 Water System Master Plan, Table 2-4
2. Source: "Special Facilities Record", City of Hanford Utility Division, received April 22, 2014
3. Source: City of Hanford Hydraulic Model received March 14, 2014
4. Storage reservoir T-5 composed of two interconnected 1.0 MG storage reservoirs.

1/26/20

- **Tank 5** is composed of two interconnected 1.0 MG ground level steel storage tanks at the intersection of Grangeville Boulevard and Centennial Drive that serve the Main Pressure Zone to satisfy normal domestic demands. The tanks are directly filled from wells 40, 42, and 43, which are controlled by SCADA to maintain set levels within the tanks. Booster pumps supply the Main Pressure Zone from the tanks and are controlled by SCADA to turn on and off based on specific downstream pressures.
- **Tank 6** is a 1.0 MG ground level steel storage tank at the intersection Fargo Avenue and the BNSF railroad that serves the Main Pressure Zone to satisfy normal domestic demands. The tank is filled from wells 41 and 44, which are controlled by SCADA to maintain set levels within the tanks. Booster pumps supply the Main Pressure Zone from the tanks and are controlled by SCADA to turn on and off based on specific downstream pressures.

Pump Stations

The City's hydraulic grade is maintained by groundwater wells that discharge directly into the distribution system as well as pump stations that pump water from ground-level storage tanks to the distribution system. The City's existing pump stations are summarized on [Table 4.4](#) and described below.

Industrial Park Pressure Zone

- Tank 4: The Tank 4 pump station is comprised of one 800 gpm pump and two 1,000 gpm pumps, for a total pump station capacity of 2,800 gpm. The 800 gpm pump is intended to provide the operational demands and operates based on a variable frequency drive, which maintains a downstream pressure of 80 psi. The two 1,000 gpm pumps are intended to provide additional flow capacity in the event of a fire.

Main Pressure Zone

- Tank 5: The Tank 5 pump station is comprised of five individual 2,200 gpm pumps, for a total pump station capacity of 11,000 gpm. This pump station draws water from Tank 5, which is filled by groundwater wells 40, 42, and 43, and discharges directly into the distribution system.
- Tank 6: The Tank 6 pump station is comprised of three individual 2,200 gpm pumps, for a total pump station capacity of 6,600 gpm. This pump station draws water from Tank 6, which is filled by groundwater wells 41 and 44, and discharges directly into the distribution system.

Table 4.4 Existing Pump Stations
 Water System Master Plan
 City of Hanford

Pump Station	Pump Station Information				Pump Information		
	Total Pump Capacity ¹ (gpm)	(mgd)	No. of Pumps	Pressure Zone	Pump No.	Individual Horsepower (hp)	Design (gpm)
Tank 4	2,800	4.03	3	Industrial	1	VFD ²	800
					2	60	1,000
					3	60	1,000
Tank 5	11,000	15.84	5	City	1	125	2,200
					2	125	2,200
					3	125	2,200
					4	125	2,200
					5	125	2,200
Tank 6	6,600	9.50	3	City	1	125	2,200
					2	125	2,200
					3	125	2,200

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Notes:

1. Source: "Special Facilities Record", City of Hanford Utilities Division, received April 22, 2014.
2. VFD = Variable Frequency Drive

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CHAPTER 5 – WATER DEMANDS AND SUPPLY CHARACTERISTICS

This chapter summarizes the existing and future domestic water demands, and the diurnal pattern used for the hydraulic analysis.

5.1 EXISTING DOMESTIC WATER DEMANDS

The existing water demands used for this master plan were based on the City's 2013 water consumption billing records, which included the monthly demands for each customer account throughout the City, as well as total annual production. These existing water demands in this analysis are adjusted to match the annual production records and account for system losses.

The existing demand distribution was obtained from the water billing records. Using GIS, each customer account was associated with parcel for the account and spatially joined to location in the hydraulic model representing the service location.

The demands extracted from the water billing records are lower than the total demands listed in the annual production records due to system losses that occurred between the groundwater wells and customer service connections. The total domestic water demands were increased proportionally to reflect the total 2013 production and account for pipeline losses. The City's 2013 the average daily production was calculated at 12.1 MGD.

5.2 FUTURE DOMESTIC WATER DEMANDS

Future demands were projected using the unit factors discussed in a previous chapter for residential and non-residential land uses and for development in the Planned Area Boundary. **Table 5.1** organizes the future land use categories and their corresponding domestic water demands. The average day domestic water demands from existing and future developments is calculated at 22.3 MGD. These demands were used in sizing the future infrastructure facilities, including transmission mains, storage reservoirs, and pump stations. Demands were also used for allocating and reserving capacities in the existing or proposed facilities.

It should be noted that the future demands account for continued conservation and meeting the 2015 UWMP established 20x2020 target. As such, the existing land use water demands are shown lower in **Table 5.1** than current water billing indicates.

5.3 MAXIMUM DAY AND PEAK HOUR DEMANDS

The maximum day and peak hour demands for the existing and future demands were calculated using the average day demands and City peaking factor criteria. The maximum day to average

Table 5.1 Average Daily Water Demands

Water System Master Plan
City of Hanford

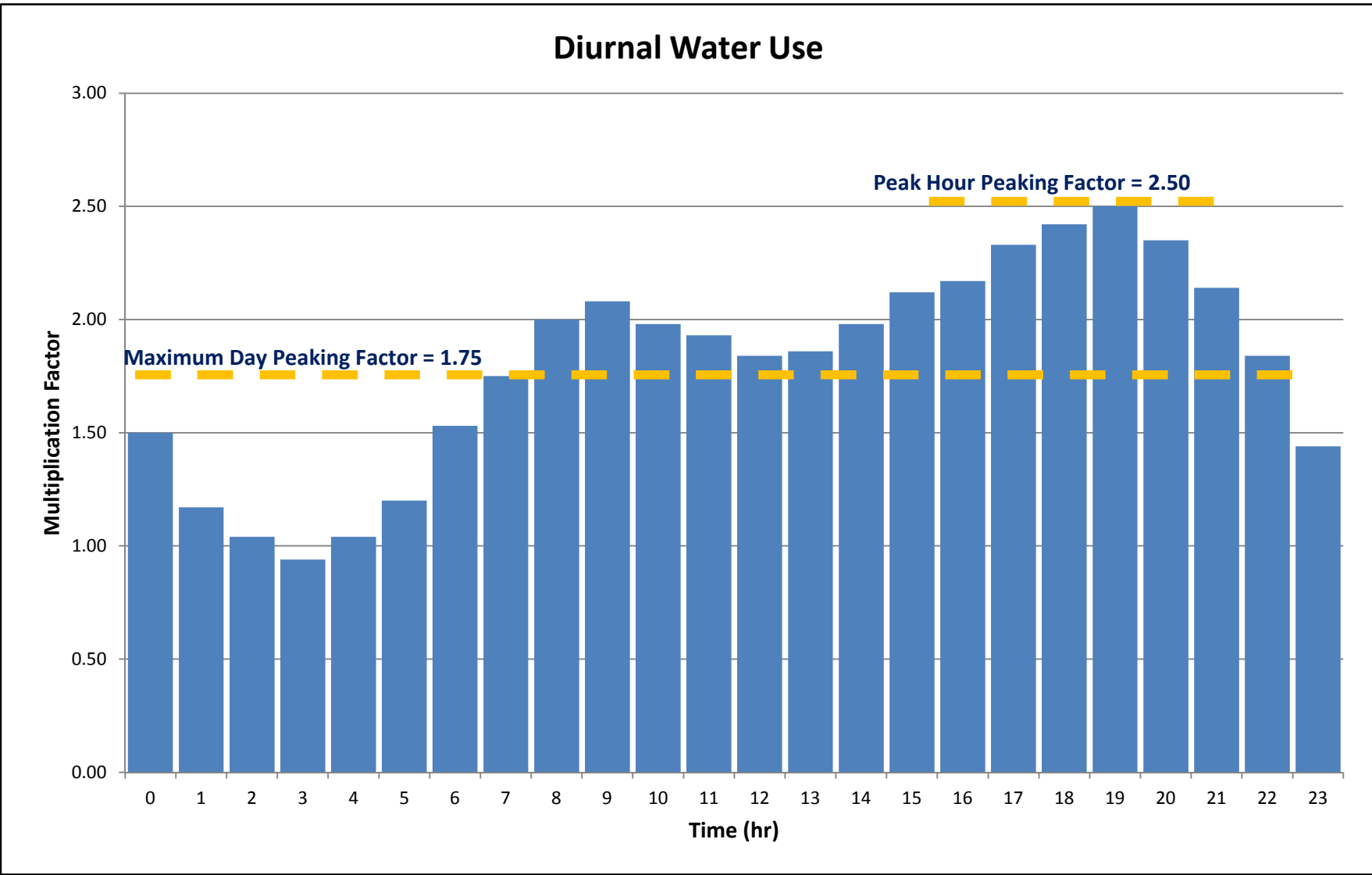
Land Use Classifications	Buildout Water Demands											
	Existing Development			Future Development to be Serviced within Planned Area Boundary								
	Within Service Area			Within Service Area			Planned Area Boundary				Total	
	Existing Development (net acre)	Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	New Development (net acre)	Future Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	Existing Development (net acre)	New Development (net acre)	Future Water Unit Factor (gpd/net acre)	Average Daily Demand (gpd)	Total Development within PAB (net acre)	Average Daily Demand (gpd)
Residential												
Low Density	2,837	1,900	5,390,015	1,026	1,900	1,949,510	539	1,401	1,900	3,687,132	5,804	11,026,658
Medium Density	498	2,240	1,115,209	225	2,240	504,025	35	312	2,240	777,612	1,070	2,396,845
High Density	84	3,100	261,950	73	3,100	227,202	0	64	3,100	198,130	222	687,282
<i>Subtotal Residential</i>	3,419		6,767,174	1,324		2,680,737	574	1,777		4,662,874	7,095	14,110,785
Mixed Use												
Office Residential	89	1,800	159,750	25	1,800	45,144	0	0	1,800	0	114	204,894
Neighborhood Mixed Use	12	1,450	17,951	42	1,450	60,656	0	15	1,450	22,407	70	101,014
Corridor Mixed Use	250	1,060	265,467	225	1,060	238,707	10	3	1,060	14,098	489	518,272
Downtown Mixed Use	81	3,430	276,218	42	3,430	145,363	0	0	3,430	0	123	421,581
<i>Subtotal Mixed Use</i>	432		719,386	334		489,871	10	18		36,505	795	1,245,762
Non-Residential												
Neighborhood Commercial	27	660	17,886	26	660	17,198	8	12	660	13,114	73	48,198
Regional Commercial	216	820	177,327	160	820	130,833	18	169	820	153,962	564	462,121
Service Commercial	103	530	54,325	54	530	28,397	56	63	530	63,048	275	145,771
Highway Commercial	48	660	31,416	68	660	44,609	16	16	660	21,193	147	97,218
Office	88	1,060	93,503	30	1,060	32,213	0	0	1,060	0	119	125,716
Light Industrial	105	610	64,209	61	610	36,911	83	557	610	390,449	806	491,569
Heavy Industrial	376	690	259,212	568	690	391,672	211	2,607	690	1,944,041	3,761	2,594,924
Airport Protection	0	0	0	125	0	0	111	563	0	0	799	0
Educational Facilities	445	1,630	725,872	117	1,630	190,123	11	97	1,630	175,078	669	1,091,073
Public Facilities	438	530	232,193	56	530	29,675	3	13	530	8,454	510	270,321
Open Space with Irrigation	16	2,690	42,314	45	2,690	119,866	0	121	2,690	326,674	182	488,854
Open Space without Irrigation	346	0	0	65	0	0	41	54	0	0	507	0
Interest Area	0	1,800	0	0	1,800	0	49	552	1,800	1,082,466	601	1,082,466
<i>Subtotal Non-Residential</i>	2,208		1,698,255	1,372		1,021,497	607	4,825		4,178,477	9,012	6,898,230
Totals	6,059		9,184,815	3,031		4,192,105	1,192	6,621		8,877,856	16,903	22,254,777

day ratio of 1.75, and peak hour to average day ratio of 2.5, were applied to the average day demands to obtain estimates of the higher demand conditions.

The maximum day and peak hour demand estimates for existing and future demand years are listed in [Table 5.2](#), and are based on the buildout of the Planned Area Boundary as discussed in a previous chapter. The 2013 maximum day and peak hour demands at 100 percent occupancy are calculated at 21.1 MGD and 30.2 MGD, respectively. The projected total maximum day demand and peak hour demand for the buildout of the Planned Area Boundary at 100 percent occupancy are 38.5 MGD and 55.0 MGD respectively.

5.4 DIURNAL DEMAND PATTERNS

Water demands vary with the time of day and by account type according to the land use designation. These fluctuations were accounted for in the modeling effort and evaluation of the water distribution system. The diurnal demand patterns affect the water levels in storage reservoirs and amount of flow through distribution mains. A diurnal curve ([Figure 5.1](#)) was used to model the demand patterns of existing customers. This demand pattern was extracted from the previous City water system hydraulic model, and is based on actual pumping records for the City's groundwater wells and pump stations. The peaks in the diurnal pattern match the peaking factors recommended in this master plan.



LEGEND



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October 26, 2016

Figure 5.1
Diurnal Pattern
Water System Master Plan
City of Hanford



Table 5.2 Projected Future Water Requirements

Water System Master Plan
City of Hanford

13.E.d

Year	Population	Annual Growth	Future Water Requirements		
			Average Day Demand	Maximum Day Demand	Peak Hour Demand
		(%)	(MGD)	(MGD)	(MGD)
Historical					
2010	53,967		10.9	19.0	27.2
2011	54,146	0.3%	10.6	18.5	26.5
2012	54,541	0.7%	11.6	20.3	28.9
2013	54,513	-0.1%	12.1	21.1	30.2
2014	54,727	0.4%	11.1	19.4	27.7
2015	55,337	1.1%	10.4	18.2	26.0
Projected					
2016	57,070	3.1%	11.0	19.3	27.6
2017	58,803	3.0%	11.2	19.5	27.9
2018	60,536	2.9%	11.3	19.7	28.2
2019	62,270	2.9%	11.4	19.9	28.4
2020	64,003	2.8%	11.5	20.0	28.6
2021	65,736	2.7%	11.8	20.6	29.4
2022	67,469	2.6%	12.1	21.1	30.2
2023	69,202	2.6%	12.4	21.7	31.0
2024	70,935	2.5%	12.7	22.2	31.7
2025	72,669	2.4%	13.0	22.8	32.5
2026	74,402	2.4%	13.3	23.3	33.3
2027	76,135	2.3%	13.6	23.8	34.1
2028	77,868	2.3%	13.9	24.4	34.8
2029	79,601	2.2%	14.2	24.9	35.6
2030	81,334	2.2%	14.6	25.5	36.4
2031	83,067	2.1%	14.9	26.0	37.2
2032	84,801	2.1%	15.2	26.6	37.9
2033	86,534	2.0%	15.5	27.1	38.7
2034	88,267	2.0%	15.8	27.6	39.5
2035	90,000	2.0%	16.1	28.2	40.3
2036	91,890	2.1%	16.4	28.8	41.1
2037	93,820	2.1%	16.8	29.4	42.0
2038	95,790	2.1%	17.1	30.0	42.9
2039	97,801	2.1%	17.5	30.6	43.8
2040	99,855	2.1%	17.9	31.3	44.7
2041	101,952	2.1%	18.2	31.9	45.6
2042	104,093	2.1%	18.6	32.6	46.6
2043	106,279	2.1%	19.0	33.3	47.6
2044	108,511	2.1%	19.4	34.0	48.6
2045	110,790	2.1%	19.8	34.7	49.6
2046	113,116	2.1%	20.2	35.4	50.6
2047	115,492	2.1%	20.7	36.2	51.7
2048	117,917	2.1%	21.1	36.9	52.8
2049	120,393	2.1%	21.6	37.7	53.9
2050	122,922	2.1%	22.0	38.5	55.0

CHAPTER 6 - HYDRAULIC MODEL DEVELOPMENT

This chapter describes the development and calibration of the City's domestic water distribution system hydraulic model. The hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

6.1 OVERVIEW

Hydraulic network analysis has become an effectively powerful tool in many aspects of water distribution planning, design, operation, management, emergency response planning, system reliability analysis, fire flow analysis, and water quality evaluations. The City's hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

6.2 MODEL SELECTION

The City's hydraulic model combines information on the physical characteristics of the water system (pipelines, groundwater wells, and storage reservoir) and operational characteristics (how they operate). The hydraulic model then performs calculations and solves series of equations to simulate flows in pipes and calculate pressures at nodes or junctions.

There are several network analysis software products that are released by different manufacturers, which can equally perform the hydraulic analysis satisfactorily. The selection of particular software depends on user preferences, the distribution system's unique requirements, and the costs for purchasing and maintaining the software.

The City's previous model was developed using the Environmental Protection Agency's EPANET, which allows the use of a single modeling scenario, and basic simulation options for steady-state and extended period simulations. As part of this master plan, the hydraulic model has been updated and redeveloped into the GIS-based hydraulic model InfoWater by Innovyze. The model has an intuitive graphical interface and is directly integrated with ESRI's ArcGIS (GIS), providing a useful modeling tool linked to the newly developed City GIS.

6.3 HYDRAULIC MODEL DEVELOPMENT

Developing the hydraulic model included digitizing and quality control, developing pipe and node databases, and water demand allocation.

6.3.1 Pipes and Nodes

Computer modeling requires the compilation of large numerical databases that enable data input into the model. Detailed physical aspects, such as pipe size, pipe elevation, and pipe lengths,

contribute to the accuracy of the model.

Pipes and nodes represent the physical aspect of the system within the model. A node is a computer representation of a place where demand may be allocated into the hydraulic system, while a pipe represents the distribution and transmission aspect of the water demand. In addition, reservoir dimensions and capacities, and groundwater well capacity and design head, were also included in the hydraulic model.

6.3.2 Digitizing and Quality Control

The City's existing domestic water distribution system was digitized in GIS using several sources of data and various levels of quality control. The data sources included the City's existing system as maintained by staff in AutoCAD, as well as the previously developed hydraulic model and subsequent updates.

The City's hydraulic model was redeveloped in H2OMap Water. The existing EPANET hydraulic model was used as a basis for the update, and the model was digitized to the existing street centerlines. The City currently maintains an inventory of the existing system in AutoCAD maps, and the maps were used to verify the update. GIS-based maps were provided to City staff after digitizing was complete, and the pipe diameters and locations were verified for accuracy.

6.3.3 Demand Allocation

Demand allocation consists of assigning water demand values to the appropriate nodes in the model. The goal is to distribute the demands throughout the model to best represent actual system response.

Allocating demands to nodes within the hydraulic model required multiple steps, incorporating the efficiency and capabilities of GIS and hydraulic modeling software. For existing demands, using GIS, each customer account was geocoded at its approximate service location. The existing demand for each customer account was then distributed to the nearest water model node.

Domestic water demands from each anticipated future development, as presented in a previous chapter, were also allocated to the model for the purpose of sizing the required future facilities. The demands from the greater Planned Area Boundary were allocated based on proposed land use and the land use acreages. As many of the areas were very large in size, demands were allocated evenly to the demand nodes within each area. Infill areas, redevelopment areas, and vacant lands were also included in the future demand allocation.

6.4 MODEL CALIBRATION

Model calibration is intended to instill a reasonable level of confidence in the pressures and flows simulated, and the field results measured in SCADA. Model calibration generally consists of comparing model predictions to field measured results and making necessary adjustments. The hydraulic model incorporated water system SCADA controls as provided by City staff ([Table 6.1](#)).

Fire flow records for the months of February, April, May, August, and November in 2013 were also provided and consulted during the model development.

As a suggested enhancement to the hydraulic model, City staff may consider adding a more thorough calibration for extended period simulations. This process includes detailing SCADA pressures and flow measurements at the wells and pump stations, and calibrating the hydraulic model to those conditions. This also includes installing teleloggers at key locations throughout the system.

Table 6.1 SCADA Operational Control Summary
 Water System Master Plan
 City of Hanford

Pump ID	Operational Setpoints		
	Control Parameter	On	Off
Groundwater Wells			
35	Pump Pressure	38 psi	55 psi
36	Pump Pressure	40 psi	63 psi
38	Pump Pressure	45 psi	58 psi
40	Tank 5 Level	12'	21'
41	Tank 6 Level	12'	21'
42	Tank 5 Level	12'	23'
43	Tank 5 Level	12'	17'
44	Tank 6 Level	12'	23'
45	Pump Pressure	45 psi	60 psi
46	Pump Pressure	40 psi	62 psi
47	Pump Pressure	42 psi	58 psi
48	Pump Pressure	42 psi	58 psi
49	Pump Pressure	42 psi	58 psi
Pump Stations			
Tank 4	Variable Speed Pump Pressure	80 psi	
Tank 5	Pump Pressure	48 psi	62 psi
Tank 6	Pump Pressure	50 psi	62 psi

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Notes:

1. Groundwater well and pump station controls received from City staff April 22, 2014.

CHAPTER 7 - EVALUATION AND PROPOSED IMPROVEMENTS

This section presents a summary of the domestic water system evaluation and identifies improvements needed to mitigate existing deficiencies, as well as improvements needed to expand the system and service growth.

7.1 OVERVIEW

The hydraulic model was used for evaluating the distribution system for capacity deficiencies during peak hour demand and during maximum day demands in conjunction with fire flows; the analysis duration was established at 24 hours for analysis.

The criteria used for evaluating the capacity adequacy of the domestic water distribution system facilities (transmission mains, storage reservoirs, and pump stations) were discussed and summarized in the System Performance and Design Criteria chapter.

7.2 LOW PRESSURE ANALYSIS

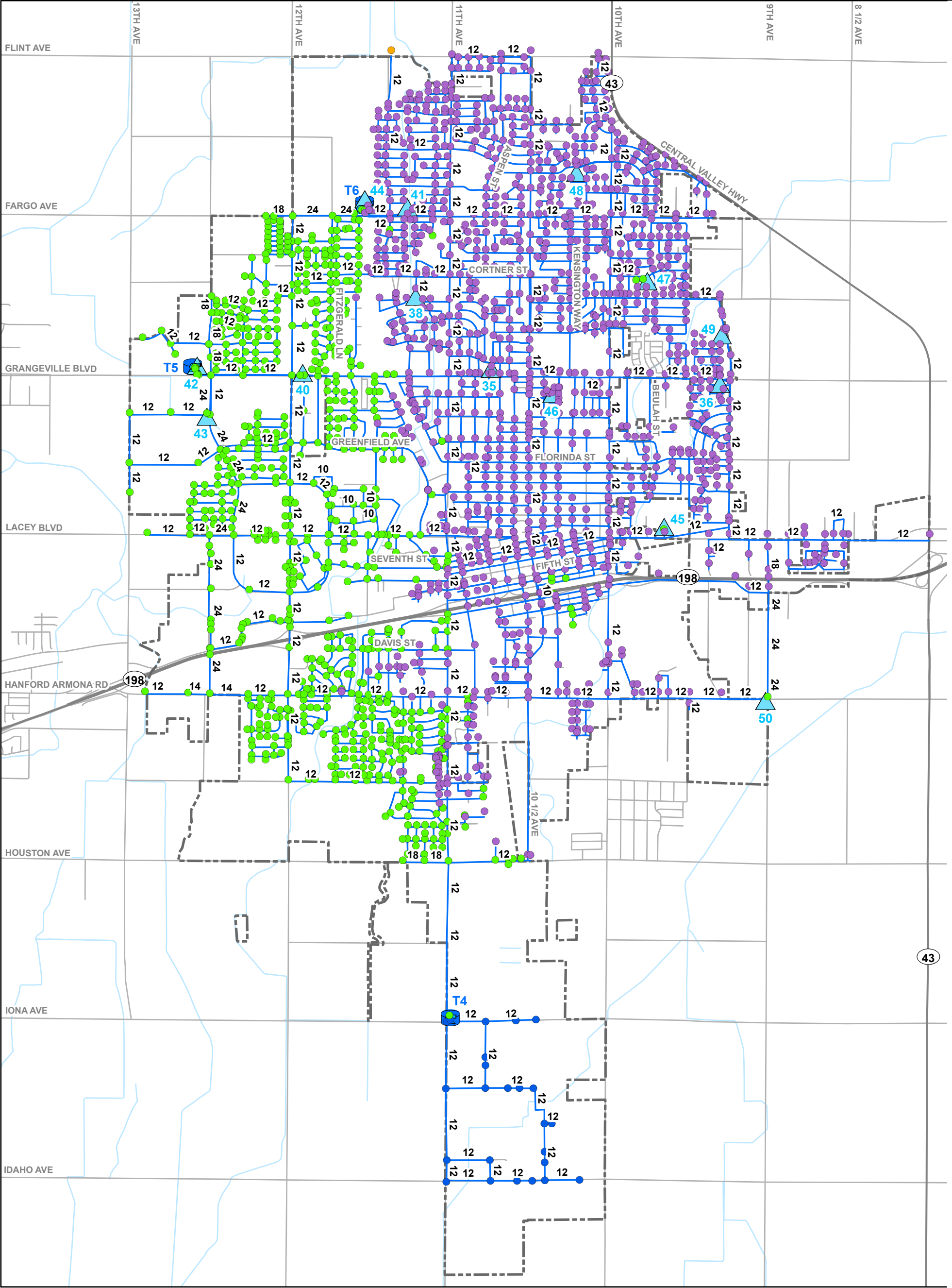
The hydraulic model was used to determine if the existing domestic water distribution system meets the City's System Performance and Design Criteria, as discussed in a previous chapter. During maximum day demands the minimum pressure requirement is 40 psi, while during the peak hour demand, the minimum pressure requirement is 30 psi. The hydraulic analysis yielded no deficiencies for low pressure under maximum day or peak hour operating conditions. The results of the low pressure analysis are summarized on [Figure 7.1](#) and [Figure 7.2](#).

7.3 FIRE FLOW ANALYSIS

The fire flow analysis consisted of using the maximum day demand in the hydraulic model and applying hypothetical fire flows. The magnitude and duration of each fire flow was based on the governing land use type within proximity to the fire location. The criterion for fire flows was also summarized in the System Performance and Design Criteria chapter.

The hydraulic model indicates that the City's existing distribution system performed adequately during the fire flow analysis, as summarized on [Figure 7.3](#) and [Figure 7.4](#). In residential and non-residential areas serviced by older 4-inch and 6-inch pipelines, the hydraulic model indicated fire flow pressures below the minimum residual pressure of 20 psi. It is the recommendation of this master plan that 4-inch and 6-inch diameter pipelines in non-residential areas be replaced with at least 8-inch pipelines. Older 8-inch pipelines may be replaced in kind, pending fire flow analysis and approval by the City engineer.

It should be noted that the Industrial Park indicates fire flow deficiencies throughout the area. This is due to inadequate storage. The pipelines are capable of meeting the City's criteria.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

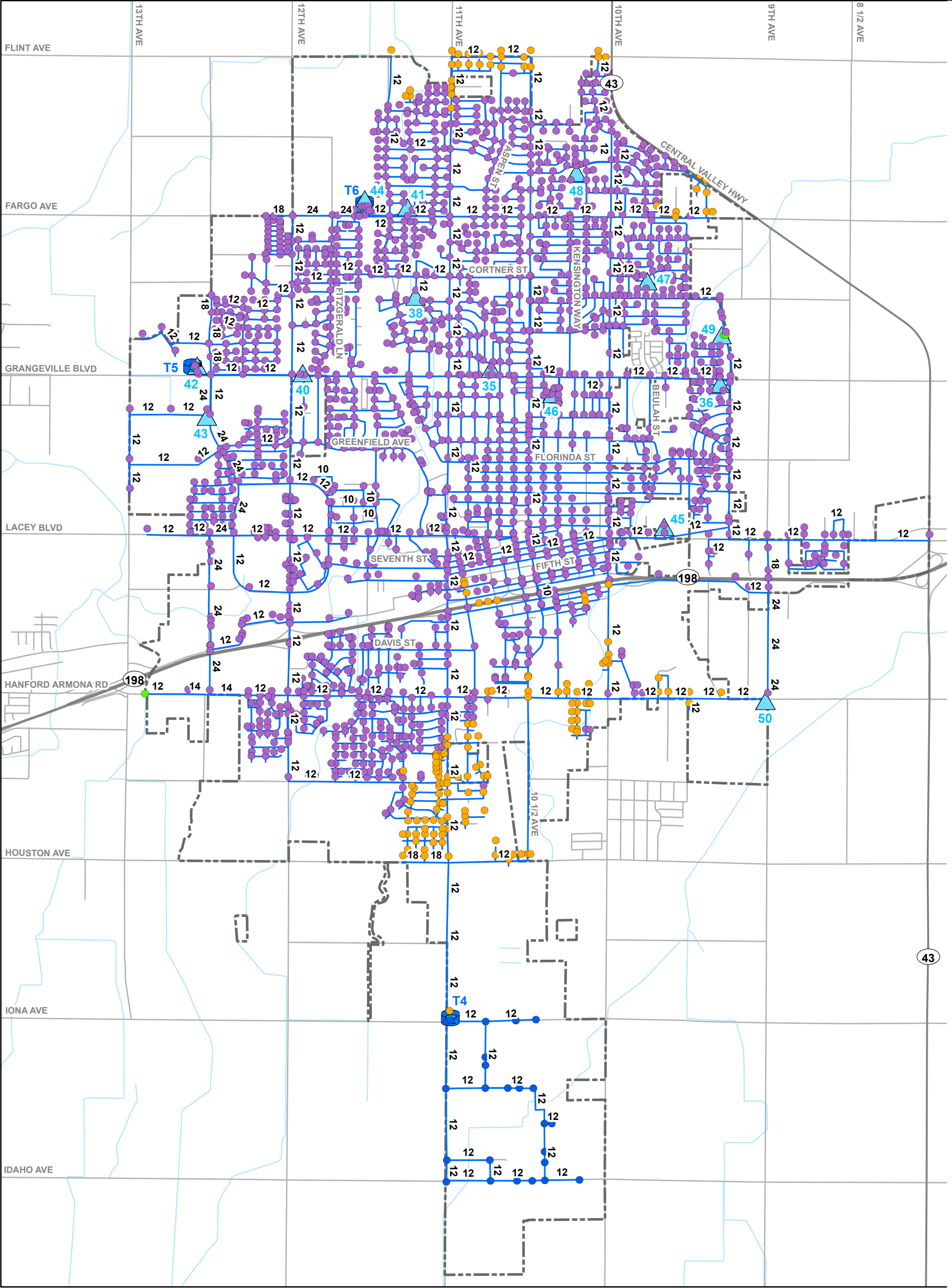
Legend

- | | | |
|---------------------------------|------------------------|--------------------|
| Junction Pressures (psi) | Existing System | City Limits |
| ● < 40 | ● Tanks | — Streets |
| ● 40 - 45 | ▲ Wells | — Highways |
| ● 45 - 55 | ■ Pump Stations | — Waterways |
| ● 55 - 65 | — Pipes | |
| ● > 65 | | |



Figure 7.1
Maximum Day Demand Pressures
Water System Master Plan
City of Hanford





Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

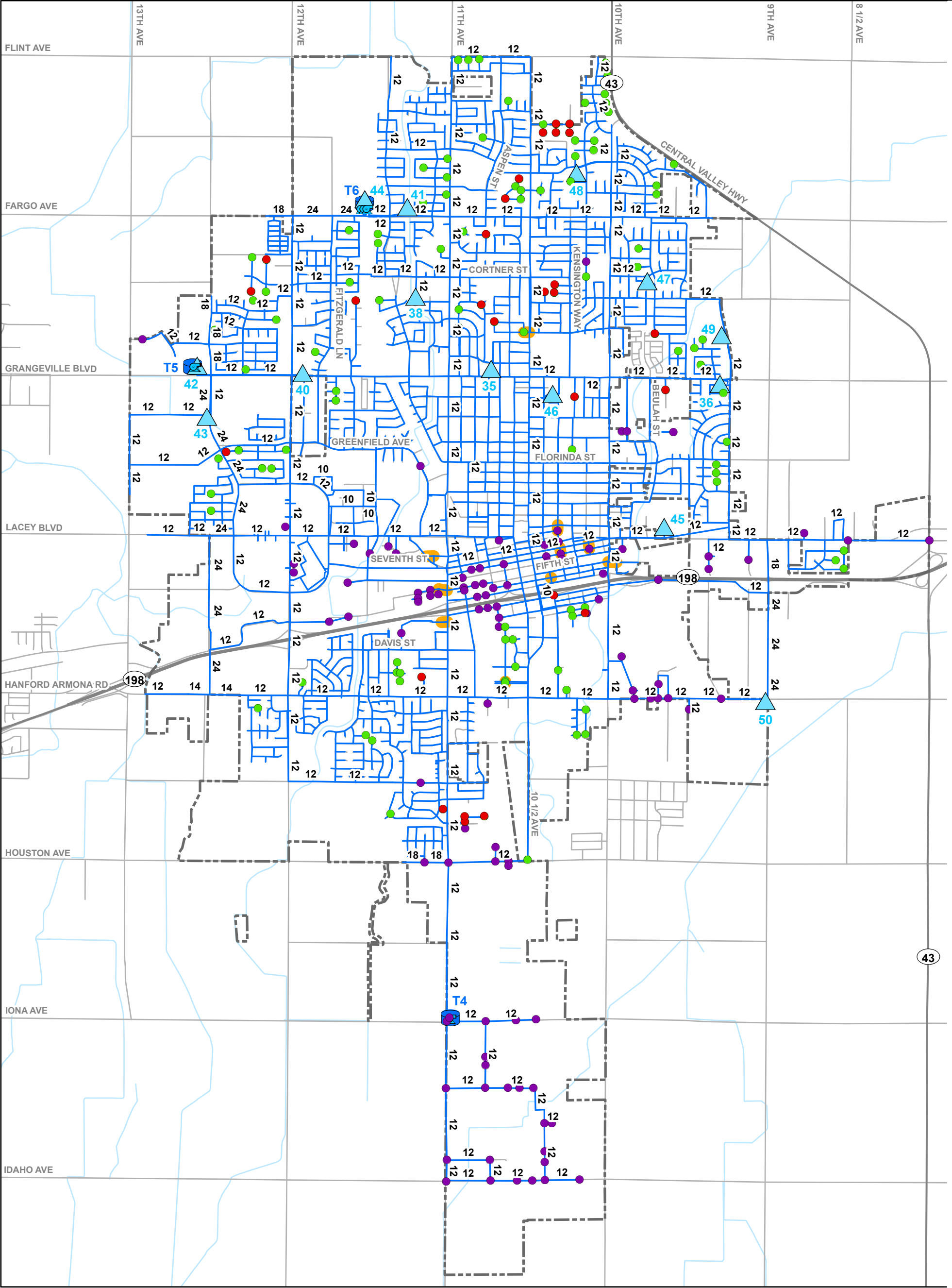
Legend

- | | | |
|---------------------------------|------------------------|--------------------|
| Junction Pressures (psi) | Existing System | City Limits |
| ● < 35 | ● Tanks | — Streets |
| ● 35 - 45 | ▲ Wells | — Highways |
| ● 45 - 55 | ■ Pump Stations | — Waterways |
| ● 55 - 65 | — Pipes | |
| ● > 65 | | |



Figure 7.2
Peak Hour Demand
Pressures
Water System Master Plan
City of Hanford





Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Junction Fire Flow Pressures < 20 psi**
- Residential 1,000 gpm
 - Residential 1,500 gpm
 - Commercial & Industrial
 - Pipe Velocities > 15 ft/s

- Existing System**
- Tanks
 - Wells
 - Pump Stations
 - Pipes

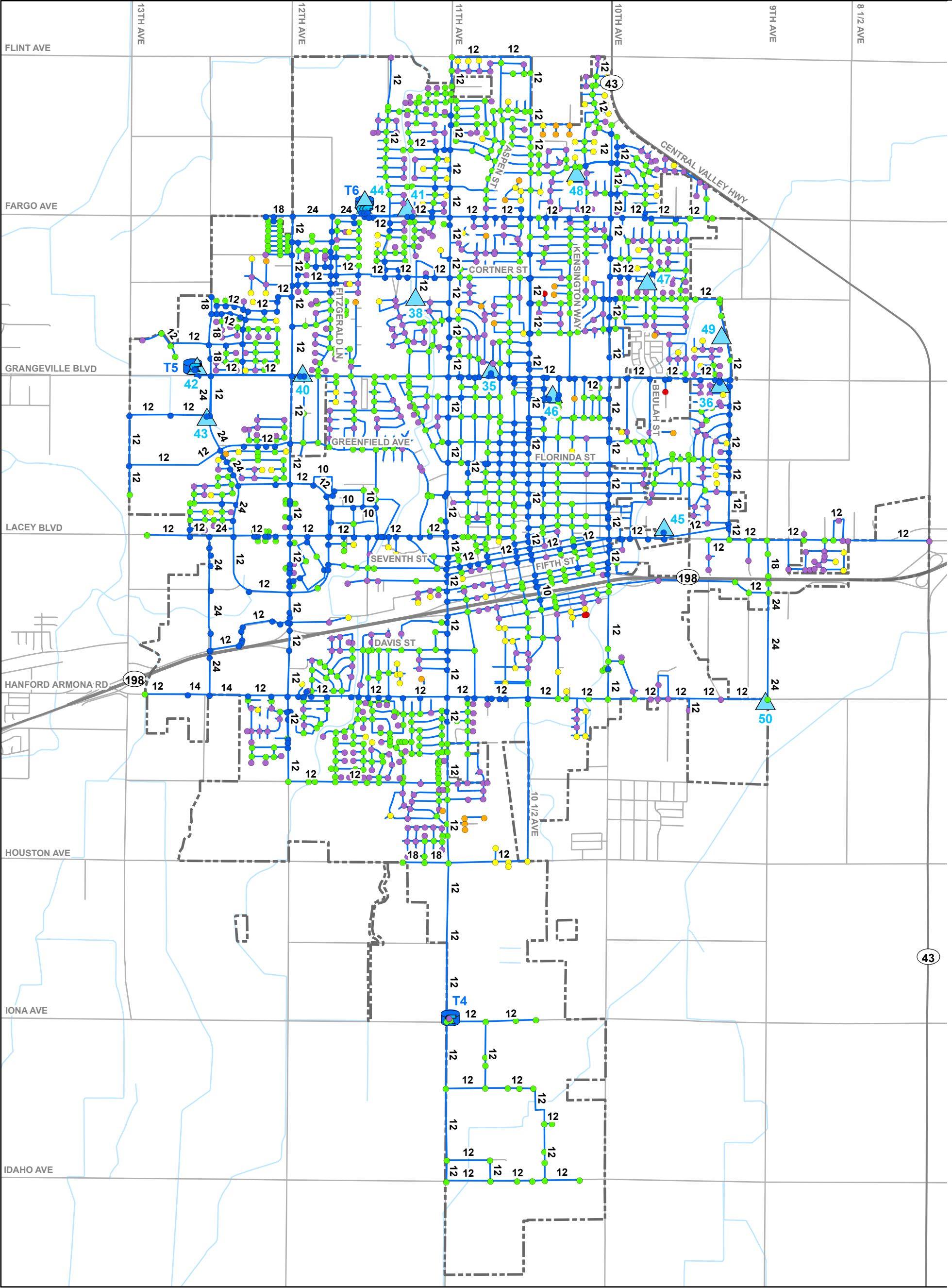
- City Limits**
- Streets
 - Highways
 - Waterways



Figure 7.3
Fire Flow Analysis

Water System Master Plan
City of Hanford





Legend

- | | | |
|----------------------------------|------------------------|--------------------|
| Available Fire Flow (gpm) | Existing System | City Limits |
| ● < 500 | ● Tanks | — Streets |
| ● 500 - 1,000 | ▲ Wells | — Highways |
| ● 1,000 - 1,500 | ⊞ Pump Stations | ~ Waterways |
| ● 1,500 - 2,500 | — Pipes | |
| ● 2,500 - 5,000 | | |
| ● > 5,000 | | |



Update: June 27, 2017

0 0.25 0.5 1 Mile

File Path: P:\GIS\GIS_Projects\Hanford\2016\Water\Final\Hardcopy\HF_Fig7-4_AvailFireFlow_062717.mxd



Figure 7.4
Available Fire Flow
Water System Master Plan
City of Hanford



7.4 STORAGE ANALYSIS

The City's current practice considers the groundwater aquifer as the available storage as long as the supply wells are designed to meet the peak hour demands. During electrical outages, it is desired that emergency generators are installed on wells to meet the average day demand requirements. As groundwater supply is seen as a sustainable resource, the groundwater aquifer storage is adequate for meeting the existing storage requirements of the City.

7.4.1 Existing Storage Requirements

Existing storage requirements were identified for each pressure zone and are summarized on [Table 7.1](#). The table lists the existing domestic water demands and identifies the operational and fire storage requirement for each zone.

The table also lists the total required storage for existing domestic water demands at 5.8 MG.

7.4.2 Future Storage Requirements

Future storage requirements were identified based on the City's anticipated development through the horizon of the master plan and are shown on [Table 7.1](#). The table lists the future domestic water demands and identifies the operational and fire storage requirement for each zone.

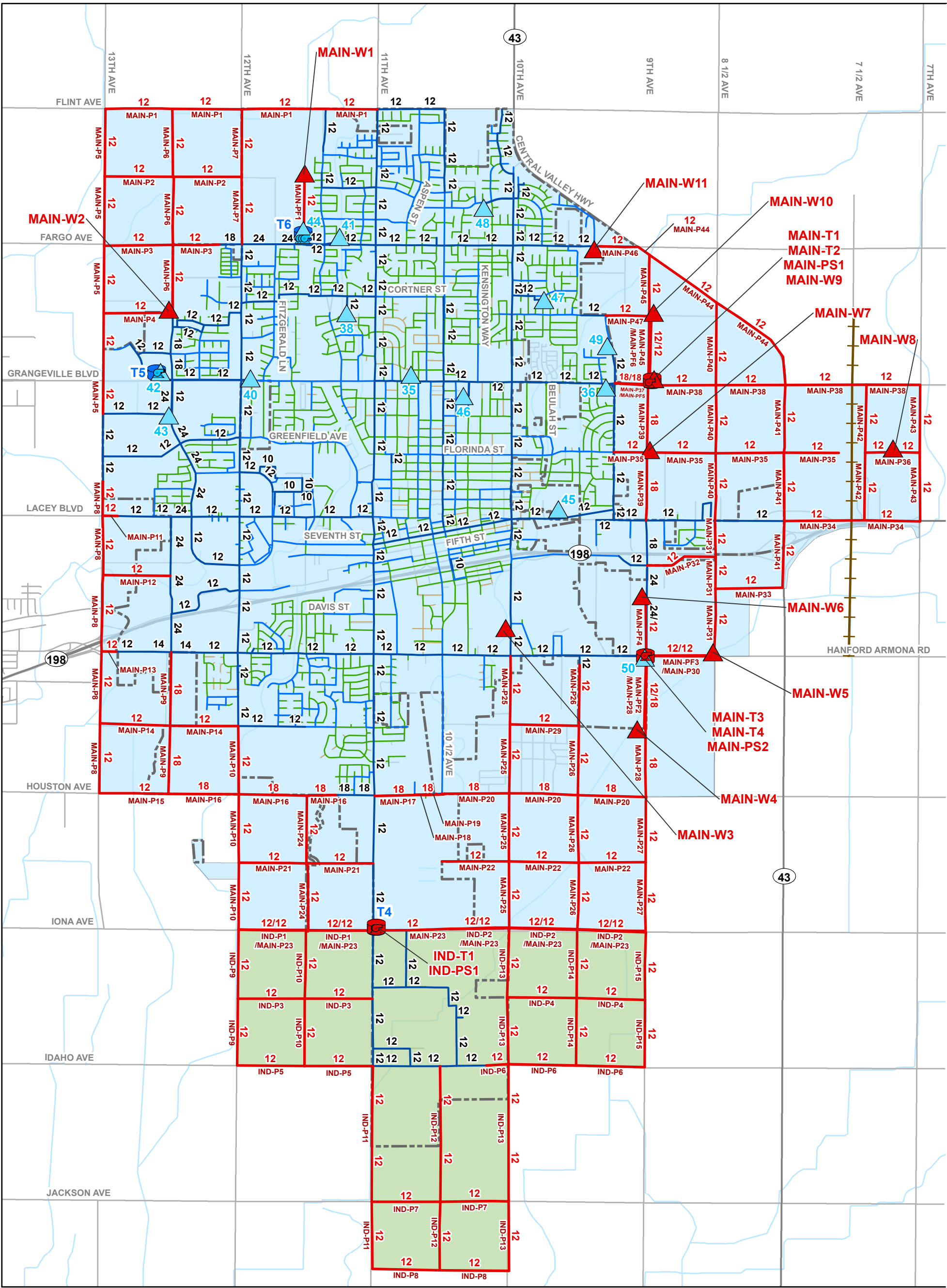
The table also lists the total required storage for future domestic water demands at 6.1 MG.

7.4.3 Recommended New Storage Facilities

The existing and future storage requirements, shown on [Table 7.1](#), were compared with existing City storage facilities in each zone and the required storage facility improvements were identified and listed on [Table 7.2](#). The table lists existing storage facilities for each zone, identifies existing storage capacity deficiencies, and identifies future storage capacity requirements to meet the needs from future developments identified in this master plan.

The proposed storage reservoirs, which are summarized on [Table 7.3](#) and shown graphically on [Figure 7.5](#), are described as follows:

- Northeast Storage Facility.** This proposed storage facility consists of two new 1.5 MG ground-level storage tanks, MAIN-T1 and MAIN-T2, located at the intersection of 9th Avenue and Grangeville Boulevard. It should be noted that these storage reservoirs are intended to provide storage requirements for future development and are recommended for phased construction. Upon the construction of the first 1.5 MG storage tank it is recommended that existing groundwater wells 36 and 49 be connected to the planned tank; this connection will involve the construction of pipeline improvement MAIN-PF4. There is an existing 12-inch in 9 ¼ Avenue that was constructed for the purpose of routing water supply to this new storage facility.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Proposed Improvements**
- Tanks
 - Wells
 - Pump Stations
 - Pipes
 - High Speed Rail Alignment

- Pressure Zones**
- Main
 - Industrial Park

- Existing System**
- Tanks
 - Wells
 - Pump Stations

- Pipes By Size**
- 4" and Smaller
 - 6"
 - 8"
 - 10" and Larger

- City Limits**
- Streets
 - Highways
 - Waterways

Figure 7.5
Schedule
of Improvements
Water System Master Plan
City of Hanford



Table 7.1 Storage Requirements

Water System Master Plan
City of Hanford

Pressure Zone	Water Demands		Water Storage Requirements		
	Average Day Demand	Maximum Day Demand ¹	Operational	Fire Protection	Total, By Pressure Zone
	(mgd)	(mgd)	(MG)	(MG)	(MG)
Existing					
Industrial Park Zone	0.4	0.8	0.11	0.63	0.74
Main Zone	11.7	20.4	5.10	0.00	5.10
Total	12.1	21.2	5.21	0.63	5.84
Future					
Industrial Park Zone	1.8	3.7	0.52	0.63	1.15
Main Zone	11.2	19.6	4.91	0.00	4.91
Total	13.1	23.3	5.43	0.63	6.06

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Note:

1. Total required Storage, by pressure zone:

Industrial Park Zone = Operational + Fire = 14% of Maximum Day Demand + 3,500 gpm for 3 hours

Main Zone = Operational = 25% Maximum Day Demand

Table 7.2 Recommended Supply and Storage Capacity
Water System Master Plan
City of Hanford

Demand and Supply	Criteria	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Population Forecasting (City-Wide)																																					
Projected Annual Growth Rate		1.11%	3.13%	3.04%	2.95%	2.86%	2.78%	2.71%	2.64%	2.57%	2.50%	2.44%	2.39%	2.33%	2.28%	2.23%	2.18%	2.13%	2.09%	2.04%	2.00%	1.96%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
Projected Population		55,337	57,070	58,803	60,536	62,270	64,003	65,736	67,469	69,202	70,935	72,669	74,402	76,135	77,868	79,601	81,334	83,067	84,801	86,534	88,267	90,000	91,890	93,820	95,790	97,801	99,855	101,952	104,093	106,279	108,511	110,790	113,116	115,492	117,917	120,393	122,922
Projected Demands		(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)
City-Wide - Average Day Demands	Per Capita Consumption: 197 gpcd (2015-2019) 179 gpcd (2020-2035)	10.9	11.0	11.2	11.3	11.4	11.5	11.8	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.2	14.6	14.9	15.2	15.5	15.8	16.1	16.4	16.8	17.1	17.5	17.9	18.2	18.6	19.0	19.4	19.8	20.2	20.7	21.1	21.6	22.0
City-Wide - Maximum Day Demands	1.75 times the Average Day Demand	19.1	19.3	19.5	19.7	19.9	20.0	20.6	21.1	21.7	22.2	22.8	23.3	23.8	24.4	24.9	25.5	26.0	26.6	27.1	27.6	28.2	28.8	29.4	30.0	30.6	31.3	31.9	32.6	33.3	34.0	34.7	35.4	36.2	36.9	37.7	38.5
City-Wide - Peak Hour Demands	2.50 times the Average Day Demand	27.3	27.6	27.9	28.2	28.4	28.6	29.4	30.2	31.0	31.7	32.5	33.3	34.1	34.8	35.6	36.4	37.2	37.9	38.7	39.5	40.3	41.1	42.0	42.9	43.8	44.7	45.6	46.6	47.6	48.6	49.6	50.6	51.7	52.8	53.9	55.0
Supply Requirements		(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)
City Required Supply	Supply to meet greater of City's Maximum Day Demands plus Fire Flows or Peak Hour Demands	27.3	27.6	27.9	28.2	28.4	28.6	29.4	30.2	31.0	31.7	32.5	33.3	34.1	34.8	35.6	36.4	37.2	37.9	38.7	39.5	40.3	41.1	42.0	42.9	43.8	44.7	45.6	46.6	47.6	48.6	49.6	50.6	51.7	52.8	53.9	55.0
Available Total Supply	Total groundwater well capacity	34.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Available Firm Supply	Groundwater well capacity with largest well out of service	32.0																																			
No. of New Wells	Minimum capacity of 2.2 mgd (1,500 gpm)			1			1			1			1		1			1		1		1			1			1			1			1			
Recommended Total Supply		32.0	32.0	34.2	34.2	34.2	36.4	36.4	36.4	38.5	38.5	38.5	40.7	40.7	40.7	42.8	42.8	42.8	45.0	45.0	45.0	47.2	47.2	47.2	49.3	49.3	49.3	51.5	51.5	51.5	53.6	53.6	53.6	55.8	55.8	55.8	55.8
Storage Requirements		(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)	(MG)
Main Pressure Zone																																					
Main Zone Storage Criteria	Storage Capacity equal to 25% of Maximum Day Demand	4.6	4.7	4.8	4.9	5.1	5.2	5.3	5.4	5.5	5.6	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.0	7.1	7.3	7.4	7.5	7.6	7.7	7.8	8.0	8.1	8.2	8.3	8.4	8.5	8.7
2015 Available Storage Capacity	Total Main Zone Storage Capacity in 2015	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Recommended Staged Upgrade	Assumed typical Future Tank Capacity at 1.5 MG		1.5							1.5						1.5												1.5									
Main Zone Total Storage		3.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	6.0	6.0	6.0	6.0	6.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	
Industrial Park Pressure Zone																																					
Industrial Park Zone MDD		0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
Industrial Park Zone Storage Criteria	Storage Capacity equal to 14% of Maximum Day Demand plus Fire Flow (3,500 gpm for 3 hours)	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	
2015 Available Storage Capacity	Total Industrial Park Zone Storage Capacity in 2015	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Recommended Staged Upgrade					0.7																																
Industrial Park Zone Total Storage		0.5	0.5	0.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	

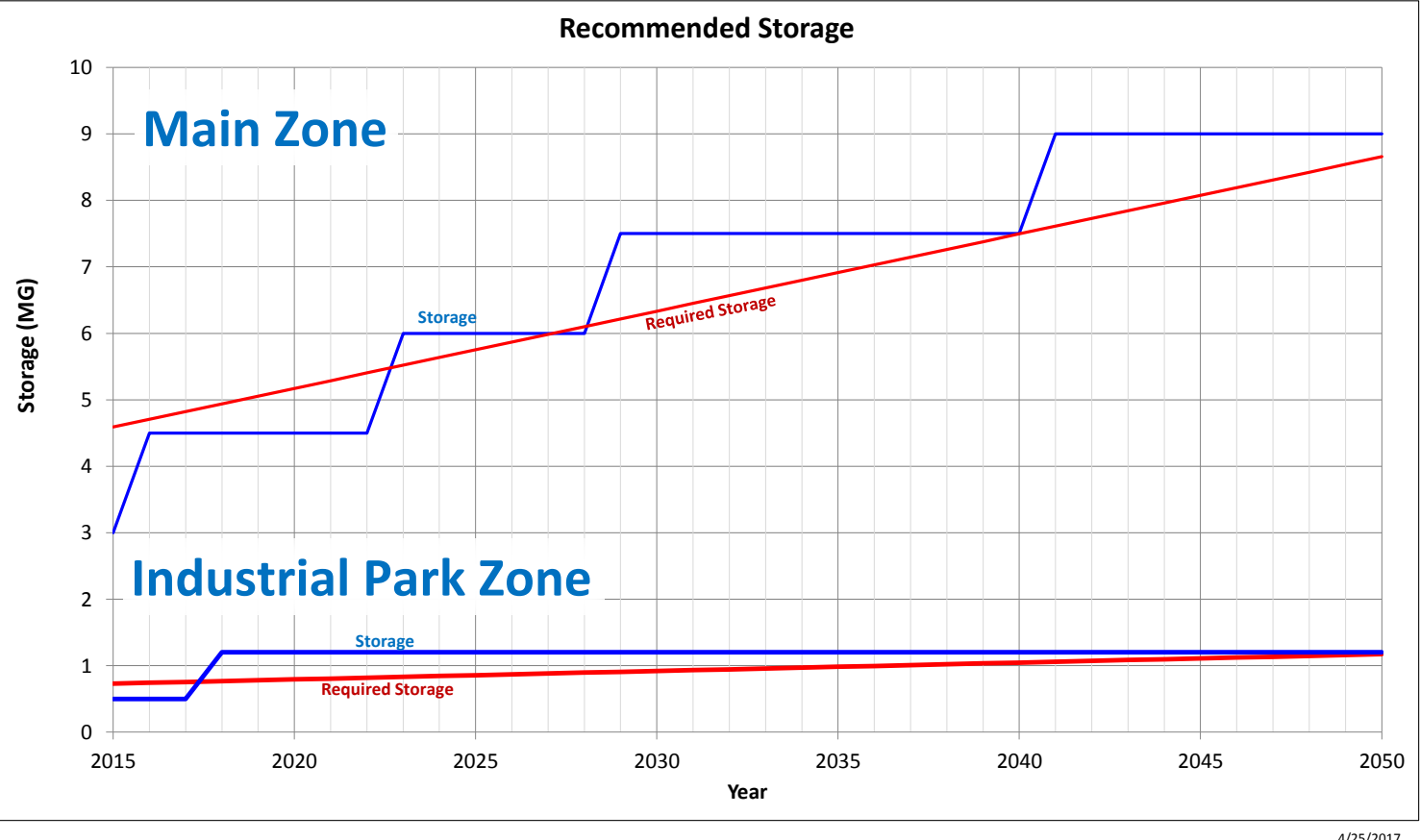
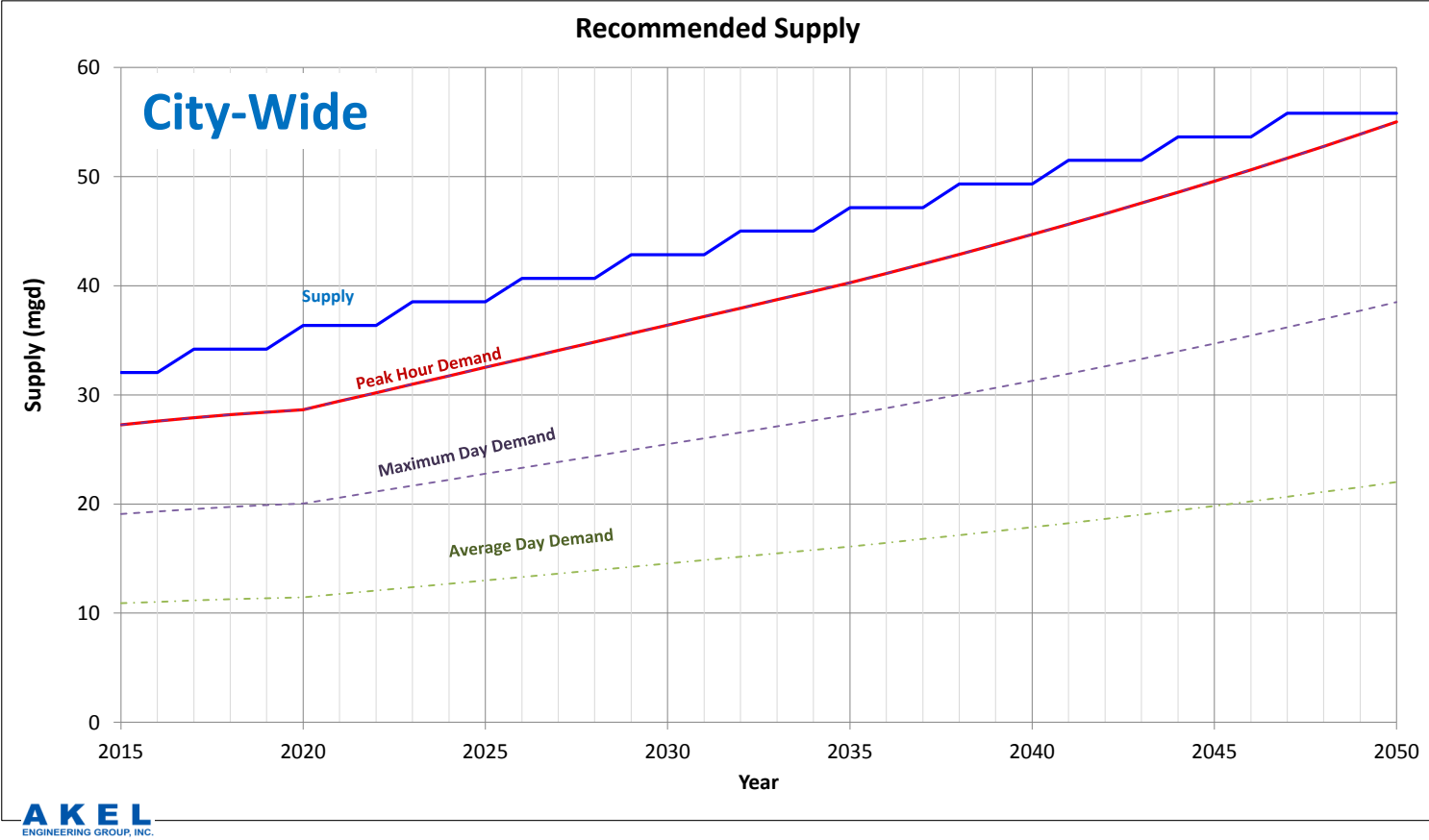


Table 7.3 Proposed Storage Reservoirs

Water System Master Plan

City of Hanford

Reservoir	Bottom Elevation (ft)	Volume (MG)	Height (ft)	Diameter (ft)
Industrial Park Pressure Zone				
11th Ave and Iona Ave	231	0.7	24	60
Main Pressure Zone				
9th Ave and Grangeville Blvd	254	1.5	24	105
9th Ave and Grangeville Blvd	254	1.5	24	105
9th Ave and Hanford Armona Rd	243	1.5	24	105
9th Ave and Hanford Armona Rd	243	1.5	24	105
Total	6.7			

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- **Southeast Storage Facility:** This proposed storage facility consists of two new 1.5 MG ground-level storage tanks, MAIN-T3 and MAIN-T4, located at the intersection of 9th Avenue and Hanford-Armona Road. It should be noted that these storage reservoirs are intended to provide storage requirements for future development and are recommended for phased construction.
- **Industrial Park Storage Expansion: IND-T1:** This proposed storage facility expansion consists of one new 0.7 MG storage tank at the existing Industrial Park storage site, at the intersection of 11th Avenue and Iona Avenue. This tank is recommended for immediate construction and is intended to mitigate an existing storage deficiency as well as providing for the storage requirements of future development.

7.5 WATER SUPPLY ANALYSIS

The City's existing and buildout water supply requirements are summarized on [Table 7.4](#) and [Table 7.5](#), respectively. Based on the buildout water supply requirements the construction of 11 new groundwater wells is required. In order to provide for annually increasing demands, it is recommended a new groundwater well is constructed every three to four years as summarized on [Table 7.2](#). It should be noted that this master plan assumes a future groundwater well capacity of 1,500 gpm; actual groundwater well capacity will vary based on site specific conditions. The specific groundwater well improvements are described as follows:

- **MAIN-W1:** This groundwater well is located approximately 800 feet west of the intersection of Julia Way and Glacier Way. This well is planned to discharge to the existing Tank 6 storage facility.
- **MAIN-W2:** This groundwater well is located on Centennial Drive, approximately 2,600 feet north of the Grangeville Boulevard. This well is planned to discharge directly into the distribution system.
- **MAIN-W3:** This groundwater well is located on 10th Avenue, approximately 1,100 feet north of the Hanford Armona Road. This well is planned to discharge directly into the distribution system.
- **MAIN-W4:** This groundwater well is located on 9th Avenue, approximately 2,800 feet south of Hanford Armona Road. This well is planned to discharge to the proposed southeast storage facility.
- **MAIN-W5:** This groundwater well is located at the intersection of 8 ½ Avenue and Hanford Armona Road. This well is planned to discharge to the proposed southeast storage facility.

Table 7.4 Existing Well Capacity Analysis

Water System Master Plan

City of Hanford

Well Supply Capacity	
Existing Wells Discharging to Distribution System	20.5 mgd
Existing Wells Discharging to Tanks	14.4 mgd
Total Well Capacity	34.9 mgd
Firm Well Capacity	32 mgd
Existing Demand	
Peak Hour	30.2 mgd
Existing Well Capacity Analysis	
Required Firm Capacity ¹	30.2 mgd
Existing Firm Well Capacity	32 mgd
Surplus/Deficit	1.8 mgd

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Notes:

1. City-wide demands equal to Main Pressure Zone plus Industrial Park Pressure Zone.

Table 7.5 Future Well Capacity Analysis
 Water System Master Plan
 City of Hanford

Well Supply Capacity	
Existing Wells Discharging to Distribution System	14.3 mgd
Existing Wells Discharging to Tanks ¹	20.6 mgd
Total Well Capacity	34.9 mgd
Firm Well Capacity	32 mgd
Buildout Demand	
Peak Hour	54.9 mgd
Future Well Capacity Analysis	
Required Firm Capacity ²	54.9 mgd
Existing Firm Well Capacity	32 mgd
Surplus/Deficit	-22.8 mgd
Recommended Well Capacity	
11 additional wells³ (1,500 gpm each)	23.8 mgd

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Notes:

1. Wells 36 and 49 are planned for replumbing to discharge into proposed tanks Main-T1/Main-T2. Well 50 is planned for replumbing to discharge into proposed tanks Main-T3/Main-T4.
2. City-wide demands equal to Main Pressure Zone plus Industrial Park Pressure Zone.
3. The 11 additional wells are further categorized as follows:
 - Six wells are planned to discharge directly to tanks
 - Five wells are planned to discharge directly to distribution system.

- **MAIN-W6:** This groundwater well is located on 9th Avenue, approximately 2,400 feet north of Hanford Armona Road. This well is planned to discharge to the proposed southeast storage facility.
- **MAIN-W7:** This groundwater well is located on 9th Avenue approximately 2,600 feet south of Grangeville Boulevard. This well is planned to discharge directly into the distribution system.
- **MAIN-W8:** This groundwater well is located on right-of-way, approximately 4,200 feet east of 8th Avenue, between Grangeville Boulevard and Lacey Boulevard. This well is planned to discharge directly into the distribution system.
- **MAIN-W9:** This groundwater well is located at the intersection of 9th Avenue and Grangeville Boulevard. This well is planned to discharge to the proposed northeast storage facility.
- **MAIN-W10:** This groundwater well is located approximately at the intersection of Leland Way 9th Avenue. This well is planned to discharge to the proposed northeast storage facility.
- **MAIN-W11:** This groundwater well is located at the intersection of Fargo Avenue and Meadow View Road. This well is planned to discharge directly into the distribution system.

7.6 PUMP STATION ANALYSIS

Pump stations were sized to convey the required flow based on the specific pressure zone criteria, which are summarized as follows:

- **Main Pressure Zone:** Pump stations serving the Main Pressure Zone must have a firm capacity greater than or equal to the sum of the groundwater wells tributary to the ground-level storage tanks as well as the difference between the system-wide peak hour and maximum day demands.
- **Industrial Park Pressure Zone:** The industrial park pump station must have a firm capacity equal to the sum of the Industrial Park Pressure Zone peak hour demand as well as a 3,500 gpm fire flow.

The existing and future pump station capacity analyses are summarized on [Table 7.6](#) and [Table 7.7](#), respectively. In order to meet the future pump station capacity requirements the following improvements are recommended:

- **Northeast Pump Station.** This pump station is associated with the Northeast Storage Facility, located at the intersection of 9th Avenue and Grangeville Boulevard. A preliminary pump layout suggests a firm capacity of 9,300 gpm which includes three 3,100 gpm duty pumps.

Table 7.6 Existing Pump Station Capacity Analysis
 Water System Master Plan
 City of Hanford

Existing Pump Station Capacity		
	Main Pressure Zone (mgd)	Industrial Park Pressure Zone (mgd)
Total Capacity	25.3	4.0
Firm Capacity	22.2	2.6
Existing Demand		
Demand Condition	Main Pressure Zone (mgd)	Industrial Park Pressure Zone (mgd)
Average Day	11.7	0.4
Maximum Day	20.4	0.8
Peak Hour	29.1	1.1
Existing Pump Station Capacity Analysis		
	Main Pressure Zone ¹ (mgd)	Industrial Park Pressure Zone ² (mgd)
Required Firm Capacity	23.1	6.1
Existing Firm Capacity	22.2	2.6
Surplus/Deficit	-1.0	-3.6

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Notes:

- Required Main Pressure Zone pump station capacity is equal to the sum of items a) and b), described as follows:
 - Difference between Peak Hour Demand and Maximum Day Demand
 - Total capacity of wells discharging directly to tanks
- Required Industrial Park Pressure Zone pump station capacity is equal to the sum of items a) and b), described as follows:
 - Peak Hour Demand
 - 3,500 gpm fire flow

Table 7.7 Future Pump Station Capacity Analysis
 Water System Master Plan
 City of Hanford

Existing Pump Station Capacity		
	Main Pressure Zone (mgd)	Industrial Park Pressure Zone (mgd)
Total Capacity	25.3	4.0
Firm Capacity	22.2	2.6
Buildout Demand		
Demand Condition	Main Pressure Zone (mgd)	Industrial Park Pressure Zone (mgd)
Average Day	19.8	1.9
Maximum Day	34.6	3.9
Peak Hour	49.5	5.4
Future Pump Station Capacity Analysis		
	Main Pressure Zone ¹ (mgd)	Industrial Park Pressure Zone ² (mgd)
Required Firm Capacity	48.4	10.4
Existing Firm Capacity	22.2	2.6
Surplus/Deficit	-26.2	-7.8
Recommended Pump Station Capacity		
	Main Pressure Zone	Industrial Park Pressure Zone
	26.8 mgd	8.1 mgd
	2 New Pump Stations	Existing Pump Station Upgrade
	2 x (3 @ 3,100 gpm)	4 @ 1,400 gpm

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Notes:

- Required Main Pressure Zone pump station capacity is equal to the sum of items a) and b), described as follows:
 - Difference between Peak Hour Demand and Maximum Day Demand
 - Total capacity of wells discharging directly to tanks
- Required Industrial Park Pressure Zone pump station capacity is equal to the sum of items a) and b), described as follows:
 - Peak Hour Demand
 - 3,500 gpm fire flow

- **Southeast Pump Station.** This pump station is associated with the Northeast Storage Facility, located at the intersection of 9th Avenue and Hanford-Armona Road. A preliminary pump layout suggests a firm capacity of 9,200 gpm which includes three 3,100 gpm duty pumps.
- **Industrial Park Pump Station Expansion:** The existing Industrial Park pump station is undersized to provide the required Industrial Park fire flow. In order to mitigate this deficiency and meet the additional pump station capacity requirements for the future development additional pumps are recommended; a preliminary pump layout suggests the construction of four 1,400 gpm duty pumps.

7.7 DISTRIBUTION AND TRANSMISSION MAIN ANALYSIS

This master plan evaluated the water system pipeline requirements to service the Planned Area Boundary at buildout of the General Plan, which are summarized on [Table 7.8](#) and shown graphically on [Figure 7.5](#). The following sections document the improvements required for future growth.

Distribution System: The future system distribution grid generally consists of a 12-inch looped network spaced approximately every half-mile. The improvements planned for the purpose of expanding the City's distribution and transmission system are summarized as follows:

Main Pressure Zone

- **MAIN-P1:** Construct a new 12-inch pipeline in Flint Avenue between 11th Avenue and 13th Avenue. It should be noted that this improvement includes one railroad crossing and two canal crossings.
- **MAIN-P2:** Construct a new 12-inch pipeline in right-of-way between 12th Avenue and 13th Avenue. This improvement includes one canal crossing.
- **MAIN-P3:** Construct a new 12-inch pipeline in Fargo Avenue between approximately 440 feet west of Corvina Place and 13th Avenue. This improvement includes one canal crossing.
- **MAIN-P4:** Construct a new 12-inch pipeline in right-of-way between Centennial Drive Avenue and 13th Avenue.
- **MAIN-P5:** Construct a new 12-inch pipeline in 13th Avenue between Flint Avenue and approximately 1,300 feet south of Grangeville Boulevard. This improvement includes two canal crossings.

Table 7.8 Schedule of Improvements
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements						
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings		
								Railroad	Highway	Canal / Slough
(in) (in) (ft)										
Pipeline Improvements										
Main Pressure Zone										
MAIN-P1	Pipeline	Flint Ave	From 11th Ave to 13th Ave	-	New	12	10,600	1		2
MAIN-P2	Pipeline	ROW	From approx 12th Ave to 13th Ave	-	New	12	5,350			1
MAIN-P3	Pipeline	Fargo Ave	From approx 270 ft w/o Corvina Pl to 13th Ave	-	New	12	4,475			1
MAIN-P4	Pipeline	ROW	From Centennial Dr to 13th Ave	-	New	12	2,700			
MAIN-P5	Pipeline	13th Ave	From Flint Ave to approx 1,300 ft s/o Grangeville Blvd	-	New	12	11,900			2
MAIN-P6	Pipeline	Centennial Dr	From Flint Ave to approx 2,600 ft n/o Grangeville Blvd	-	New	12	7,975			2
MAIN-P7	Pipeline	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,275			1
MAIN-P8	Pipeline	13th Ave	From approx 1,350 ft n/o Lacey Blvd to Houston Ave	-	New	12	12,200		1	3
MAIN-P9	Pipeline	12 1/2 Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,525			
MAIN-P10	Pipeline	12th Ave	From Hume Ave to Iona Ave	-	New	12	7,950			1
MAIN-P11	Pipeline	Lacey Blvd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	600			
MAIN-P12	Pipeline	ROW	From 12 1/2 Ave to 13th Ave	-	New	12	2,625			
MAIN-P13	Pipeline	Hanford Armona Rd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	575			
MAIN-P14	Pipeline	Hume Ave	From 12th Ave to 13th Ave	-	New	12	5,400			
MAIN-P15	Pipeline	Houston Ave	From approx 12 1/2 Ave to 13th Ave	-	New	12	2,700			1
MAIN-P16	Pipeline	Houston Ave	From 12 1/2 Ave to approx 700 ft w/o Courtright Dr	-	New	18	6,525			2
MAIN-P17	Pipeline	Houston Ave	From 11th Ave to approx 1,600 ft e/o 11th Ave	6	Replace	18	1,600			
MAIN-P18	Pipeline	Houston Ave	From approx 1,600 ft e/o 11th Ave to approx 2,000 ft e/o 11th Ave	12	Replace	18	475			
MAIN-P19	Pipeline	Houston Ave	From approx 2,000 ft e/o 11th Ave to 10 1/2 Ave	8	Replace	18	925			
MAIN-P20	Pipeline	Houston Ave	From 10 1/2 Ave to 9th Ave	-	New	18	7,875			1
MAIN-P21	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250			2
MAIN-P22	Pipeline	ROW	From 9th Ave to 10 1/2 Ave	-	New	12	7,950	1		1
MAIN-P23	Pipeline	Iona Ave	From 9th Ave to 12th Ave	-	New	12	16,100	1		2
MAIN-P24	Pipeline	ROW	From Houston Ave to Iona Ave	-	New	12	5,275			1
MAIN-P25	Pipeline	10th Ave	From Hanford Armona Rd to Iona Ave	-	New	12	10,600			
MAIN-P26	Pipeline	ROW	From approx 370 ft s/o Hanford Armona Rd to Iona Ave	-	New	12	10,325			3
MAIN-P27	Pipeline	9th Ave	From Houston Ave to Iona Ave	-	New	12	5,225			
MAIN-P28	Pipeline	9th Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,500			1
MAIN-P29	Pipeline	ROW	From approx 700 ft e/o 9 3/4 Ave to 10th Ave	-	New	12	2,700			
MAIN-P30	Pipeline	Hanford Armona Rd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650			1
MAIN-P31	Pipeline	ROW	From Lacey Blvd to Hanford Armona Rd	-	New	12	5,300		1	1
MAIN-P32	Pipeline	Third St	From 9th Ave to 8 1/2 Ave	-	New	12	2,800			
MAIN-P33	Pipeline	ROW	From HWY 43 to 8 1/2 Ave	-	New	12	2,625			
MAIN-P34	Pipeline	Lacey Blvd	From approx 7th Ave to HWY 43	-	New	12	5,300			

Table 7.8 Schedule of Improvements
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements					Number of Casings		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length		Railroad	Highway	Canal / Slough
				(in)		(in)	(ft)				
MAIN-P35	Pipeline	ROW	From 7th Ave to 9 1/4 Ave	-	New	12	8,775				
MAIN-P36	Pipeline	ROW	From 7th Ave to approx 2,600 ft e/o HWY 43	-	New	12	2,125				
MAIN-P37	Pipeline	Grangeville Blvd	From approx 1,300 ft e/o 9 1/4 Ave to 9 1/4 Ave	-	New	18	1,300				
MAIN-P38	Pipeline	Grangeville Blvd	From 7th Ave to approx 1,300 ft e/o 9 1/4 Ave	-	New	12	10,625				
MAIN-P39	Pipeline	9th Ave	From Grangeville Blvd to Lacey Blvd	-	New	18	5,300				
MAIN-P40	Pipeline	8 1/2 Ave	From HWY 43 to Lacey Blvd	-	New	12	8,525	1			
MAIN-P41	Pipeline	HWY 43	From Grangeville Blvd to approx 2,600 ft s/o Lacey Blvd	-	New	12	7,925	1	1		
MAIN-P42	Pipeline	ROW	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			
MAIN-P43	Pipeline	7th Ave	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			
MAIN-P44	Pipeline	HWY 43	From Fargo Ave to Grangeville Blvd	-	New	12	8,250				1
MAIN-P45	Pipeline	9th Ave	From HWY 43 to Grangeville Blvd	-	New	12	5,100				1
MAIN-P46	Pipeline	Fargo Ave	From HWY 43 to approx 200 ft e/o Meadow View Rd	-	New	12	1,500				
MAIN-P47	Pipeline	Leland Wy	From approx 1,700 ft e/o 9 1/4 Ave to 9th Ave	-	New	12	1,700				
Industrial Park Pressure Zone											
IND-P1	Pipeline	Iona Ave	From 11th Ave to 12th Ave	-	New	12	5,250				
IND-P2	Pipeline	Iona Ave	From 9th Ave to approx 2,340 ft w/o 10th Ave	-	New	12	7,675				2
IND-P3	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250				
IND-P4	Pipeline	ROW	From 9th Ave to 10th Ave	-	New	12	5,375				1
IND-P5	Pipeline	Idaho Ave	From 11th Ave to 12th Ave	-	New	12	5,300				
IND-P6	Pipeline	Idaho Ave	From 9th Ave to approx 860 ft w/o 10th Ave	-	New	12	6,175				1
IND-P7	Pipeline	Jackson Ave	From 10th Ave to 11th Ave	-	New	12	5,350	1			
IND-P8	Pipeline	ROW	From 10th Ave to 11th Ave	-	New	12	5,325	1			
IND-P9	Pipeline	12th Ave	From Iona Ave to Idaho Ave	-	New	12	5,300				
IND-P10	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,375				
IND-P11	Pipeline	11th Ave	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,925				1
IND-P12	Pipeline	ROW	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,975				
IND-P13	Pipeline	10th Ave	From Iona Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	13,400				1
IND-P14	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,325				
IND-P15	Pipeline	9th Ave	From Iona Ave to Idaho Ave	-	New	12	5,275				2
Tank Feed Pipelines											
MAIN-PF1	Pipeline	ROW	From approx 800 ft w/o the intersection of Julia Wy and Glacier Wy to approx 400 ft n/o Fargo Ave	-	New	12	2,325				
MAIN-PF2	Pipeline	9th Ave	From Hanford Armona Rd to approx 2,800 ft s/o Hanford Armona Rd	-	New	12	2,825				
MAIN-PF3	Pipeline	Hanford Armona Rd	From approx 2,700 ft e/o 9th Ave to 9th Ave	-	New	12	2,675				
MAIN-PF4	Pipeline	9th Ave	From approx 2,400 ft n/o Hanford Armona Rd to Hanford Armona Rd	-	New	12	2,400				
MAIN-PF5	Pipeline	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,575				
MAIN-PF6	Pipeline	9th Ave	From approx 2,600 ft n/o Grangeville Blvd to Grangeville Blvd	-	New	18	2,625				

Table 7.8 Schedule of Improvements
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements						
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings		
								Railroad	Highway	Canal / Slough
				(in)		(in)	(ft)			
Groundwater Well Improvements					Pump Capacity (gpm)					
MAIN-W1	Groundwater Well	Approx 800 ft w/o the intersection of Julia Wy and Glacier Wy			New	1,500				
MAIN-W2	Groundwater Well	Centennial Dr approx 2,600 ft n/o Grangeville Blvd			New	1,500				
MAIN-W3	Groundwater Well	10th Ave approx 1,100 ft n/o Hanford Armona Rd			New	1,500				
MAIN-W4	Groundwater Well	9th Ave approx 2,800 ft s/o Hanford Armona Rd			New	1,500				
MAIN-W5	Groundwater Well	8 1/2 Ave and Hanford Armona Rd			New	1,500				
MAIN-W6	Groundwater Well	9th Ave approx 2,400 ft n/o Hanford Armona Rd			New	1,500				
MAIN-W7	Groundwater Well	9th Ave and approx 2,600 ft s/o Grangeville Blvd			New	1,500				
MAIN-W8	Groundwater Well	ROW Approx 4,200 ft e/o 8th Avenue s/o Grangeville Blvd			New	1,500				
MAIN-W9	Groundwater Well	Grangeville Blvd and 9th Ave			New	1,500				
MAIN-W10	Groundwater Well	Leland Way and 9th Ave			New	1,500				
MAIN-W11	Groundwater Well	Fargo Ave and Meadow View Rd			New	1,500				
Pump Station Improvements					Firm Booster Station Capacity					
Main Pressure Zone										
MAIN-PS1	Booster Station	Grangeville Blvd and 9th Ave			New	3 @ 3,100 gpm				
MAIN-PS2	Booster Station	Hanford Armona Rd and 9th Ave			New	3 @ 3,100 gpm				
Industrial Park Pressure Zone					Firm Booster Station Capacity					
IND-PS1	Booster Station	11th Ave and Iona Ave			Additional Capacity	4 @ 1,400 gpm				
Tank Improvements					Storage Tank Capacity (M)					
Main Pressure Zone										
MAIN-T1	Storage Tank	Grangeville Blvd and 9th Ave			New	1.5				
MAIN-T2	Storage Tank	Grangeville Blvd and 9th Ave			New	1.5				
MAIN-T3	Storage Tank	Hanford Armona Rd and 9th Ave			New	1.5				
MAIN-T4	Storage Tank	Hanford Armona Rd and 9th Ave			New	1.5				
Industrial Park Pressure Zone					Storage Tank Capacity (M)					
IND-T1	Storage Tank	11th Ave and Iona Ave			New	0.7				

- **MAIN-P6:** Construct a new 12-inch pipeline in Centennial Boulevard between Flint Avenue and approximately 2,600 feet north of Grangeville Boulevard. This improvement includes two canal crossings.
- **MAIN-P7:** Construct a new 12-inch pipeline in 12th Avenue between Flint Avenue and Fargo. This improvement includes one canal crossing.
- **MAIN-P8:** Construct a new 12-inch pipeline in 13th Avenue between approximately 1,350 feet north of Lacy Boulevard and Houston Avenue. This improvement includes one highway crossing and three canal crossings.
- **MAIN-P9:** Construct a new 18-inch pipeline in 12½ Avenue between Hanford Armona Road and Houston Avenue.
- **MAIN-P10:** Construct a new 12-inch pipeline in 12th Avenue between Hume Avenue and Iona Avenue. This improvement includes one canal crossing.
- **MAIN-P11:** Construct a new 12-inch pipeline in Lacey Boulevard between approximately 600 feet east of 13th Avenue and 13th Avenue.
- **MAIN-P12:** Construct a new 12-inch pipeline in right-of-way between 12½ Avenue and 13th Avenue.
- **MAIN-P13:** Construct a new 12-inch pipeline in Hanford Armona Road between 600 feet east of 13th Avenue and 13th Avenue.
- **MAIN-P14:** Construct a new 12-inch pipeline in Hume Avenue between 12th Avenue and 13th Avenue.
- **MAIN-P15:** Construct a new 12-inch pipeline in Houston Avenue between 12½ Avenue and 13th Avenue. This improvement includes one canal crossing.
- **MAIN-P16:** Construct a new 18-inch pipeline in Houston Avenue between 12½ Avenue and approximately 700 feet west of Courtright Drive. This improvement includes two canal crossings.
- **MAIN-P17:** Replace an existing 6-inch pipeline in Houston Avenue between 11th Avenue and approximately 1,600 feet east of 11th Avenue with a new 18-inch pipeline.
- **MAIN-P18:** Replace an existing 12-inch pipeline in Houston Avenue between approximately 1,600 feet east of 11th Avenue and approximately 2,000 feet east of 11th Avenue with a new 18-inch pipeline.
- **MAIN-P19:** Replace an existing 8-inch pipeline in Houston Avenue between approximately 2,000 feet east of 11th Avenue and 10½ Avenue with a new 18-inch pipeline.

- **MAIN-P20:** Construct a new 18-inch pipeline in Houston Avenue between 10½ Avenue and 9th Avenue.
- **MAIN-P21:** Construct a new 12-inch pipeline in right-of-way between 11th Avenue and 12th Avenue. This improvement includes two canal crossings.
- **MAIN-P22:** Construct a new 12-inch pipeline in right-of-way between 9th Avenue and 10½ Avenue. This improvement includes one railroad crossing and one canal crossing.
- **MAIN-P23:** Construct a new 12-inch pipeline in Iona Avenue between 9th Avenue and 12th Avenue. This improvement includes one railroad crossing and two canal crossings.
- **MAIN-P24:** Construct a new 12-inch pipeline in right-of-way between Houston Avenue and Iona Avenue. This improvement includes one canal crossing.
- **MAIN-P25:** Construct a new 12-inch pipeline in 10th Avenue between Hanford Armona Road and Iona Avenue.
- **MAIN-P26:** Construct a new 12-inch pipeline in right-of-way between approximately 370 feet south of Hanford Armona Road to Iona Avenue. This improvement includes three canal crossings.
- **MAIN-P27:** Construct a new 12-inch pipeline in 9th Avenue between Houston Avenue and Iona Avenue.
- **MAIN-P28:** Construct a new 18-inch pipeline in 9th Avenue between Hanford Armona Road and Houston Avenue. This improvement includes one canal crossing.
- **MAIN-P29:** Construct a new 12-inch pipeline in right-of-way between approximately 700 feet east of 9¾ Avenue and 10th Avenue.
- **MAIN-P30:** Construct a new 12-inch pipeline in Hanford Armona Road between 8½ Avenue Road and 9th Avenue. This improvement includes one canal crossing.
- **MAIN-P31:** Construct a new 12-inch pipeline in right-of-way between Lacey Boulevard and Hanford Armona Road. This improvement includes one highway crossing and one canal crossing.
- **MAIN-P32:** Construct a new 12-inch pipeline in Third Street between 9th Avenue and 8½ Avenue.
- **MAIN-P33:** Construct a new 12-inch pipeline in right-of-way between Highway 43 and 8½ Avenue.

- **MAIN-P34:** Construct a new 12-inch pipeline in Lacey Boulevard between 7th Avenue and Highway 43.
- **MAIN-P35:** Construct a new 12-inch pipeline in right-of-way between approximately 2,500 feet east of Highway 43 and 9¼ Avenue.
- **MAIN-P36:** Construct a new 12-inch pipeline in right-of-way between 7th Avenue and approximately 2,600 feet east of Highway 43.
- **MAIN-P37:** Construct a new 18-inch pipeline in Grangeville Boulevard between approximately 1,300 feet east of 9¼ Avenue and 9¼ Avenue.
- **MAIN-P38:** Construct a new 12-inch pipeline in Grangeville Boulevard between 7th Avenue and approximately 1,300 feet east of 9¼ Avenue.
- **MAIN-P39:** Construct a new 18-inch pipeline in 9th Avenue between Grangeville Boulevard and Lacey Boulevard.
- **MAIN-P40:** Construct a new 12-inch pipeline in 8½ Avenue between Highway 43 and Lacey Boulevard. This improvement includes one railroad crossing.
- **MAIN-P41:** Construct a new 12-inch pipeline in Highway 43 between Grangeville Boulevard and approximately 2,600 feet south of Lacey Boulevard. This improvement includes one railroad crossing and one highway crossing.
- **MAIN-P42:** Construct a new 12-inch pipeline in right-of-way between Grangeville Boulevard and Lacey Boulevard. This improvement includes one railroad crossing.
- **MAIN-P43:** Construct a new 12-inch pipeline in 7th Avenue between Grangeville Boulevard and Lacey Boulevard. This improvement includes one railroad crossing.
- **MAIN-P44:** Construct a new 12-inch pipeline in Highway 43 between Fargo Avenue and Grangeville Boulevard. This improvement includes one canal crossing.
- **MAIN-P45:** Construct a new 12-inch pipeline in 9th Avenue between Highway 43 and Grangeville Boulevard. This improvement includes one canal crossing.
- **MAIN-P46:** Construct a new 12-inch pipeline in Fargo Avenue between Highway 43 and approximately 200 feet east of Meadow View Road.
- **MAIN-P47:** Construct a new 12-inch pipeline in Leland Way between approximately 1,700 feet east of 9¼ Avenue and 9th Avenue. This improvement includes one canal crossing.

Industrial Park Pressure Zone

- **IND-P1:** Construct a new 12-inch pipeline in Iona Avenue between 11th Avenue and 12th Avenue.
- **IND-P2:** Construct a new 12-inch pipeline in Iona Avenue between 9th Avenue and approximately 2,340 feet west of 10th Avenue. This improvement includes two canal crossings.
- **IND-P3:** Construct a new 12-inch pipeline in right-of-way between 11th Avenue and 12th Avenue.
- **IND-P4:** Construct a new 12-inch pipeline in right-of-way between 9th Avenue and 10th Avenue. This improvement includes one canal crossing.
- **IND-P5:** Construct a new 12-inch pipeline in Idaho Avenue between 11th Avenue and 12th Avenue.
- **IND-P6:** Construct a new 12-inch pipeline in Idaho Avenue between 9th Avenue and approximately 860 feet west of 10th Avenue. This improvement includes one canal crossing.
- **IND-P7:** Construct a new 12-inch pipeline in Jackson Avenue between 10th Avenue and 11th Avenue. This improvement includes one railroad crossing.
- **IND-P8:** Construct a new 12-inch pipeline in right-of-way between 10th Avenue and 11th Avenue. This improvement includes one railroad crossing.
- **IND-P9:** Construct a new 12-inch pipeline in 12th Avenue between Iona Avenue and Idaho Avenue.
- **IND-P10:** Construct a new 12-inch pipeline in right-of-way between Iona Avenue and Idaho Avenue.
- **IND-P11:** Construct a new 12-inch pipeline in 11th Avenue between Idaho Avenue and approximately 8,000 feet south of Idaho Avenue. This improvement includes one canal crossing.
- **IND-P12:** Construct a new 12-inch pipeline in right-of-way between Idaho Avenue and approximately 8,000 feet south of Idaho Avenue.
- **IND-P13:** Construct a new 12-inch pipeline in 10th Avenue between Iona Avenue and approximately 8,000 feet south of Idaho Avenue. This improvement includes one canal crossing.

- **IND-P14:** Construct a new 12-inch pipeline in right-of-way between Iona Avenue and Idaho Avenue.
- **IND-P15:** Construct a new 12-inch pipeline in 9th Avenue between Iona Avenue and Idaho Avenue. This improvement includes two canal crossings.

Tank Feed Pipelines

- **MAIN-PF1:** Construct a new 12-inch pipeline in right-of-way between approximately 800 feet west of the intersection of Julia Way and Glacier Way and approximately 400 feet north of Fargo Avenue.
- **MAIN-PF2:** Construct a new 12-inch pipeline in 9th Avenue between Hanford Armona Road and approximately 2,800 feet south of Hanford Armona Road.
- **MAIN-PF3:** Construct a new 12-inch pipeline in Hanford Armona Road between approximately 2,700 east of 9th Avenue and 9th Avenue.
- **MAIN-PF4:** Construct a new 12-inch pipeline in 9th Avenue between approximately 2,400 feet north of Hanford Armona Road and Hanford Armona Road.
- **MAIN-PF5:** Construct a new 18-inch pipeline in Grangeville Boulevard between 9¼ Avenue and 9th Avenue. This pipeline is sized to carry the flow of existing groundwater wells 36 and 49 and is recommended for construction with the proposed tank MAIN-T1.
- **MAIN-PF6:** Construct a new 12-inch pipeline in 9th Avenue between approximately 2,600 feet north of Grangeville Boulevard and Grangeville Boulevard.

Transmission System: The transmission system to service future users throughout the Planned Area Boundary consists of 18-inch and 24-inch pipelines along 9th Avenue, Houston Avenue, right-of-way between 12th Avenue and 13th Avenue, and Centennial Drive. The transmission mains are described in more detail below:

- **Northeast-Southeast Transmission Main.** This north-south transmission main is approximately 3 miles long and is intended to convey water between the future tank locations in the northeast and the southeast region of the City. It should be noted that approximately one mile of this transmission has already been constructed.

The transmission main begins at the intersection of 9th Avenue and Grangeville Boulevard and continues south to Lacey Boulevard where it reaches the previously constructed section of transmission main. The proposed transmission begins again at the intersection of Hanford Armona Road and 9th Avenue before terminating at Houston Avenue.

The proposed portions of this transmission main consist of improvements MAIN-P28 and MAIN-P39.

- **East-West Transmission Main.** This east-west transmission main is approximately 3.5 miles long and is intended to convey water between the southeast and the southwest regions of the City. It should be noted that approximately one-quarter mile of this transmission main has already been constructed.

The transmission main begins at the intersection of 9th Avenue and Houston Avenue and continues westward 11th Avenue where it reaches the previously constructed section of transmission main. The proposed transmission begins again west of the intersection of Houston Avenue and Courtright Avenue before terminating one-half mile west of 12th Avenue.

The proposed portions of this transmission main consist of improvements MAIN-P16, MAIN-P17, MAIN-P18, MAIN-P19, and MAIN-P20; these improvements include two canal crossings.

- **Northwest-Southwest Transmission Main.** This north-south transmission main is approximately 3.5 miles long and is intended to convey water between the northwest and the southwest regions of the City. It should be noted that approximately 2.5 miles of this transmission main has already been constructed.

The transmission main begins at Houston Avenue approximately one-half mile west of 12th Avenue and continues northward to Hanford Armona Road where it reaches the previously constructed section of transmission main. The proposed portion of this transmission main consists of improvement MAIN-P9.

CHAPTER 8 – CAPITAL IMPROVEMENT PROGRAM

This chapter provides a summary of the recommended domestic water system improvements to mitigate existing capacity deficiencies and to accommodate anticipated future growth. The chapter also presents the cost criteria and methodologies for developing the capital improvement program. Finally, a capacity allocation analysis, usually used for cost sharing purposes, is also included.

8.1 COST ESTIMATE ACCURACY

Cost estimates presented in the CIP were prepared for general master planning purposes and, where relevant, for further project evaluation. Final costs of a project will depend on several factors including the final project scope, costs of labor and material, and market conditions during construction.

The Association for the Advancement of Cost Engineering (AACE International), formerly known as the American Association of Cost Engineers has defined three classifications of assessing project costs. These classifications are presented in order of increasing accuracy: Order of Magnitude, Budget, and Definitive.

- **Order of Magnitude Estimate.** This classification is also known as an “original estimate”, “study estimate”, or “preliminary estimate”, and is generally intended for master plans and studies.

This estimate is not supported with detailed engineering data about the specific project, and its accuracy is dependent on historical data and cost indexes. It is generally expected that this estimate would be accurate within -30 percent to +50 percent.

- **Budget Estimate.** This classification is also known as an “official estimate” and generally intended for predesign studies. This estimate is prepared to include flow sheets and equipment layouts and details. It is generally expected that this estimate would be accurate within -15 percent to +30 percent.
- **Definitive Estimate.** This classification is also known as a “final estimate” and prepared during the time of contract bidding. The data includes complete plot plans and elevations, equipment data sheets, and complete specifications. It is generally expected that this estimate would be accurate within -5 percent to + 15 percent.

Costs developed in this study should be considered “Order of Magnitude” and have an expected accuracy range of **-30 percent** and **+50 percent**.

8.2 COST ESTIMATE METHODOLOGY

Cost estimates presented in this chapter are opinions of probable construction and other relevant costs developed from several sources including cost curves, Akel experience on other master planning projects, and input from City staff. Where appropriate, costs were escalated to reflect the more current Engineering News-Record (ENR) Construction Cost Index (CCI).

This section documents the unit costs used in developing the opinion of probable construction costs, the CCI, the land acquisition costs, and markups to account for construction contingency and other project related costs.

8.2.1 Unit Costs

The unit cost estimates used in developing the Capital Improvement Program are summarized on [Table 8.1](#). Domestic water pipeline unit costs are based on length of pipes, in feet. Storage reservoir unit costs are based on capacity in MG. Pump station costs are based on an equation that replaces the pump curve.

The unit costs are intended for developing the Order of Magnitude estimate and do not account for site specific conditions, labor and material costs during the time of construction, final project scope, implementation schedule, detailed utility and topography surveys for reservoir sites, investigation of alternative routings for pipes, and other various factors. The capital improvement program included in this report accounts for construction and project-related contingencies as described in this chapter.

8.2.2 Construction Cost Index

Costs estimated in this study are adjusted utilizing the ENR CCI, which is widely used in the engineering and construction industries.

The costs in this Water System Master Plan were benchmarked using a 20-City national average ENR CCI of 10,532, reflecting a date of January 2017.

8.2.3 Land Acquisition

Construction of pipelines is generally assumed to be within existing or future street right-of-ways. A land acquisition fee for the construction of storage reservoirs and pump stations was assumed based on recent land acquisitions. It was assumed that new tank sites will require 3 acres, which includes all recommended tank and pump station improvements.

8.2.4 Construction Contingency Allowance

Knowledge about site-specific conditions for each proposed project is limited at the master planning stage; therefore, construction contingencies were used. The estimated construction costs in this master plan include a **15 percent** contingency allowance to account for unforeseen events and unknown field conditions.

Table 8.1 Unit Costs
 Water System Master Plan
 City of Hanford

Pipelines	
Diameter (in)	(\$/lineal foot)
8	\$65
10	\$78
12	\$83
16	\$131
18	\$159
20	\$167
24	\$200
30	\$256
36	\$310
Pump Stations	
Estimated Pumping Station Project Cost = $1.9 * 10^{(0.7583 * \log(Q) + 3.1951)}$, where Q is in gpm	
Casings ²	
Estimated casing costs are based on \$22 per inch diameter per linear foot	
Groundwater Wells	
1,500 gpm each	\$905,300
Storage Reservoirs	
Tank Volume (MG)	(\$/gallon)
≤ 1.0 MG	\$2.15
1.1 MG - 3.0 MG	\$1.72
3.1 MG - 5.0 MG	\$1.24
> 5.0 MG	\$0.92
Land Acquisition	(\$/acre)
Land Acquisition	\$40,000

AKEL
 ENGINEERING GROUP, INC.

Notes :

- Unit costs based on January 2017 ENR CCI of 10532.
- Casing size assumed at 20 inches larger than carrier pipe.

1/27/2017

8.2.5 Project Related Costs

The capital improvement costs also account for project-related costs, comprising of engineering design, project administration (developer and City staff), construction management and inspection, and legal costs. The project related costs in this master plan were estimated by applying an additional **15 percent** to the estimated construction costs.

8.3 CAPITAL IMPROVEMENT PROGRAM

This section documents the capital improvement program and the cost allocation for existing and future users.

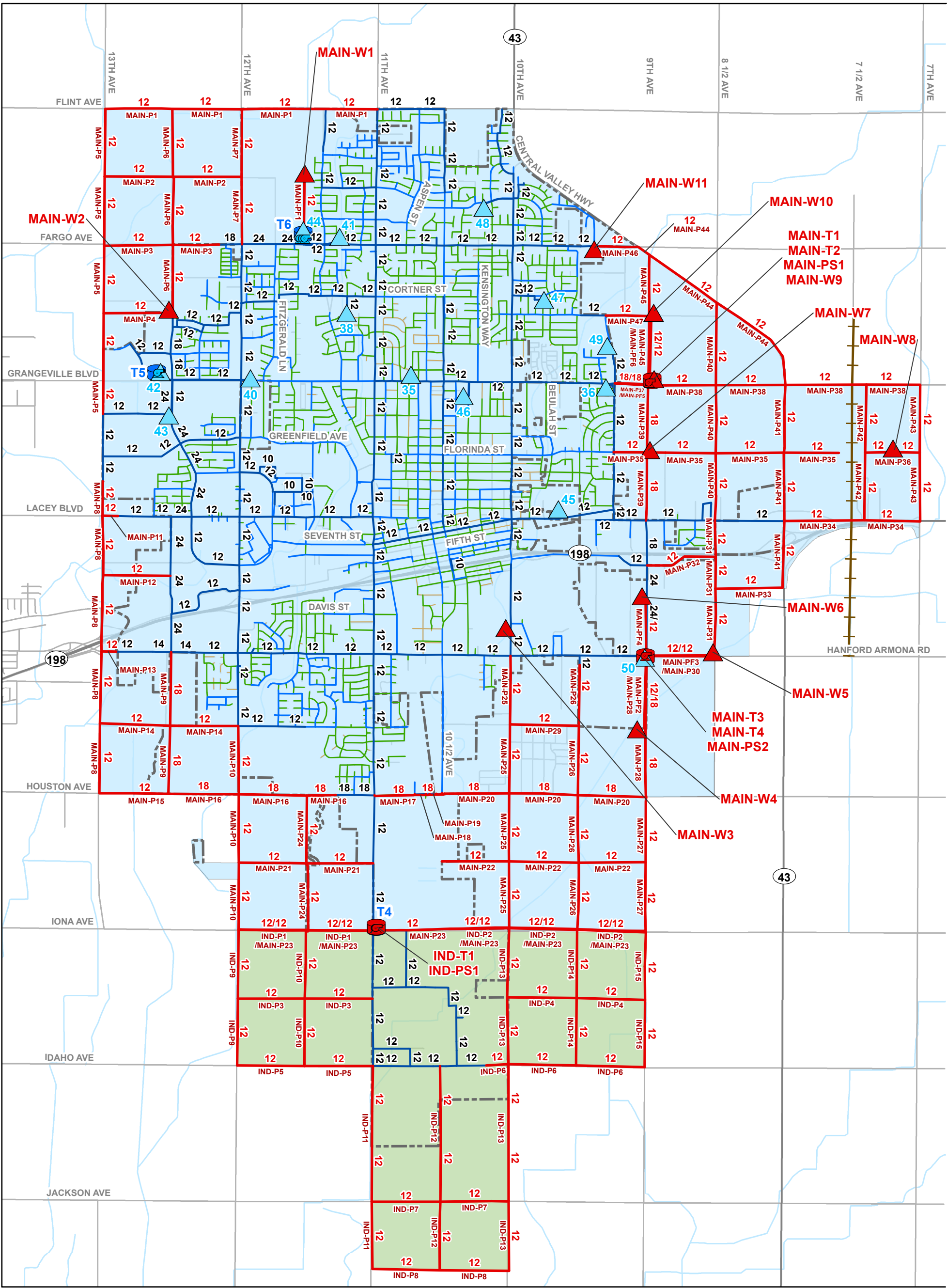
8.3.1 Capital Improvements Program Costs

The Capital Improvement Program costs for the projects identified in this master plan for mitigating existing system deficiencies and for serving anticipated future growth throughout the City are summarized on **Table 8.2**.

Each improvement was assigned a unique coded identifier associated with the improvement type, which corresponds to the summary figure (**Figure 8.1**) that shows the location and identifiers of each improvement. The suggested capital improvement costs include the contingencies discussed in a previous section.

8.3.2 Recommended Cost Allocation Analysis

Cost allocation analysis is needed to identify improvement funding sources, and to establish a nexus between development impact fees and improvements needed to service growth. In compliance with the provisions of Assembly Bill AB 1600, the analysis differentiates between the project needs of servicing existing users and for those required to service anticipated future developments. The cost responsibility is based on model parameters for existing and future land use, and may change depending on the nature of development. **Table 8.2** lists each improvement, and separates the cost by responsibility between existing and future users.



Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Proposed Improvements**
- Tanks
 - Wells
 - Pump Stations
 - Pipes
 - High Speed Rail Alignment

- Pressure Zones**
- Main
 - Industrial Park

- Existing System**
- Tanks
 - Wells
 - Pump Stations

- Pipes By Size**
- 4" and Smaller
 - 6"
 - 8"
 - 10" and Larger

- City Limits**
- Streets
 - Highways
 - Waterways

Figure 8.1
Capital Improvement
Program
Water System Master Plan
City of Hanford



Table 8.2 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Railroad	Number of Casings ¹		Unit Cost ²	Infr. Cost	Baseline Construction Costs (\$)	Estimated Construction Costs ³ (\$)	Land Acquisition Costs ⁴ (\$)	Capital Improvement Costs ⁵ (\$)	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
									(in)	(ft)										
Pipeline Improvements																				
Main Pressure Zone																				
MAIN-P1	Pipeline	Flint Ave	From 11th Ave to 13th Ave	-	New	12	10,600	1		2	83	1,306,372	1,306,372	1,502,327		1,727,677	0%	100%	0	1,727,677
MAIN-P2	Pipeline	ROW	From approx 12th Ave to 13th Ave	-	New	12	5,350			1	83	586,956	586,956	674,999		776,249	0%	100%	0	776,249
MAIN-P3	Pipeline	Fargo Ave	From approx 270 ft w/o Corvina Pl to 13th Ave	-	New	12	4,475			1	83	513,986	513,986	591,084		679,747	0%	100%	0	679,747
MAIN-P4	Pipeline	ROW	From Centennial Dr to 13th Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P5	Pipeline	13th Ave	From Flint Ave to approx 1,300 ft s/o Grangeville Blvd	-	New	12	11,900			2	83	1,273,983	1,273,983	1,465,081		1,684,843	0%	100%	0	1,684,843
MAIN-P6	Pipeline	Centennial Dr	From Flint Ave to approx 2,600 ft n/o Grangeville Blvd	-	New	12	7,975			2	83	946,664	946,664	1,088,663		1,251,963	0%	100%	0	1,251,963
MAIN-P7	Pipeline	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,275			1	83	580,701	580,701	667,806		767,977	0%	100%	0	767,977
MAIN-P8	Pipeline	13th Ave	From approx 1,350 ft n/o Lacey Blvd to Houston Ave	-	New	12	12,200		1	3	83	1,862,201	1,862,201	2,141,532		2,462,761	0%	100%	0	2,462,761
MAIN-P9	Pipeline	12 1/2 Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,525				159	880,543	880,543	1,012,625		1,164,519	40%	60%	465,807	698,711
MAIN-P10	Pipeline	12th Ave	From Hume Ave to Iona Ave	-	New	12	7,950			1	83	803,779	803,779	924,346		1,062,997	0%	100%	0	1,062,997
MAIN-P11	Pipeline	Lacey Blvd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	600				83	50,036	50,036	57,542		66,173	0%	100%	0	66,173
MAIN-P12	Pipeline	ROW	From 12 1/2 Ave to 13th Ave	-	New	12	2,625				83	218,908	218,908	251,744		289,506	0%	100%	0	289,506
MAIN-P13	Pipeline	Hanford Armona Rd	From approx 600 ft e/o 13th Ave to 13th Ave	-	New	12	575				83	47,951	47,951	55,144		63,416	0%	100%	0	63,416
MAIN-P14	Pipeline	Hume Ave	From 12th Ave to 13th Ave	-	New	12	5,400				83	450,325	450,325	517,874		595,555	0%	100%	0	595,555
MAIN-P15	Pipeline	Houston Ave	From approx 12 1/2 Ave to 13th Ave	-	New	12	2,700			1	83	365,963	365,963	420,857		483,986	40%	60%	193,594	290,391
MAIN-P16	Pipeline	Houston Ave	From 12 1/2 Ave to approx 700 ft w/o Courtright Dr	-	New	18	6,525			2	159	1,374,318	1,374,318	1,580,465		1,817,535	40%	60%	727,014	1,090,521
MAIN-P17	Pipeline	Houston Ave	From 11th Ave to approx 1,600 ft e/o 11th Ave	6	Replace	18	1,600				159	254,999	254,999	293,249		337,236	40%	60%	134,894	202,342
MAIN-P18	Pipeline	Houston Ave	From approx 1,600 ft e/o 11th Ave to approx 2,000 ft e/o 11th Ave	12	Replace	18	475				159	75,703	75,703	87,058		100,117	40%	60%	40,047	60,070
MAIN-P19	Pipeline	Houston Ave	From approx 2,000 ft e/o 11th Ave to 10 1/2 Ave	8	Replace	18	925				159	147,421	147,421	169,534		194,965	40%	60%	77,986	116,979
MAIN-P20	Pipeline	Houston Ave	From 10 1/2 Ave to 9th Ave	-	New	18	7,875			1	159	1,422,273	1,422,273	1,635,614		1,880,956	0%	100%	0	1,880,956
MAIN-P21	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250			2	83	719,416	719,416	827,329		951,428	20%	80%	190,286	761,142
MAIN-P22	Pipeline	ROW	From 9th Ave to 10 1/2 Ave	-	New	12	7,950	1		1	83	944,579	944,579	1,086,266		1,249,205	0%	100%	0	1,249,205
MAIN-P23	Pipeline	Iona Ave	From 9th Ave to 12th Ave	-	New	12	16,100	1		2	83	1,765,036	1,765,036	2,029,792		2,334,261	25%	75%	583,565	1,750,695
MAIN-P24	Pipeline	ROW	From Houston Ave to Iona Ave	-	New	12	5,275			1	83	580,701	580,701	667,806		767,977	0%	100%	0	767,977
MAIN-P25	Pipeline	10th Ave	From Hanford Armona Rd to Iona Ave	-	New	12	10,600				83	883,972	883,972	1,016,567		1,169,053	0%	100%	0	1,169,053
MAIN-P26	Pipeline	ROW	From approx 370 ft s/o Hanford Armona Rd to Iona Ave	-	New	12	10,325			3	83	1,283,439	1,283,439	1,475,954		1,697,347	40%	60%	678,939	1,018,408
MAIN-P27	Pipeline	9th Ave	From Houston Ave to Iona Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P28	Pipeline	9th Ave	From Hanford Armona Rd to Houston Ave	-	New	18	5,500			1	159	1,043,759	1,043,759	1,200,323		1,380,371	0%	100%	0	1,380,371
MAIN-P29	Pipeline	ROW	From approx 700 ft e/o 9 3/4 Ave to 10th Ave	-	New	12	2,700				83	225,163	225,163	258,937		297,778	0%	100%	0	297,778
MAIN-P30	Pipeline	Hanford Armona Rd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650			1	83	361,793	361,793	416,062		478,471	0%	100%	0	478,471
MAIN-P31	Pipeline	ROW	From Lacey Blvd to Hanford Armona Rd	-	New	12	5,300		1	1	83	1,005,186	1,005,186	1,155,964		1,329,358	0%	100%	0	1,329,358
MAIN-P32	Pipeline	Third St	From 9th Ave to 8 1/2 Ave	-	New	12	2,800				83	233,502	233,502	268,527		308,806	0%	100%	0	308,806
MAIN-P33	Pipeline	ROW	From HWY 43 to 8 1/2 Ave	-	New	12	2,625				83	218,908	218,908	251,744		289,506	0%	100%	0	289,506

Attachment: Water System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Table 8.2 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Railroad	Number of Casings ¹		Unit Cost ²	Infr. Cost	Baseline Construction Costs (\$)	Estimated Construction Costs ³ (\$)	Land Acquisition Costs ⁴ (\$)	Capital Improvement Costs ⁵ (\$)	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)
									(in)	(ft)										
MAIN-P34	Pipeline	Lacey Blvd	From approx 7th Ave to HWY 43	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
MAIN-P35	Pipeline	ROW	From 7th Ave to 9 1/4 Ave	-	New	12	8,775				83	731,778	731,778	841,545		967,777	0%	100%	0	967,777
MAIN-P36	Pipeline	ROW	From 7th Ave to approx 2,600 ft e/o HWY 43	-	New	12	2,125				83	177,211	177,211	203,793		234,362	0%	100%	0	234,362
MAIN-P37	Pipeline	Grangeville Blvd	From approx 1,300 ft e/o 9 1/4 Ave to 9 1/4 Ave	-	New	18	1,300				159	207,187	207,187	238,265		274,004	40%	60%	109,602	164,403
MAIN-P38	Pipeline	Grangeville Blvd	From 7th Ave to approx 1,300 ft e/o 9 1/4 Ave	-	New	12	10,625				83	886,057	886,057	1,018,965		1,171,810	0%	100%	0	1,171,810
MAIN-P39	Pipeline	9th Ave	From Grangeville Blvd to Lacey Blvd	-	New	18	5,300				159	844,684	844,684	971,387		1,117,095	0%	100%	0	1,117,095
MAIN-P40	Pipeline	8 1/2 Ave	From HWY 43 to Lacey Blvd	-	New	12	8,525	1			83	851,730	851,730	979,490		1,126,413	0%	100%	0	1,126,413
MAIN-P41	Pipeline	HWY 43	From Grangeville Blvd to approx 2,600 ft s/o Lacey Blvd	-	New	12	7,925	1	1		83	1,224,094	1,224,094	1,407,708		1,618,864	0%	100%	0	1,618,864
MAIN-P42	Pipeline	ROW	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			83	582,786	582,786	670,204		770,734	0%	100%	0	770,734
MAIN-P43	Pipeline	7th Ave	From Grangeville Blvd to Lacey Blvd	-	New	12	5,300	1			83	582,786	582,786	670,204		770,734	0%	100%	0	770,734
MAIN-P44	Pipeline	HWY 43	From Fargo Ave to Grangeville Blvd	-	New	12	8,250			1	83	828,797	828,797	953,116		1,096,084	0%	100%	0	1,096,084
MAIN-P45	Pipeline	9th Ave	From HWY 43 to Grangeville Blvd	-	New	12	5,100			1	83	566,107	566,107	651,023		748,677	0%	100%	0	748,677
MAIN-P46	Pipeline	Fargo Ave	From HWY 43 to approx 200 ft e/o Meadow View Rd	-	New	12	1,500				83	125,090	125,090	143,854		165,432	0%	100%	0	165,432
MAIN-P47	Pipeline	Leland Wy	From approx 1,700 ft e/o 9 1/4 Ave to 9th Ave	-	New	12	1,700				83	141,769	141,769	163,034		187,490	0%	100%	0	187,490
						Subtotal - Main Pressure Zone						31,070,923	35,731,561		41,091,295			3,201,734	37,889,561	
Industrial Park Pressure Zone																				
IND-P1	Pipeline	Iona Ave	From 11th Ave to 12th Ave	-	New	12	5,250				83	437,816	437,816	503,489		579,012	0%	100%	0	579,012
IND-P2	Pipeline	Iona Ave	From 9th Ave to approx 2,340 ft w/o 10th Ave	-	New	12	7,675			2	83	921,646	921,646	1,059,892		1,218,876	0%	100%	0	1,218,876
IND-P3	Pipeline	ROW	From 11th Ave to 12th Ave	-	New	12	5,250				83	437,816	437,816	503,489		579,012	0%	100%	0	579,012
IND-P4	Pipeline	ROW	From 9th Ave to 10th Ave	-	New	12	5,375			1	83	589,040	589,040	677,396		779,006	0%	100%	0	779,006
IND-P5	Pipeline	Idaho Ave	From 11th Ave to 12th Ave	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
IND-P6	Pipeline	Idaho Ave	From 9th Ave to approx 860 ft w/o 10th Ave	-	New	12	6,175			1	83	655,755	655,755	754,119		867,236	0%	100%	0	867,236
IND-P7	Pipeline	Jackson Ave	From 10th Ave to 11th Ave	-	New	12	5,350	1			83	586,956	586,956	674,999		776,249	0%	100%	0	776,249
IND-P8	Pipeline	ROW	From 10th Ave to 11th Ave	-	New	12	5,325	1			83	584,871	584,871	672,601		773,492	0%	100%	0	773,492
IND-P9	Pipeline	12th Ave	From Iona Ave to Idaho Ave	-	New	12	5,300				83	441,986	441,986	508,284		584,526	0%	100%	0	584,526
IND-P10	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,375				83	448,240	448,240	515,476		592,798	0%	100%	0	592,798
IND-P11	Pipeline	11th Ave	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,925			1	83	801,694	801,694	921,948		1,060,240	0%	100%	0	1,060,240
IND-P12	Pipeline	ROW	From Idaho Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	7,975				83	665,064	665,064	764,823		879,547	0%	100%	0	879,547
IND-P13	Pipeline	10th Ave	From Iona Ave to approx 8,000 ft s/o Idaho Ave	-	New	12	13,400			1	83	1,258,274	1,258,274	1,447,015		1,664,067	0%	100%	0	1,664,067
IND-P14	Pipeline	ROW	From Iona Ave to Idaho Ave	-	New	12	5,325				83	444,071	444,071	510,681		587,284	0%	100%	0	587,284
IND-P15	Pipeline	9th Ave	From Iona Ave to Idaho Ave	-	New	12	5,275			2	83	721,501	721,501	829,726		954,185	0%	100%	0	954,185
						Subtotal - Industrial Pressure Zone						9,436,715	10,852,222		12,480,056			0	12,480,056	

Table 8.2 Capital Improvement Program
Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation																
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings ¹			Unit Cost ²	Infr. Cost	Baseline Construction Costs (\$)	Estimated Construction Costs ³ (\$)	Land Acquisition Costs ⁴ (\$)	Capital Improvement Costs ⁵ (\$)	Existing Users (%)	Future Users (%)	Existing Users (\$)	Future Users (\$)														
								Railroad	Highway	Canal/Slough																								
																				(in)	(ft)				(\$/unit)	(\$)								
Tank Feed Pipelines																																		
MAIN-PF1	Pipeline	ROW	From approx 800 ft w/o the intersection of Julia Wy and Glacier Wy to approx 400 ft n/o Fargo Ave	-	New	12	2,325				83	193,890	193,890	222,974		256,420	0%	100%	0	256,420														
MAIN-PF2	Pipeline	9th Ave	From Hanford Armona Rd to approx 2,800 ft s/o Hanford Armona Rd	-	New	12	2,825				83	235,587	235,587	270,925		311,564	0%	100%	0	311,564														
MAIN-PF3	Pipeline	Hanford Armona Rd	From approx 2,700 ft e/o 9th Ave to 9th Ave	-	New	12	2,675				83	223,078	223,078	256,539		295,020	0%	100%	0	295,020														
MAIN-PF4	Pipeline	9th Ave	From approx 2,400 ft n/o Hanford Armona Rd to Hanford Armona Rd	-	New	12	2,400				83	200,145	200,145	230,166		264,691	0%	100%	0	264,691														
MAIN-PF5	Pipeline	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,575				83	131,345	131,345	151,047		173,704	0%	100%	0	173,704														
MAIN-PF6	Pipeline	9th Ave	From approx 2,600 ft n/o Grangeville Blvd to Grangeville Blvd	-	New	18	2,625				159	418,358	418,358	481,111		553,278	0%	100%	0	553,278														
						Subtotal - Industrial Pressure Zone						1,402,402	1,612,762		1,854,676			0	1,854,676															
						Subtotal - Pipeline Improvements						41,910,039	48,196,545		55,426,027			3,201,734	52,224,293															
Groundwater Well Improvements																				Pump Capacity (gpm)														
MAIN-W1	Groundwater Well	Approx 800 ft w/o the intersection of Julia Wy and Glacier Wy			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W2	Groundwater Well	Centennial Dr approx 2,600 ft n/o Grangeville Blvd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W3	Groundwater Well	10th Ave approx 1,100 ft n/o Hanford Armona Rd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W4	Groundwater Well	9th Ave approx 2,800 ft s/o Hanford Armona Rd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W5	Groundwater Well	8 1/2 Ave and Hanford Armona Rd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W6	Groundwater Well	9th Ave approx 2,400 ft n/o Hanford Armona Rd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W7	Groundwater Well	9th Ave and approx 2,600 ft s/o Grangeville Blvd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W8	Groundwater Well	ROW Approx 4,200 ft e/o 8th Avenue s/o Grangeville Blvd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W9	Groundwater Well	Grangeville Blvd and 9th Ave			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W10	Groundwater Well	Leland Way and 9th Ave			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
MAIN-W11	Groundwater Well	Fargo Ave and Meadow View Rd			New	1,500						-	905,300	905,300	1,041,095	20,000	1,220,259	0%	100%	0	1,220,259													
						Subtotal - Groundwater Well Improvements						9,958,300	11,452,045	220,000	13,422,852			0	13,422,852															
Pump Station Improvements																				Firm Pump Station Capacity (gpm)														
Main Pressure Zone																																		
MAIN-PS1	Pump Station	Grangeville Blvd and 9th Ave			New	3 @ 3,100 gpm						-	3,041,965	3,041,965	3,498,260		4,022,999	60%	40%	2,413,799	1,609,200													
MAIN-PS2	Pump Station	Hanford Armona Rd and 9th Ave			New	3 @ 3,100 gpm						-	3,041,965	3,041,965	3,498,260		4,022,999	0%	100%	0	4,022,999													
						Subtotal - Main Pressure Zone						6,083,930	6,996,520		8,045,998			2,413,799	5,632,198															
Industrial Park Pressure Zone																				Firm Pump Station Capacity (gpm)														
IND-PS1	Pump Station	11th Ave and Iona Ave			Additional Capacity	4 @ 1,400 gpm						-	2,070,640	2,070,640	2,381,236		2,738,421	25%	75%	684,605	2,053,816													
						Subtotal - Industrial Pressure Zone						2,070,640	2,381,236		2,738,421			684,605	2,053,816															
						Subtotal - Pump Station Improvements						8,154,570	9,377,756		10,784,419			3,098,405	7,686,014															

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Water System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements		Infrastructure Costs						Capital Improvement Costs				Suggested Cost Allocation		Cost Allocation		
				Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings ¹			Unit Cost ²	Infr. Cost	Baseline Construction Costs	Estimated Construction Costs ³	Land Acquisition Costs ⁴	Capital Improvement Costs ⁵	Existing Users	Future Users	Existing Users	Future Users
								Railroad	Highway	Canal/Slough										
Tank Improvements				Storage Tank Capacity (MG)																
Main Pressure Zone																				
MAIN-T1	Storage Tank	Grangeville Blvd and 9th Ave		New			1.5		-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	100%	0%	3,479,975	0		
MAIN-T2	Storage Tank	Grangeville Blvd and 9th Ave		New			1.5		-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
MAIN-T3	Storage Tank	Hanford Armona Rd and 9th Ave		New			1.5		-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
MAIN-T4	Storage Tank	Hanford Armona Rd and 9th Ave		New			1.5		-	2,579,187	2,579,187	2,966,065	60,000	3,479,975	0%	100%	0	3,479,975		
					Subtotal - Main Pressure Zone						10,316,748	11,864,260	240,000	13,919,899			3,479,975	10,439,924		
Industrial Park Pressure Zone				Storage Tank Capacity (MG)																
IND-T1	Storage Tank	11th Ave and Iona Ave		New			0.7		-	1,203,621	1,203,621	1,384,164	60,000	1,660,788	6%	94%	99,647	1,561,141		
					Subtotal - Industrial Pressure Zone						1,203,621	1,384,164	60,000	1,660,788			99,647	1,561,141		
					Subtotal - Storage Tank Improvements						11,520,368	13,248,424	300,000	15,580,687			3,579,622	12,001,065		
Total Improvement Cost																				
					Pipeline Improvements						41,910,039	48,196,545	0	55,426,027			3,201,734	52,224,293		
					Groundwater Wells						9,958,300	11,452,045	220,000	13,422,852			0	13,422,852		
					Pump Stations						8,154,570	9,377,756	0	10,784,419			3,098,405	7,686,014		
					Storage Tanks						11,520,368	13,248,424	300,000	15,580,687			3,579,622	12,001,065		
AKEL					Total Improvement Costs						71,543,278	82,274,769	520,000	95,213,985			9,879,761	85,334,224		

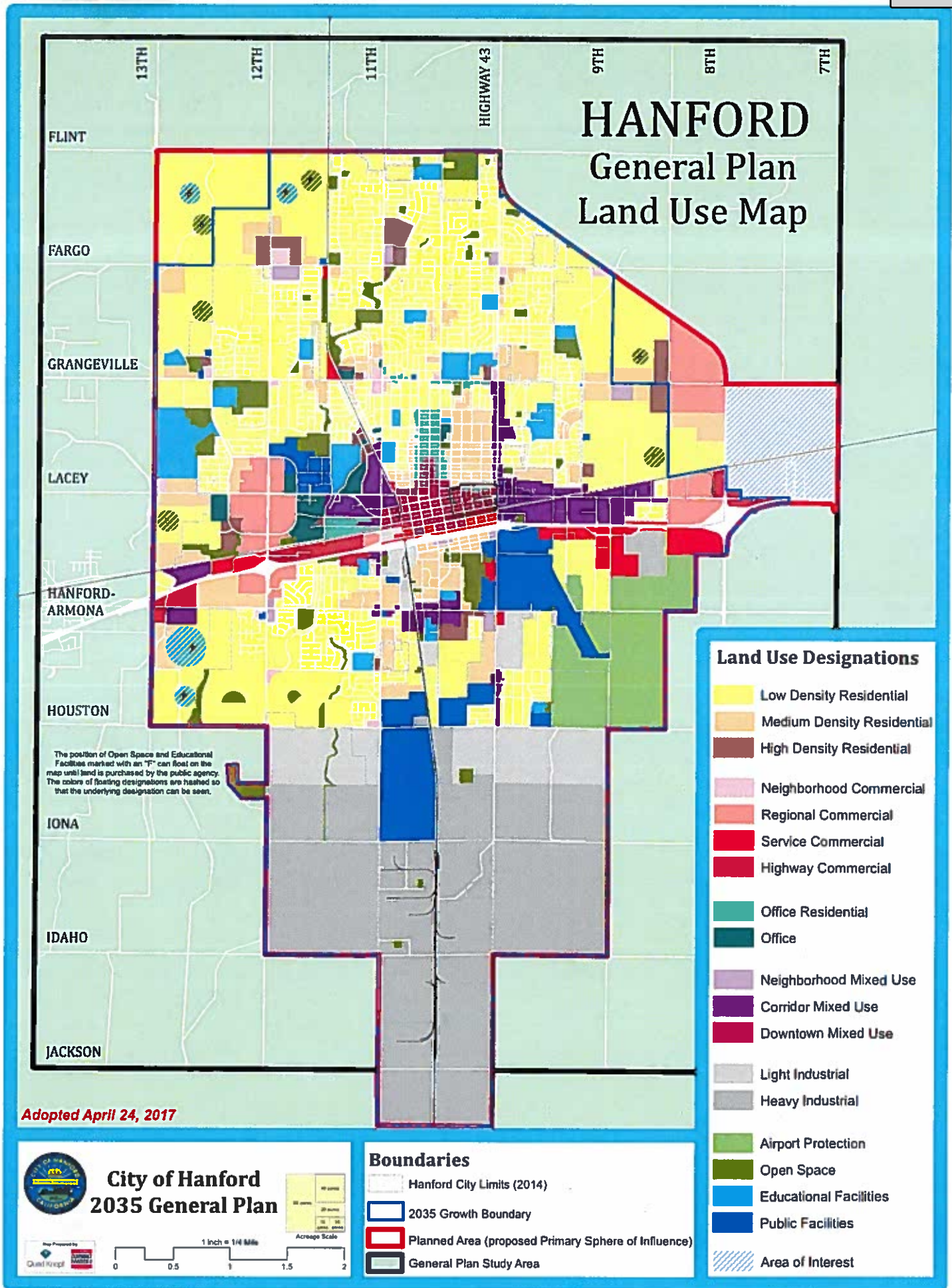


Notes:
1. Casing diameter assumed at 20 inches greater than carrier pipe. Railroad and canal/slough casings assumed at a length of 200 feet; highway casings assumed at a length of 600 feet.
2. Unit costs based on a January 2017 ENR CCI of 10,532.
3. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.
4. It was assumed that new storage reservoirs would require 1.5 acres of land acquisition while new groundwater wells would require 0.5 acres of land acquisition.
5. Estimated construction cost and land acquisition cost plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs

5/19/2017

APPENDIX A

General Plan Land Use Map

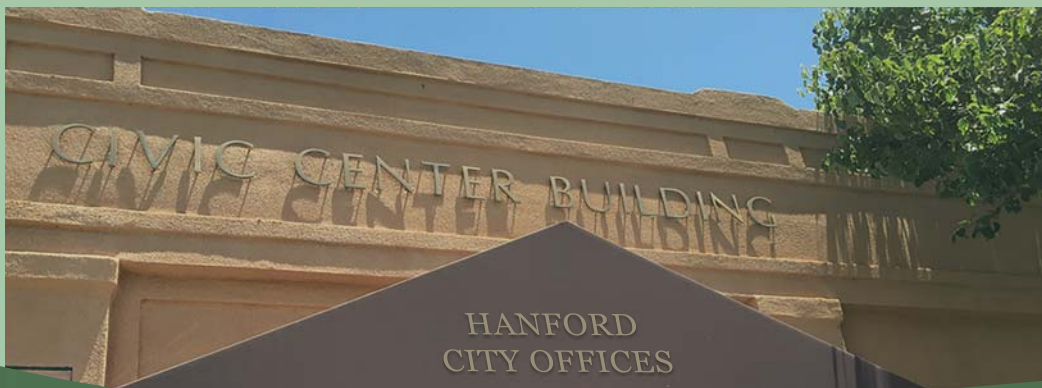




SEPTEMBER 2017
FINAL

City of Hanford

Sewer System Master Plan



A K E L
ENGINEERING GROUP, INC.



CITY OF HANFORD

2017

SEWER SYSTEM MASTER PLAN

Final

September 2017



AKEL
ENGINEERING GROUP, INC.



Smart Planning Our Water Resources

September 29, 2017

City of Hanford
319 Douty Street
Hanford CA, 93230

Attention: Lou Camara
Director of Public Works

Subject: 2017 Sewer System Master Plan – Final Report

Dear Lou:

We are pleased to submit the final report for the City of Hanford Sewer System Master Plan. This master plan is a standalone document, though it was prepared as part of the integrated infrastructure master plans for the water, sewer, and storm drainage master plans. The master plan documents the following:

- Existing collection system facilities, acceptable hydraulic performance criteria, and projected wastewater flows consistent with the Planned Area Boundary
- Development of the City's hydraulic sewer model.
- Capacity evaluation of the existing sewer system with improvements to mitigate existing deficiencies and to accommodate future growth.
- Capital improvement program (CIP) with an opinion of probable construction costs and suggestions for cost allocations to meet AB 1600.

We extend our thanks to you; John Doyel, Director of Public Utilities/ City Engineer; Darlene Mata, Community Development Director, and other City staff whose courtesy and cooperation were valuable components in completing this study.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.
Principal

Enclosure: Report



Acknowledgements

City Council

David Ayers, Mayor

Sue Sorensen, Vice Mayor

Martin Devine

Francisco Ramirez

Justin Mendes

Management Personnel

Lou Camara, Director of Public Works

John Doyel, Director of Public Utilities / City Engineer

Mike Cosenza, Utilities Superintendent

Darlene Mata, Community Development Director

Other City Engineering, Planning, and Operations Staff

City of Hanford

Sewer System Master Plan

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Sewer System Master Plan

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City of Hanford Sewer System Master Plan

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City of Hanford Sewer System Master Plan

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APPENDICES

Appendix A	Hanford General Plan Land Use Map
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EXECUTIVE SUMMARY

This executive summary presents a brief background of the City of Hanford's sewer system, the planning area characteristics, the planning and design criteria, the hydraulic model development and a capital improvement program.

The hydraulic model was used to evaluate the capacity adequacy of the existing sewer system and for recommending improvements to mitigate existing deficiencies and for servicing future growth. The prioritized capital improvement program accounts for growth throughout the Hanford Planning Area.

ES.1 STUDY OBJECTIVES

The City of Hanford recognizes the importance of planning, developing, and financing system facilities to provide sewer collection services to existing customers and for servicing anticipated growth within the Hanford Planning Area, the City initiated the preparation of the 2017 Sewer System Master Plan (SSMP).

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. This 2017 SSMP is intended to serve as a tool for planning and phasing the construction of future sewer system infrastructure for the projected buildout of the City of Hanford. The 2017 SSMP evaluates the City's sewer system and recommends capacity improvements necessary to service the need of existing users and for servicing the future growth of the City.

The planning boundary and horizon for the master plan were developed in accordance with the City's recently adopted General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

This master plan included the following tasks:

- Summarize the City's existing sewer system facilities.
- Document growth planning assumptions and known future developments.
- Update the sewer system performance criteria.
- Project future sewer flows.
- Update the hydraulic model using available data.
- Evaluate the adequacy of capacity for the sewer system facilities to meet existing and projected peak dry weather flows.
- Recommend a capital improvement program (CIP) with an opinion of probable construction costs.

- Perform a capacity allocation analysis for cost sharing purposes between existing users and future growth.
- Develop a 2017 Sewer System Master Plan Report.

ES.2 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer System Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, they have been coordinated for consistency with the City's General Plan. Additionally, each document has been cross referenced to reflect relevant analysis results with the other documents.

ES.3 STUDY AREA DESCRIPTION

The City is located in Kings County, approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure ES.1](#)). The City's closest neighbor, the City of Lemoore, is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east-west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City service area.

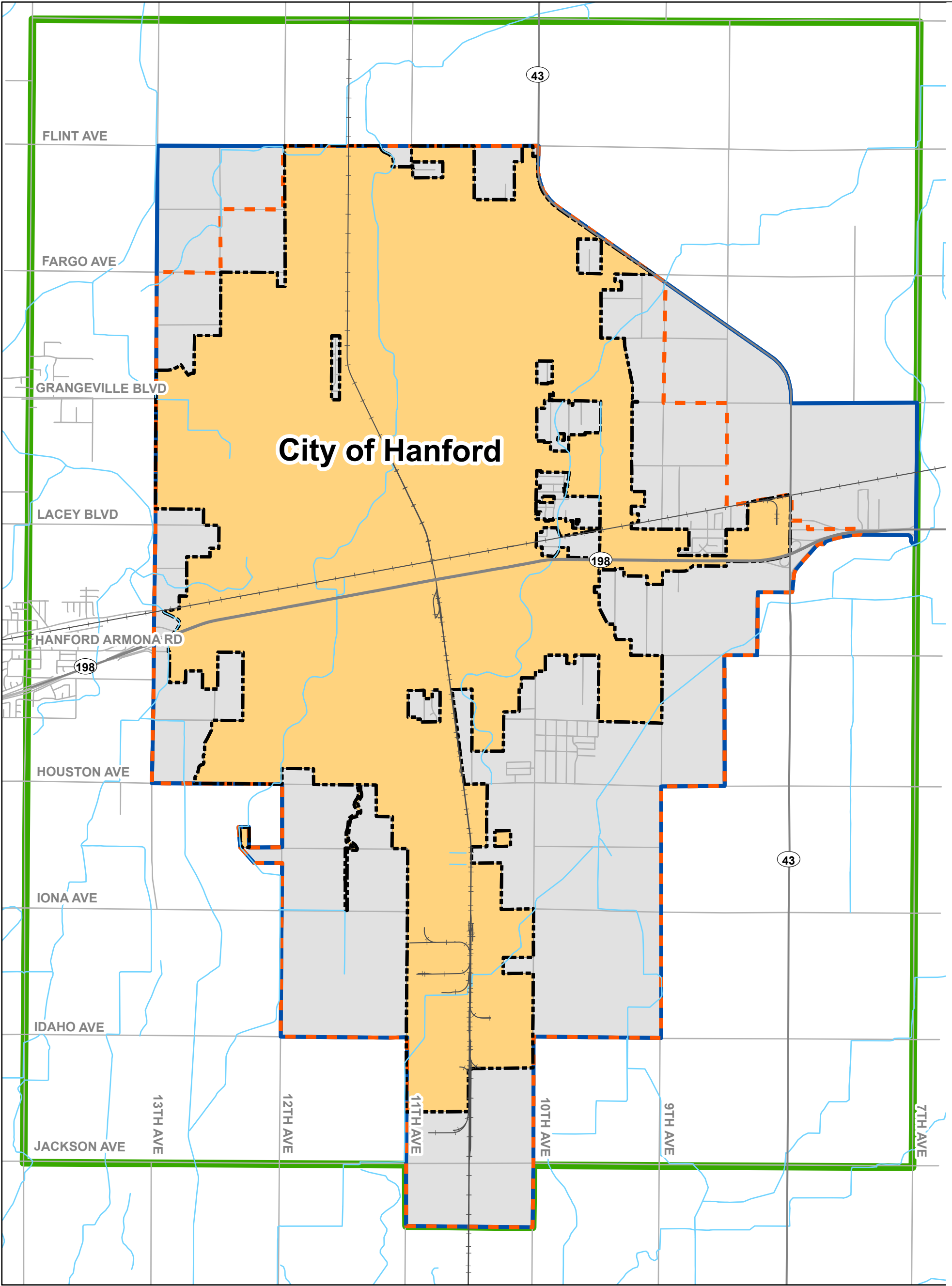
The City operates and maintains a sewer system that covers the majority of the area within the City Limits. The existing sewer collection system conveys flows to the City's Wastewater Treatment Plant (WWTP).

ES.4 SYSTEM PERFORMANCE AND DESIGN CRITERIA

Gravity Sewer capacities depend on several factors including: material and roughness of the pipe, the limiting velocity and slope, and the maximum allowable depth of flow. Design criteria include capacity requirements for the sewer collection system facilities and flow calculation methodologies for future users.

Partial Flow Criteria (d/D)

Partial flow in gravity sewers is expressed as a depth of flow to pipe diameter ratio (d/D). For circular gravity conduits, the highest capacity is generally reached at 92 percent of the full height of the pipe (d/D ratio of 0.92). This is due to the additional wetted perimeter and increased friction of a gravity pipe.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



ES. 1
Planning Area
Sewer System Master Plan
City of Hanford



During peak dry weather flows (PDWF), the maximum allowable d/D ratio for proposed pipelines smaller than 18-inches is 0.5. For proposed pipelines 18-inches and larger, the maximum allowable d/D criteria is 0.75. The maximum allowable d/D for all existing pipes (all diameters) is 0.92. The criterion for existing pipe is relaxed in order to maximize the use of the existing pipes before costly pipes improvements are required.

The City's design standards pertaining to the d/D criteria are summarized in [Table ES.1](#).

ES.5 EXISTING SEWER SYSTEM OVERVIEW

The City provides sewer collection services to approximately 56,000 residents, as well as commercial, industrial, and institutional establishments. The City owns, operates, and maintains the sewer collection system which consists of gravity and force mains, with pipes up to 48-inches in size ultimately conveying the flow to the City's WWTP.

The City's existing sewer system is shown in [Figure ES.2](#), which displays the existing system by pipe sizes. This figure also labels the existing lift stations and the WWTP.

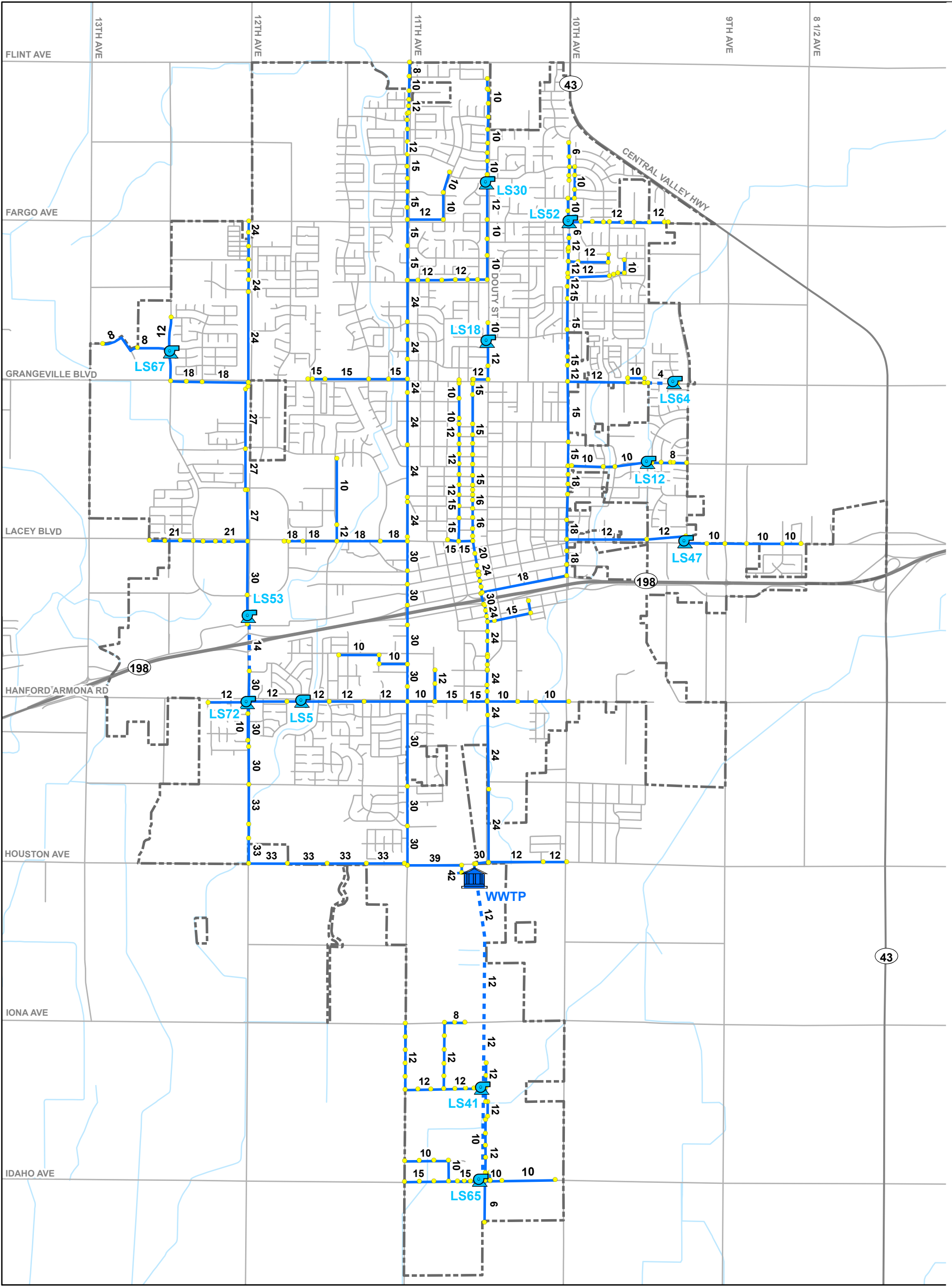
ES.6 SEWER FLOWS

The sewer flows collected and treated at the WWTP vary monthly, daily, and hourly. Flow data influent to Hanford's WWTP was obtained from City Operation Staff. The flow data covered the time period from year 2006 to year 2015. [Table ES.2](#) shows the flows experienced at the WWTP have decreased from 4.93 mgd in 2006 to 4.44 mgd in 2015. In addition to listing the 2006-2015 flows, and for comparison purposes, the table calculates the peaking factors applied to the corresponding average annual flows for each year.

The land use methodology was used to estimate the buildout flows and to be consistent with the City's General Plan. [Table ES.3](#) identifies the total acreages for existing residential and non-residential categories and the undeveloped lands designated for urbanization. The areas planned for development were multiplied by the corresponding unit sewer flow factor to estimate the sewer flows at buildout.

ES.7 HYDRAULIC MODEL DEVELOPMENT

The City's hydraulic model combines information on the physical characteristics of the sewer system (pipelines, lift stations, force mains) and operational characteristics (how they operate). The hydraulic model then performs calculations and solves series of equations to simulate flows in pipes, including backwater calculations for surcharged conditions. Computer modeling requires the compilation of large numerical databases that enable data input into the model. Detailed physical aspects, such as pipe size, ground elevation, invert elevations, and pipe lengths contribute to the accuracy of the model.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Existing System
- Gravity Mains

Force Mains

Streets

Highways

Waterways

WWTP

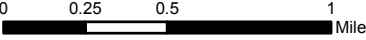
Lift Stations

Manholes

City Limits



Update: October 27, 2016



File Path: P:\xGIS\GIS_Projects\Hanford\2016\Sewer\Final\HCE\SHF_ES-2_ExistSewerSys_102716.mxd



ES. 2

Existing Modeled

Sewer System

Sewer System Master Plan

City of Hanford



Table ES.1 Planning and Design Criteria

Sewer System Master Plan

City of Hanford

Pipeline Criteria		
Peak Dry Weather Flow Criteria		
Diameter	Maximum Allowable d/D	
(in)	Existing Trunks	Proposed Trunks
< 18	0.92	0.50
≥ 18	0.92	0.75
Peak Flow Estimation		
$Q_{\text{peak}} = 1.80 \times Q_{\text{avg}}^{0.92}$ (cubic feet per second, cfs units)		
$Q_{\text{peak}} = 1.74 \times Q_{\text{avg}}^{0.92}$ (million gallons per day, mgd units)		
Unit Flow Factor Criteria		
Land Use Classification	Unit Flow Factor	
	(gpd/acre)	
Residential		
Low Density Residential	790	
Medium Density Residential	1,350	
High Density Residential	2,450	
Mixed Use		
Office Residential	1,650	
Neighborhood Mixed Use	1,250	
Corridor Mixed Use	900	
Downtown Mixed Use	2,950	
Non-Residential		
Neighborhood Commercial	640	
Regional Commercial	790	
Service Commercial	520	
Highway Commercial	640	
Office	1,030	
Public Facilities	520	
Light Industrial	590	
Heavy Industrial	680	
Educational Facilities	800	

Table ES.2 Historical Flows at the Hanford Wastewater Treatment Plant
 Sewer System Master Plan
 City of Hanford

Year	Population	Per Capita Flows	Average Annual Flow (AAF)	Percentage Change	Seasonal Average		Maximum Month		Maximum Day	
					ADWF ¹	AWWF ²	MMDWF	MMWWF	MDDWF	MDWWF
					(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)
Historical Flows										
2006	48,920	101	4.93	-	4.98	4.94	5.00	5.04	5.51	7.85
2007	50,534	98	4.97	0.9%	4.98	4.97	5.06	5.07	6.00	5.90
2008	51,922	99	5.16	3.7%	5.27	5.15	5.38	5.25	6.39	6.07
2009	52,970	93	4.92	-4.7%	4.87	4.98	4.93	5.16	5.72	7.60
2010	53,967	90	4.86	-1.1%	4.83	4.89	4.86	5.22	5.76	7.14
2011	54,146	87	4.73	-2.8%	4.79	4.70	4.90	4.83	5.75	7.25
2012	54,541	87	4.72	-0.2%	4.77	4.68	4.86	4.73	5.37	5.99
2013	54,513	87	4.73	0.3%	4.75	4.72	4.79	4.80	5.12	7.11
2014	54,727	86	4.69	-0.9%	4.73	4.70	4.82	4.81	5.11	5.27
2015	55,337	80	4.44	-5.3%	4.44	4.44	4.46	4.52	5.00	4.77
Historical Peaking Factors (Applied to ADWF)										
2006			0.99		1.00	0.99	1.01	1.01	1.11	1.58
2007			1.00		1.00	1.00	1.02	1.02	1.21	1.19
2008			1.01		1.00	0.98	1.02	1.00	1.21	1.15
2009			1.01		1.00	1.02	1.01	1.06	1.18	1.56
2010			0.99		1.00	1.01	1.01	1.08	1.19	1.48
2011			0.99		1.00	0.98	1.02	1.01	1.20	1.51
2012			1.00		1.00	0.98	1.02	0.99	1.13	1.25
2013			0.99		1.00	0.99	1.01	1.01	1.08	1.50
2014			1.00		1.00	0.99	1.02	1.02	1.08	1.11
2015			1.00		0.94	1.00	1.00	0.96	1.13	1.07

AKEL
 ENGINEERING GROUP, INC.

2/28/2017

Notes :

1. Dry weather months include months from May to September
2. Wet weather months include months from October to April

Table ES.3 Average Daily Sewer FlowsSewer System Master Plan
City of Hanford

Land Use Classifications	Buildout Sewer Flows												
	Existing Development			Future Development to be Serviced within Planned Area Boundary									
	Within Service Area			Within Service Area				Planned Area Boundary				Total	
	Existing Development (net acre)	Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	New Development (net acre)	Anticipated New Development (net acre)	Future Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	Existing Development (net acre)	New Development (net acre)	Future Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	Total Development within PAB (net acres)	Average Daily Flow (gpd)
Residential													
Low Density	2,837	790	2,241,112	1,026	462	790	810,586	539	1,401	790	1,533,071	5,804	4,584,768
Medium Density	498	1,350	672,112	225	101	1,350	303,765	35	312	1,350	468,650	1,070	1,444,527
High Density	84	2,450	207,025	73	33	2,450	179,563	0	64	2,450	156,587	222	543,175
Subtotal	3,419		3,120,249	1,324	596		1,293,914	574	1,777		2,158,307	7,095	6,572,470
Mixed Use													
Office Residential	89	1,650	146,438	25	25	1,650	41,382	0	0	1,650	0	114	187,820
Neighborhood Mixed Use	12	1,250	15,475	42	42	1,250	52,290	0	15	1,250	19,316	70	87,081
Corridor Mixed Use	250	900	225,397	225	225	900	202,676	10	3	900	11,970	489	440,042
Downtown Mixed Use	81	2,950	237,564	42	42	2,950	125,021	0	0	2,950	0	123	362,585
Subtotal	432		624,873	334	334		421,369	10	18		31,286	795	1,077,528
Non-Residential													
Neighborhood Commercial	27	640	17,344	26	26	640	16,676	8	12	640	12,717	73	46,737
Regional Commercial	216	790	170,839	160	160	790	126,046	18	169	790	148,329	564	445,214
Service Commercial	103	520	53,300	54	54	520	27,862	56	63	520	61,859	275	143,020
Highway Commercial	48	640	30,464	68	68	640	43,258	16	16	640	20,550	147	94,272
Office	88	1,030	90,856	30	30	1,030	31,302	0	0	1,030	0	119	122,158
Light Industrial	105	590	62,103	61	21	590	35,701	83	557	590	377,647	806	475,452
Heavy Industrial	376	680	255,456	568	199	680	385,995	211	2,607	680	1,915,866	3,761	2,557,317
Airport Protection	0	0	0	125	125	0	0	111	563	0	0	799	0
Educational Facilities	445	800	356,256	117	117	800	93,312	11	97	800	85,928	669	535,496
Public Facilities	438	520	227,812	56	56	520	29,115	3	13	520	8,294	510	265,221
Open Space with Irrigation	16	0	0	45	33	0	0	0	121	0	0	182	0
Open Space without Irrigation	346	0	0	65		0	0	41	54	0	0	507	0
Interest Area	0	1,650	0	0		1,650	0	49	552	1,650	992,261	601	992,261
Subtotal	2,208		1,264,430	1,372	888		789,266	607	4,825		3,623,450	9,012	5,677,147
Totals	6,059		5,009,552	3,031	1,818	0	2,504,548	1,192	6,621		5,813,044	16,903	13,327,145

12/28/2016

The hydraulic modeling software used for evaluating the capacity adequacy of the City's sewer collection system, InfoSewer by Innovyze Inc., uses the simplified St Venant's equation, which is utilized to simulate backwater and surcharge conditions, in addition to simulating manifolded force mains. The software also incorporates the use of the Manning's Equation in other calculations including upstream pipe flow conditions. The St Venant's and Manning's equations are discussed in the System Performance and Design Criteria chapter.

ES.8 CAPACITY EVALUATION

The hydraulic model was used for evaluating the sewer system for capacity deficiencies during peak dry weather flows. The planning and design criteria were used as a basis to judge the adequacy of the capacity of for the existing sewer collection system. The design flows simulated in the hydraulic model for existing conditions, and at buildout include:

- Existing PDWF: **7.6** mgd
- Future PDWF at buildout: **18.8** mgd

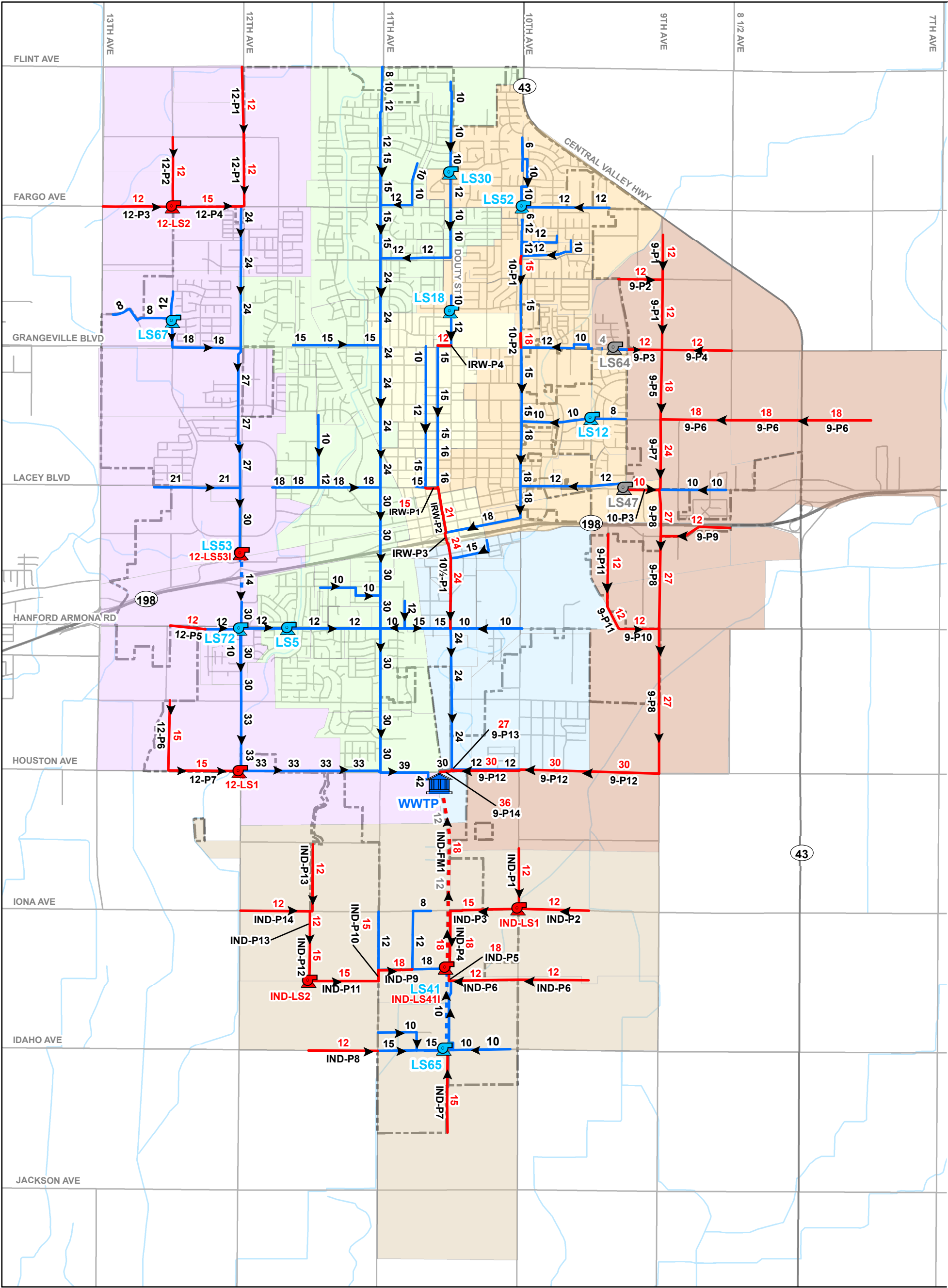
In general, the hydraulic model indicated that the sewer system exhibited acceptable performance to service the existing customers during peak dry weather flow conditions. Future flows were then added to the hydraulic model and the existing sewer collection system was expanded in order to serve these future users. The proposed improvements for the future system are shown with recommended pipe sizes on an overall exhibit (**Figure ES.3**).

ES.9 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program costs for the projects identified in this master plan for mitigating existing system deficiencies and for serving anticipated future growth throughout the City are summarized on **Table ES.4** and are graphically represented on **Figure ES.3**.

The estimated construction costs include the baseline costs plus **15 percent** contingency allowance to account for unforeseen events and unknown field conditions. Capital improvement costs include the estimated construction costs plus **15 percent** project-related costs (engineering design, project administration, construction management and inspection, and legal costs).

The costs in this sewer system master plan were benchmarked using a 20-City national average Engineering News Records (ENR) Construction Cost Index (CCI) of 10,532, reflecting a date of January 2017. In total, the CIP includes approximately 22 miles of pipeline improvements, and 6 lift station improvements, with a project cost totaling over 53 million dollars.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Proposed Improvements

-  Lift Stations and Pumps
-  Gravity Mains
-  Force Mains
- Future Basins
 -  9th Ave Basin

-  10th Ave Basin
-  10 1/2 Ave Basin
-  11th Ave Basin
-  12th Ave Basin
-  Irwin St Basin
-  Industrial Area Basin

Abandoned

-  Lift Stations
-  Gravity Main
-  Force Main

Existing System

-  WWTP
-  Lift Stations
-  Gravity Mains
-  Force Mains

-  City Limits
-  Streets
-  Highways
-  Waterways



ES. 3
Capital Improvement
Program
Sewer System Master Plan
City of Hanford



Table ES.4 Capital Improvement Program
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements					Infrastructure Costs				Baseline Constr. Consts	Estimated Constr. Costs ³	Capital Improv. Costs ⁴	Suggested Cost Allocation		Cost Sharing		
				Existing Diameter	New/Parallel/Replace	Diameter	Length	Railroad	Casings		Pipe Unit Cost	Pipe Cost ^{1,2}				Existing Users	Future Users	Existing Users	Future Users	
									Highway	Canal/ Slough										(in)
12th Avenue Trunk																				
Pipeline Capacity Improvements																				
12-P1	Gravity Main	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,400			1	228	1,370,042	1,370,042	1,575,548	1,811,880	0%	100%	0	1,811,880	
12-P2	Gravity Main	Future 12 1/2 Ave	From approx 2,650 ft n/o Fargo Ave to Fargo Ave	-	New	12	2,675			1	228	749,730	749,730	862,190	991,518	0%	100%	0	991,518	
12-P3	Gravity Main	Fargo Ave	From 13th Ave to future 12 1/2 Ave	-	New	12	2,675			1	228	749,730	749,730	862,190	991,518	0%	100%	0	991,518	
12-P4	Gravity Main	Fargo Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,575				239	616,660	616,660	709,160	815,533	0%	100%	0	815,533	
12-P5	Gravity Main	Hanford Armona Rd	From ext. of future 12 1/2 Ave to 12th Ave		New	12	1,350				228	307,310	307,310	353,407	406,418	0%	100%	0	406,418	
12-P6	Gravity Main	Future 12 1/2 Ave	From ext. of Hume Ave to Houston Ave	-	New	15	2,675				239	640,608	640,608	736,700	847,205	0%	100%	0	847,205	
12-P7	Gravity Main	Houston Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,750			2	239	975,369	975,369	1,121,675	1,289,926	0%	100%	0	1,289,926	
Lift Station Improvements																				
12-LS53I	Lift Station	12th Avenue	300 ft n/o of Glendale Ave		Replace	2 @ 1,200 gpm					-	1,207,973	1,207,973	1,389,169	1,597,545	35%	65%	558,274	1,039,270	
12-LS1	Lift Station	Houston Ave	Intersection of Houston Ave and 12th Ave		New	1 @ 600 gpm					-	550,707	550,707	633,313	728,310	0%	100%	0	728,310	
12-LS2	Lift Station	Fargo Ave	2,600 ft w/o 12th Ave		New	1 @ 400 gpm					-	477,677	477,677	549,329	631,728	0%	100%	0	631,728	
Subtotal - 12th Avenue Trunk														7,645,808	8,792,679	10,111,581			558,274	9,553,307
9th Avenue Trunk																				
Pipeline Capacity Improvements																				
9-P1	Gravity Main	9th Ave	From Fairview Pl to Grangeville Blvd	-	New	12	4,375				228	995,914	995,914	1,145,301	1,317,096	0%	100%	0	1,317,096	
9-P2	Gravity Main	Leland Way	From 9 1/4 Ave to 9th Ave	-	New	12	1,700				228	386,984	386,984	445,031	511,786	0%	100%	0	511,786	
9-P3 ⁵	Gravity Main	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,350				228	307,310	307,310	353,407	406,418	63%	37%	255,271	151,147	
9-P4	Gravity Main	Grangeville Blvd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650				228	603,239	603,239	693,725	797,784	0%	100%	0	797,784	
9-P5	Gravity Main	9th Ave	From Grangeville Blvd to Florinda St	-	New	18	2,650				258	683,439	683,439	785,954	903,847	7%	93%	65,111	838,736	
9-P6	Gravity Main	Florinda St	From approx 2,600 ft e/o HWY 43 to 9th Ave	-	New	18	8,000				258	2,063,211	2,063,211	2,372,692	2,728,596	0%	100%	0	2,728,596	
9-P7	Gravity Main	9th Ave	From Florinda St to Lacey Blvd	-	New	24	2,700	1			291	996,352	996,352	1,145,804	1,317,675	2%	98%	32,046	1,285,629	
9-P8	Gravity Main	9th Ave	From Lacey Blvd to Houston Ave	-	New	27	10,775	1	1		336	4,565,788	4,565,788	5,250,657	6,038,255	7%	93%	450,149	5,588,106	
9-P9	Gravity Main	Third St	From ext. of David St to 9th Ave	-	New	12	2,750				228	626,003	626,003	719,903	827,889	0%	100%	0	827,889	
9-P10	Gravity Main	Hanford Armona Rd	From approx 450 ft e/o 9 1/2 Ave to 9th Ave	-	New	12	1,500				228	341,456	341,456	392,675	451,576	0%	100%	0	451,576	
9-P11	Gravity Main	9 1/2 Ave	From approx 300 ft s/o Third St to Hanford Armona Rd	-	New	12	3,750				228	853,640	853,640	981,686	1,128,939	0%	100%	0	1,128,939	
9-P12	Gravity Main	Houston Ave	From 9th Ave to 10 1/2 Ave		New	30	7,875			1	395	3,346,232	3,346,232	3,848,167	4,425,392	7%	93%	311,967	4,113,424	
9-P13	Gravity Main	10 1/2 Ave	From approx 50 ft n/o Houston Ave to Houston Ave	-	New	27	50				336	16,777	16,777	19,293	22,187	70%	30%	15,454	6,733	
9-P14	Gravity Main	Houston Ave	From 10 1/2 Ave to approx 500 ft w/o 10 1/2 Ave	-	New	36	725	1			491	619,831	619,831	712,806	819,727	40%	60%	325,862	493,865	
Subtotal - 9th Avenue Trunk														16,406,175	18,867,102	21,697,167			1,455,860	20,241,307
10th Avenue Trunk																				
Pipeline Capacity Improvements																				
10-P1	Gravity Main	10th Ave	From approx 100 ft n/o Lakewood Dr to 200 ft s/o Lakewood Dr	12	Replace	15	300				239	71,844	71,844	82,621	95,014	65%	35%	61,759	33,255	
10-P2	Gravity Main	10th Ave	From approx 150 ft s/o Cross Ave to Grangeville Blvd	12	Replace	18	575				258	148,293	148,293	170,537	196,118	73%	27%	143,166	52,952	
Slope Deficiency Improvements																				
10-P3 ⁶	Gravity Main	Lacey Blvd	From 9 1/4 Ave to 9th Ave	10	Replace	10	1,300				222	289,086	289,086	332,449	382,317	50%	50%	191,158	191,158	
Subtotal - 10th Avenue Trunk														509,224	585,607	673,448			396,083	277,365
10 1/2 Avenue																				
Slope Deficiency Improvements																				
10%-P1	Gravity Main	Irwin St	From Third St to Hanford Armona Rd	24	Replace	24	3,350				291	974,170	974,170	1,120,295	1,288,339	79%	21%	1,017,090	271,249	
Subtotal - 10 1/2 Avenue Trunk														974,170	1,120,295	1,288,339			1,017,090	271,249
Irwin St Trunk																				
Slope Deficiency Improvements																				

Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Table ES.4 Capital Improvement Program
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements						Infrastructure Costs		Suggested Cost Allocation			Cost Sharing				
				Existing Diameter	New/Parallel/Replace	Diameter	Length	Railroad	Casings		Pipe Unit Cost	Pipe Cost ^{1,2}	Baseline Constr. Consts	Estimated Constr. Costs ³	Capital Improv. Costs ⁴	Existing Users	Future Users	Existing Users	Future Users
									Highway	Canal/ Slough									
IRW-P1	Gravity Main	Lacey Blvd	From Redington St to Irwin St	15	Replace	15	525				239	125,727	125,727	144,586	166,274	92%	8%	152,719	13,555
IRW-P2	Gravity Main	Irwin St	From Lacey Blvd to Fourth St	20, 24	Replace	21	1,850	1			280	729,700	729,700	839,155	965,028	79%	21%	766,182	198,847
IRW-P3	Gravity Main	Irwin St	From Fourth St to 3rd St	24, 30	Replace	24	500		1		291	778,998	778,998	895,848	1,030,225	79%	21%	818,544	211,681
IRW-P4	Gravity Main	Grangeville Blvd	From Douty St to Irwin St	12	Replace	12	525				228	119,510	119,510	137,436	158,051	96%	4%	151,099	6,952
Subtotal - Irwin Street Trunk													1,753,935	2,017,025	2,319,579			1,888,544	431,036
Industrial Trunk																			
Pipeline Capacity Improvements																			
IND-P1	Gravity Main	10th Ave	From approx 2,300 ft n/o Iona Ave to Iona Ave	-	New	12	2,300				228	523,566	523,566	602,101	692,416	0%	100%	0	692,416
IND-P2	Gravity Main	Iona Ave	From future 9 1/2 Ave to ext. of 10th Ave	-	New	12	2,675		1		228	749,730	749,730	862,190	991,518	0%	100%	0	991,518
IND-P3	Gravity Main	Iona Ave	From 10th Avenue to 10 1/2 Ave	12	Replace	15	2,125				239	508,895	508,895	585,229	673,013	0%	100%	0	673,013
IND-P4	Gravity Main	ext. 10 1/2 Ave	From Iona Ave to Industry Ave	12	Replace	18	2,675				258	689,886	689,886	793,369	912,374	6%	94%	53,771	858,603
IND-P5	Gravity Main	ext. 10 1/2 Ave	From approx 600 ft s/o Industry Ave to Industry Ave	12	Replace	18	600				258	154,741	154,741	177,952	204,645	12%	88%	24,979	179,666
IND-P6	Gravity Main	Future ROW	From future 9 1/2 Ave to ext. of 10 1/2 Ave	-	New	12	5,225		1		228	1,330,205	1,330,205	1,529,736	1,759,197	0%	100%	0	1,759,197
IND-P7	Gravity Main	ext. 10 1/2 Ave	From 3,100 ft s/o Idaho Ave to Idaho Ave	6	Replace	15	3,250				239	778,309	778,309	895,056	1,029,314	32%	68%	329,018	700,296
IND-P8	Gravity Main	Idaho Ave	From approx 2,600 ft w/o 11th Avenue to 11th Avenue	-	New	12	2,650				228	603,239	603,239	693,725	797,784	32%	68%	252,053	545,730
IND-P9	Gravity Main	Industry Ave	From 11th Avenue to Crown Avenue	12	Replace	18	1,325				258	341,719	341,719	392,977	451,924	31%	69%	139,155	312,768
IND-P10	Gravity Main	11th Ave	From approx 420 ft s/o Industry Ave to Industry Ave	-	New	15	425				239	101,779	101,779	117,046	134,603	0%	100%	0	134,603
IND-P11	Gravity Main	Future ROW	From future 11 1/2 Ave to 11th Ave	-	New	15	2,600				239	622,647	622,647	716,045	823,451	0%	100%	0	823,451
IND-P12	Gravity Main	Future 11 1/2 Ave	From approx 1,350 ft s/o Iona Ave to approx 420 ft s/o Industry Ave	-	New	15	1,325				239	317,311	317,311	364,907	419,643	19%	81%	77,724	341,919
IND-P13	Gravity Main	Future 11 1/2 Ave	From approx 2,530 ft n/o Iona Ave to approx 1,350 ft s/o Iona Ave	-	New	12	3,975		1		228	1,045,659	1,045,659	1,202,507	1,382,884	0%	100%	0	1,382,884
IND-P14	Gravity Main	Iona Ave	From 12th Ave to future 11 1/2 Ave	-	New	12	2,650				228	603,239	603,239	693,725	797,784	0%	100%	0	797,784
IND-FM1	Force Main	ext. 10 1/2 Ave	From Industry Ave to Houston Ave	12	Replace	18	7,275				258	1,876,232	1,876,232	2,157,667	2,481,317	11%	89%	266,908	2,214,409
Lift Station Improvements																			
IND-LS41I	Lift Station	Industry Ave	1,300 e/o Crown Ave		Replace	2 @ 1,500 gpm						1,552,759	1,552,759	1,785,673	2,053,524	11%	89%	220,891	1,832,632
IND-LS1	Lift Station	Iona Ave	Intersection of Iona Ave and 10th Ave		New	1 @ 500 gpm						512,425	512,425	589,289	677,682	0%	100%	0	677,682
IND-LS2	Lift Station	Future 11 1/2 Ave	2,650 ft s/o Iona Ave		New	1 @ 500 gpm						512,425	512,425	589,289	677,682	0%	100%	0	677,682
Subtotal - Industrial Avenue Trunk													12,824,767	14,748,482	16,960,754			1,364,501	15,596,253
Subtotal - Pipeline Capacity Improvements													35,300,112	40,595,129	46,684,398			5,901,186	40,783,211
Subtotal - Lift Station Improvements													4,813,966	5,536,061	6,366,470			779,165	5,587,305
Total Improvement Costs													40,114,078	46,131,190	53,050,868			6,680,352	46,370,517
AKEL ENGINEERING GROUP, INC.																			

Notes:

1. Railroad and canal/slough casings assumed at a length of 200 feet. Highway casings assumed at a length of 600 feet.
2. Unit costs based on a January 2017 ENR CCI of 10,532.
3. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.
4. Estimated construction cost plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.
5. Improvement 9-P3 is meant to redirect flow from Lift Station 64 to the 9th Avenue Trunk.
6. Improvement 10-P2 is meant to redirect flow from Lift Station 47 to the 9th Avenue Trunk.

CHAPTER 1 - INTRODUCTION

This chapter provides a brief background of the City of Hanford's (City) sewer system (also known as a wastewater collection system), the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

1.1 BACKGROUND

The City of Hanford is located approximately 30 miles southeast of the city of Fresno and 20 miles west of the city of Visalia ([Figure 1.1](#)). The City provides sewer collection services to approximately 56,000 residents, as well as commercial, industrial, and institutional establishments. The City owns, operates, and maintains the sewer collection system, which consists of gravity mains and force mains, with up to 48-inch pipe sizes, ultimately conveying the flow to the Hanford Wastewater Treatment Plant (WWTP). The WWTP has a rated treatment capacity of 8.0 million gallons per day (mgd).

In 1990, the City developed a Sewer System Master Plan that identified capacity deficiencies in the existing sewer system and recommended improvements to alleviate existing deficiencies and serve future developments in the Planned Area Boundary. Recognizing the importance of planning, developing, and financing system facilities to provide reliable sewer service to existing customers and for servicing anticipated growth, the City initiated updating elements of the 1990 Sewer System Master Plan, to reflect current land use conditions.

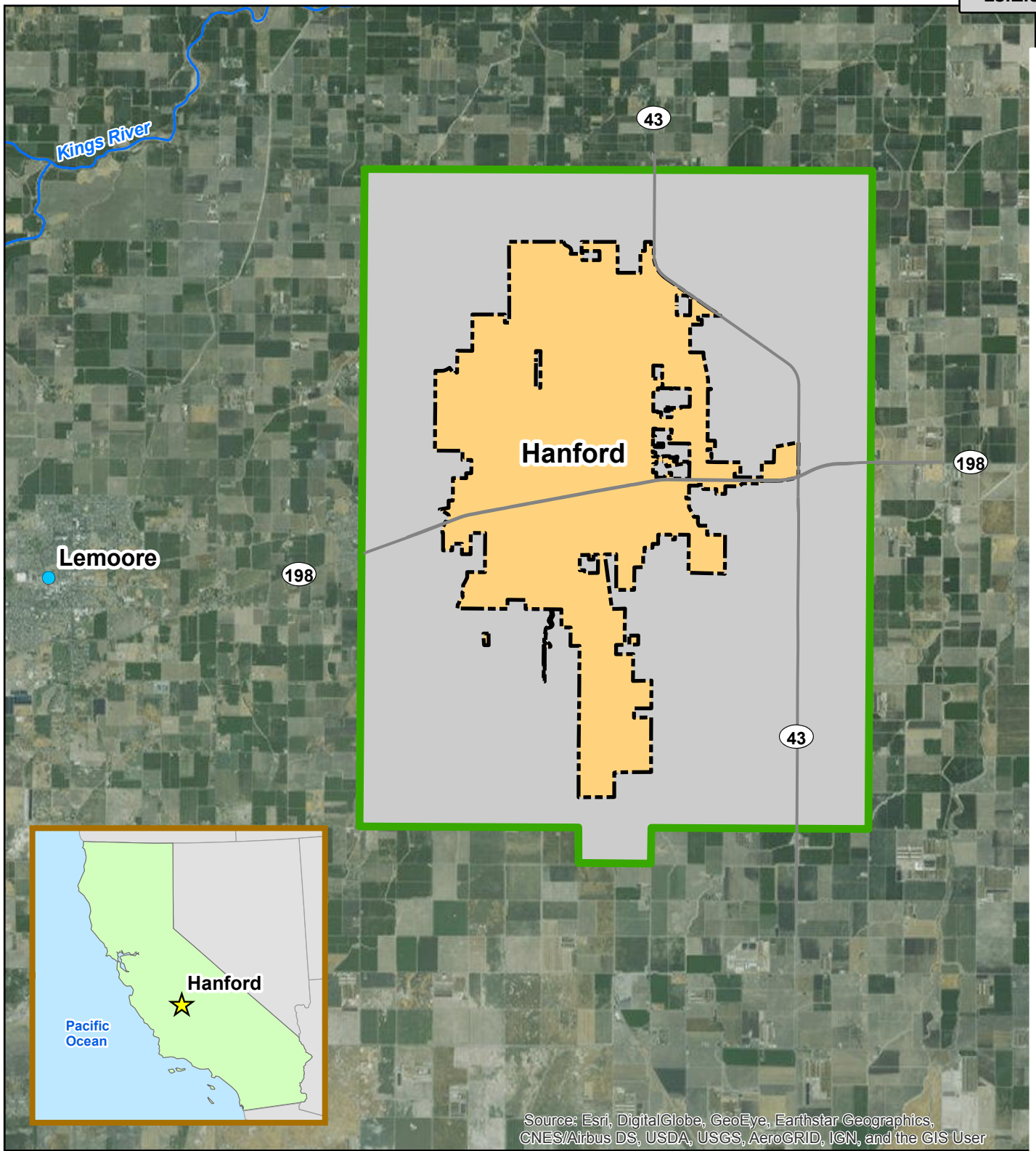
1.2 SCOPE OF WORK

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. This 2017 Sewer System Master Plan (SSMP) is intended to serve as a tool for planning and phasing the construction of future sewer system facilities for the projected buildout of the City. The 2017 SSMP evaluates the City's sewer system and recommends capacity improvements necessary to service the needs of existing users and for servicing the future growth of the City.

The Planned Area Boundary and horizon for the master plan is stipulated in the City's General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

The City authorized Akel Engineering Group Inc. to complete the following tasks:

- Summarize the City's existing sewer system facilities.
- Document growth planning assumptions and known future developments.



Legend

- Cities
- City Limits Area
- General Plan Area
- Highways
- ~ River

AKEL
ENGINEERING GROUP, INC.

Update: January 18, 2016

0 0.5 1 2 Miles



File Path: P:\GIS\GIS_Projects\Hanford\2016\SewerFinal\HC\HF_Fig1-1_RLM_011816.mxd

Figure 1.1
Regional Location Map
Sewer System Master Plan
City of Hanford



- Summarize the sewer system performance criteria.
- Project future sewer flows.
- Update the hydraulic model using available data. Evaluate the adequacy of capacity for the sewer system facilities to meet existing and projected peak dry weather flows.
- Recommend a capital improvement program (CIP) with an opinion of probable construction costs.
- Perform a capacity allocation analysis for cost sharing purposes between existing users and future growth.
- Develop a 2017 Sewer System Master Plan Report.

1.3 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer System Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, it has been coordinated for consistency with the City's General Plan document. Additionally, each document has been cross referenced to reflect relevant analysis results with the other documents.

1.4 PREVIOUS MASTER PLANS

The City's most recent sewer master plan was completed in 1990. This master plan included evaluation of servicing growth to the planning area, evaluated existing sewer flows and projected future flows and recommended phased improvements to the sewer system for a horizon year of 2010. Additionally, the 1990 master plan included the development of the hydraulic model that served as the basis for the evaluation. Improvements were recommended for servicing existing and future growth areas, and a corresponding Capital Improvement Program was developed to quantify the corresponding costs. Additionally, an Industrial Park Area Infrastructure Master Plan was developed in 1995 to account for the future industrial developments occurring in the southernmost part of the City.

1.5 RELEVANT REPORTS

The City has completed several special studies intended to evaluate localized growth. These reports were referenced and used during this capacity analysis. The following lists relevant reports that were used in the completion of this master plan, as well as a brief description of each document:

- **Sewer System Master Plan, June 1990 (1990 SSMP).** This report documents the planning and performance criteria, evaluates the sewer system, recommends improvements, and provides an estimate of costs.
- **Industrial Park Area Infrastructure Master Plan (1995 IPA Master Plan).** This report documents the infrastructure required to serve future industrial development within the study area. The study area included the area bounded to the north by Houston Avenue, to the south by Jackson Avenue, to the east by 10th Avenue and to the west by 12th Avenue.
- **City of Hanford General Plan Update, (2017 General Plan).** The City's 2017 General Plan provides future land use planning, and growth assumptions for the Planning Area. Additionally, this report establishes the planning horizon for improvements in this master plan.

1.6 REPORT ORGANIZATION

The Sewer System Master Plan report contains the following chapters:

Chapter 1 – Introduction. This chapter provides a brief background of the City of Hanford's (City) sewer system (also known as a sewer collection system), the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

Chapter 2 – Planning Area Characteristics. This chapter presents a discussion of the planning area characteristics for this master plan and includes a study area description, service area land use, and population for the City of Hanford.

Chapter 3 – System Performance and Design Criteria. This chapter presents the City's planning and design criteria, which were used in this master plan for evaluating the adequacy of capacity for the existing sewer system and for sizing improvements required to mitigate deficiencies and to accommodate future growth. The design criteria include: capacity requirements for the sewer facilities, flow calculation methodologies for future users, and flow peaking factors.

Chapter 4 – Existing Sewer Collection Facilities. This chapter provides a description of the City's existing sewer system facilities including gravity trunks, force mains, lift stations, and sewer collection basins. The chapter also includes a brief description of the Hanford Wastewater Treatment Plant.

Chapter 5 – Sewer Flows. This chapter summarizes historical sewer flows experienced at the City's WWTP and defines flow terminologies relevant to this evaluation. This chapter discusses the wastewater flow distribution within the six collection basins, and identifies the design flows used in the hydraulic modeling effort and capacity evaluation. The design flows include the existing condition (existing customers) and the projected ultimate buildout scenario.

Chapter 6 – Hydraulic Model Development. This chapter describes the development of the City's sewer system hydraulic model. Hydraulic network analysis has become an effectively powerful tool in all aspects of sewer system planning, design, operation, management, and system reliability analysis. The City's hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

Chapter 7 – Evaluation and Proposed Improvements. This section presents a summary of the sewer system capacity evaluation during peak dry weather flows and peak wet weather flows for the existing and buildout flows. The recommended sewer system improvements needed to mitigate capacity deficiencies are also discussed in this chapter

Chapter 8 – Capital Improvement Program. This chapter provides a summary of the recommended Capital Improvement Program (CIP) for the City's sewer system. The program is based on the evaluation of the City's sewer system and on the recommended projects described in the previous chapters. The CIP has been prepared to assist the City in planning and constructing the collection system improvements through the ultimate buildout scenario. This chapter also presents the cost criteria and methodologies for developing the capacity improvement costs.

1.7 ACKNOWLEDGEMENTS

Obtaining the necessary information to successfully complete the analysis presented in this report, and developing the long-term strategy for mitigating the existing system deficiencies and for accommodating future growth, was accomplished with the strong commitment and very active input from dedicated team members including:

- Lou Camara, Director of Public Works
- John Doyel, Director of Public Utilities / City Engineer
- Darlene Mata, Community Development Director
- Mike Cosenza, Utilities Superintendent
- QK Inc, General Plan Consultant
- John Zumwalt, City of Hanford Consultant

This report was prepared in conjunction with the General Plan Update, and included coordination with QK and John Zumwalt, who were the General Plan consultants.

1.8 UNIT CONVERSIONS AND ABBREVIATIONS

Engineering units were used in reporting flow rates and volumes pertaining to the design and operation of various components of the sewer system. In some cases, different sets of units were used to describe the same parameter where it was necessary to report values in smaller or larger quantities. Values reported in one set of units can be converted to another set of units by applying

a multiplication factor. A list of multiplication factors for units used in this report are shown on [Table 1.1](#).

Various abbreviations and acronyms were also used in this report to represent relevant wastewater system terminologies and engineering units. A list of abbreviations and acronyms is included in [Table 1.2](#).

1.9 GEOGRAPHIC INFORMATION SYSTEMS

This master planning effort made extensive use of Geographic Information Systems (GIS) technology, for efficiently completing the following tasks:

- Develop the physical characteristics of the hydraulic model (gravity mains, force mains, and lift stations).
- Allocate existing wastewater loads, as calculated using the developed wastewater unit factors.
- Calculate and allocating future wastewater loads, based on the future developments land use.
- Extract ground elevations along the gravity and force mains from available contour maps.
- Generate maps and exhibits used in this master plan.

Table 1.1 Unit Conversions
 Sewer System Master Plan
 City of Hanford

Volume Unit Calculations		
To Convert From:	To:	Multiply by:
acre feet	gallons	325,857
acre feet	cubic feet	43,560
acre feet	million gallons	0.3259
cubic feet	gallons	7.481
cubic feet	acre feet	2.296×10^{-5}
cubic feet	million gallons	7.481×10^{-6}
gallons	cubic feet	0.1337
gallons	acre feet	3.069×10^{-6}
gallons	million gallons	1×10^{-6}
million gallons	gallons	1,000,000
million gallons	cubic feet	133,672
million gallons	acre feet	3.069
Flow Rate Calculations		
To Convert From:	To:	Multiply By:
ac-ft/yr	mgd	8.93×10^{-4}
ac-ft/yr	cfs	1.381×10^{-3}
ac-ft/yr	gpm	0.621
ac-ft/yr	gpd	892.7
cfs	mgd	0.646
cfs	gpm	448.8
cfs	ac-ft/yr	724
cfs	gpd	646300
gpd	mgd	1×10^{-6}
gpd	cfs	1.547×10^{-6}
gpd	gpm	6.944×10^{-4}
gpd	ac-ft/yr	1.12×10^{-3}
gpm	mgd	1.44×10^{-3}
gpm	cfs	2.228×10^{-3}
gpm	ac-ft/yr	1.61
gpm	gpd	1,440
mgd	cfs	1.547
mgd	gpm	694.4
mgd	ac-ft/yr	1,120
mgd	gpd	1,000,000

Table 1.2 Abbreviations and Acronyms
 Sewer System Master Plan
 City of Hanford

Abbreviation	Expansion	Abbreviation	Expansion
1990 SSMP	1990 Sewer System Master Plan	gpd	Gallons per Day
10Yr-24Hr	10-Year 24-Hour	gpm	Gallons per Minute
ADWF	Average Dry Weather Flow	HGL	Hydraulic Grade Line
AAF	Annual Average Flow	LF	Linear Feet
Akel	Akel Engineering Group, Inc.	MDDWF	Maximum Day Dry Weather Flow
AWWF	Average Wet Weather Flow	MDWWF	Maximum Day Wet Weather Flow
CCI	Construct Cost Index	mgd	Million Gallons per Day
CIP	Capital Improvement Program	MMDWF	Maximum Month Dry Weather Flow
City	City of Hanford	MMWWF	Maximum Month Wet Weather Flow
d/D	depth of flow to pipe diameter	PDWF	Peak Dry Weather Flow
ENR	Engineering News Record	ROW	Right of Way
fps	Feet per Second	WWTP	Wastewater Treatment Plant
GIS	Geographic Information Systems		

CHAPTER 2 - PLANNING AREA CHARACTERISTICS

This chapter presents a discussion of the planning area characteristics for this master plan and includes a study area description, service area land use, and population for the City of Hanford.

2.1 STUDY AREA DESCRIPTION

The City is located in Kings County, approximately 30 miles southeast of the city of Fresno and 20 miles west of the city of Visalia ([Figure 2.1](#)). The City's closest neighbor, the city of Lemoore, is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east-west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City service area.

The City operates and maintains a sewer system that services the majority of the area within the City Limits. Currently, the sewer flows are conveyed to the City WWTP.

2.2 PLANNING AREA BOUNDARIES

The City's 2017 General Plan update designates two boundaries for defining urban expansion:

- **Planned Area Boundary:** This boundary serves as the limits of the area to be planned for urban development.
- **2035 Growth Boundary:** This boundary serves as the limits of the area to be developed with urban uses during the 2015 to 2035 planning period.

It should be noted that for the purposes of this master plan, City Staff has requested improvements to be sized to account for the development of the Planned Area Boundary. Based on growth assumptions consistent with the 2017 General Plan Update, buildout of the Planned Area Boundary is not expected to be reached before the year 2050.

2.3 SEWER SERVICE AREAS AND LAND USE

The City's sewer system services residential and non-residential lands within the service area, as summarized on [Table 2.1](#). This service area includes:

- 6,059 net acres of developed lands inside the City limits.
- 2,765 net acres of undeveloped lands inside the City limits.
- 265 net acres of underutilized lands inside the City limits that are expected to redevelop.

The existing land use statistics were based on the land use information developed for the recently adopted General Plan ([Appendix A](#)). The land use is shown graphically on [Figure 2.2](#). The land use information provided included developed and undeveloped areas, which were classified into the following subtypes:

- Net Area. Net areas are typically fully developed, and exclude street and other associated right of ways.
- Gross Area. Gross areas are typically large undeveloped parcels, which may be subdivided in future developments. Part of these areas will include street and other right of ways.

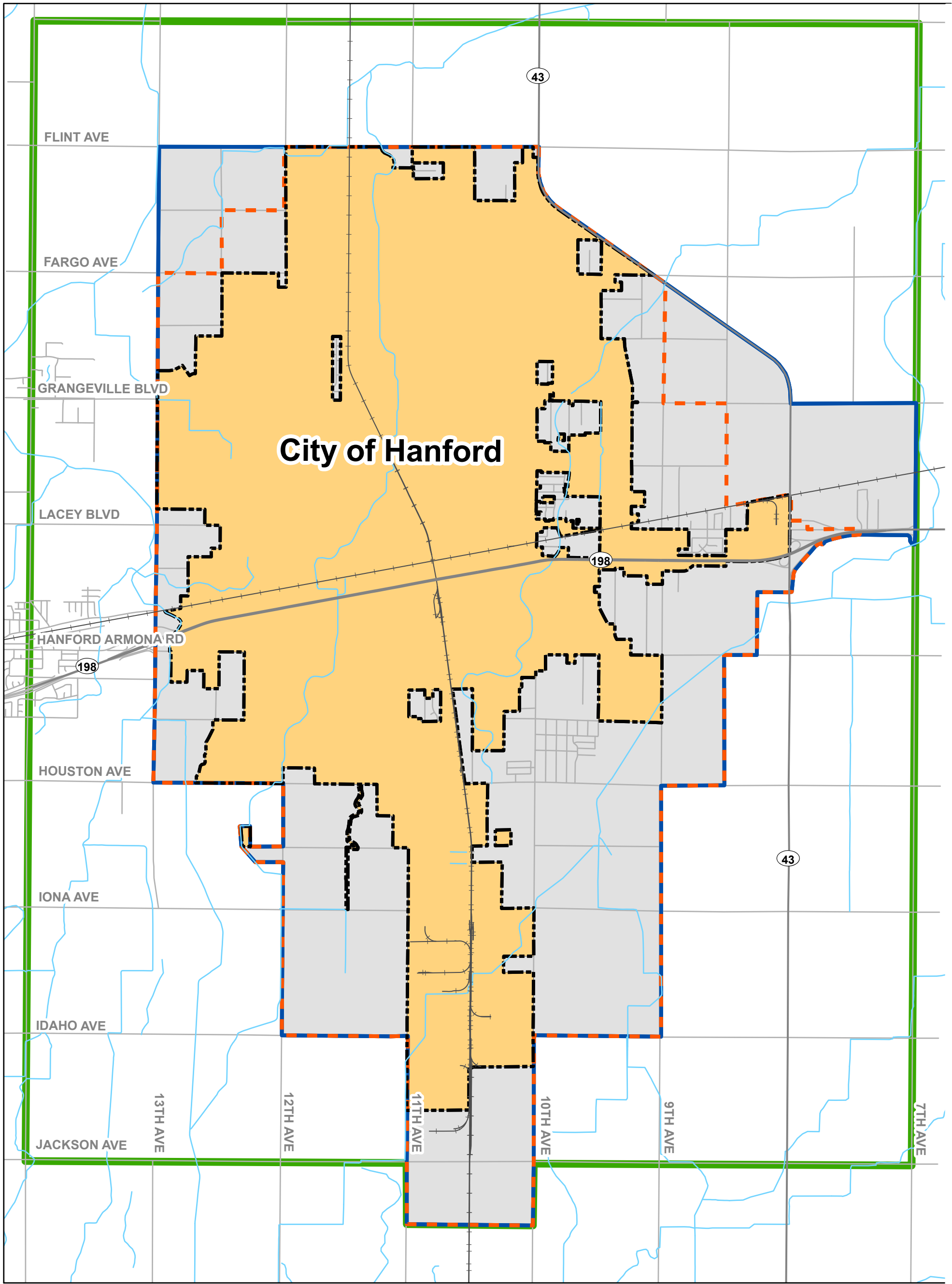
For the purpose of this master plan, net areas were used in the quantification of wastewater flows, as they represent the total acreage that contributes flows to the sewer collection system. In order to convert the areas that were identified as gross areas to net areas, the following reduction factors were applied:

- Single Family Residential land use types: 1 gross acre = 0.80 net acre
- Multi-Family Residential / Mixed Use land use types: 1 gross acre = 0.85 net acre
- Commercial / Industrial land use types: 1 gross acre = 0.90 net acre

The City's general plan anticipates approximately 16,900 net acres of residential and non-residential development at ultimate buildout of the Planned Area Boundary. The land use designations utilized in this master plan are consistent with the Land Use Element of the City's General Plan, as shown on [Figure 2.3](#).

2.4 HISTORICAL AND FUTURE GROWTH

The City's historical and projected population data are presented in [Table 2.2](#). The historical information was extracted from the previous master plan and California Department of Finance documents. The City's 2017 General Plan Update anticipates future growth of approximately 2.1 percent per year, which is slightly greater than historical trends approximately 2.0 percent per year. The 2017 General Plan Update is planning for a 2035 population of 90,000. [Table 2.2](#) documents the historical population from 2010 to 2015 and the projected population by year to the buildout master plan horizon of 2050. This horizon reflects the buildout of the Planned Area Boundary.



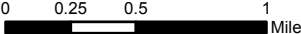
Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



Update: September 1, 2016

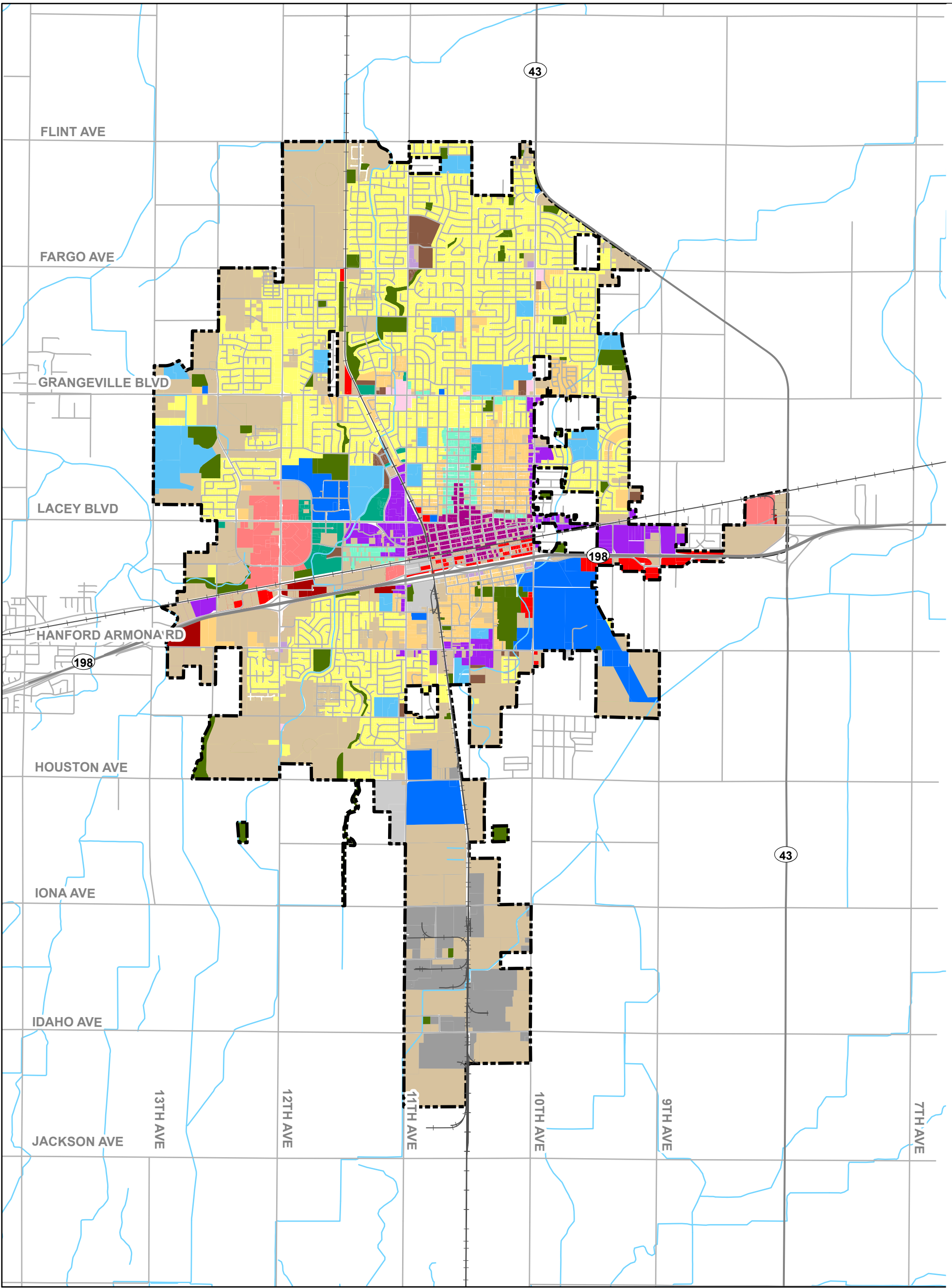


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Figure 2.1
Planning Area
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

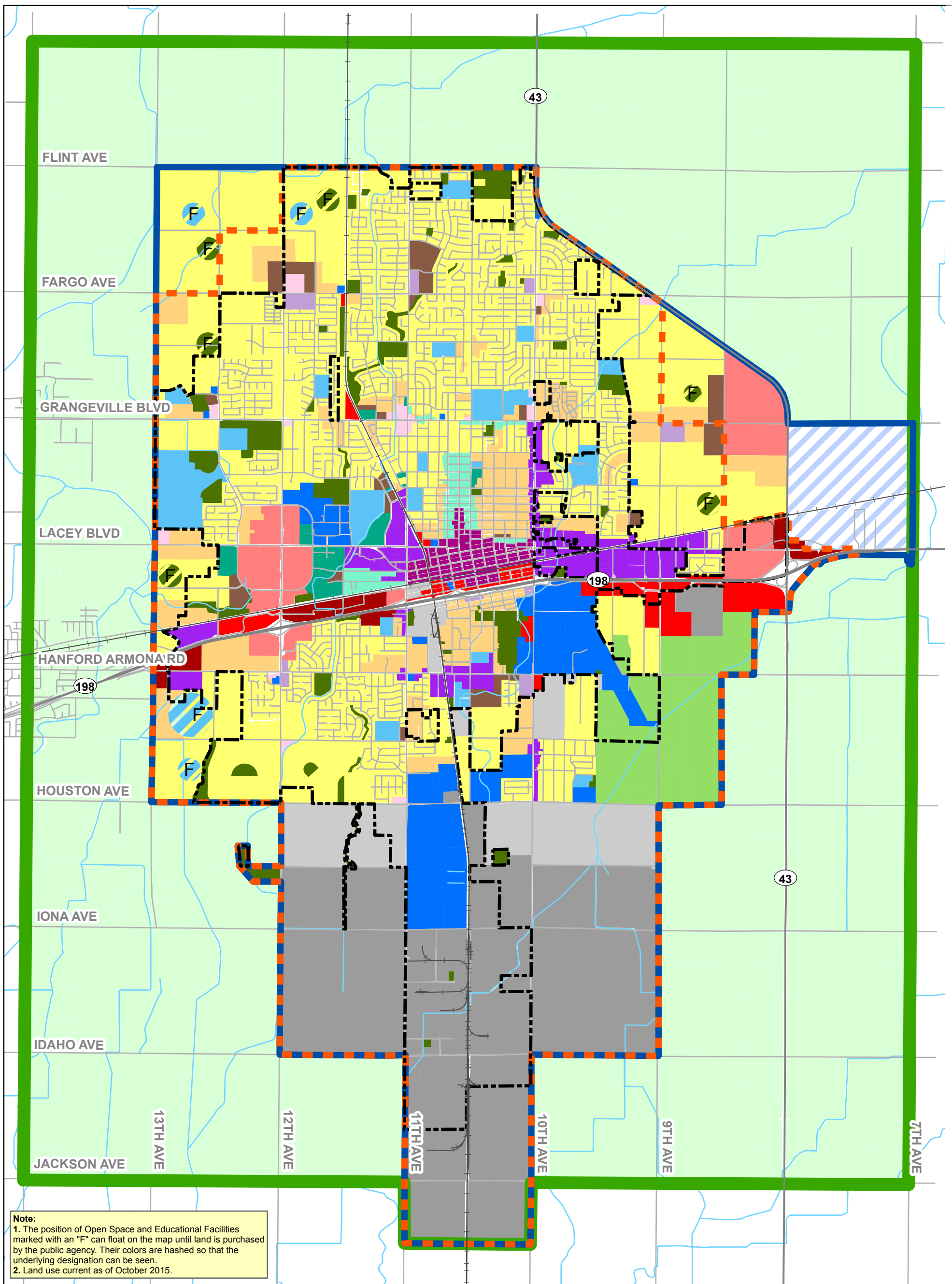
Legend

- | | | | |
|----------------------------|------------------------|------------------------|-----------|
| Low Density Residential | Office Residential | Airport Protection | Streets |
| Medium Density Residential | Office | Open Space | Waterways |
| High Density Residential | Light Industrial | Educational Facilities | |
| Neighborhood Commercial | Heavy Industrial | Public Facilities | |
| Regional Commercial | Neighborhood Mixed Use | Interest Area | |
| Service Commercial | Corridor Mixed Use | Vacant/Agriculture | |
| Highway Commercial | Downtown Mixed Use | City Limits | |



Figure 2.2
Existing Land Use
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- | | | | |
|----------------------------|------------------------|------------------------|----------------------------------|
| Low Density Residential | Office Residential | Airport Protection | Planned Area Boundary |
| Medium Density Residential | Office | Open Space | General Plan Study Area Boundary |
| High Density Residential | Light Industrial | Educational Facilities | Streets |
| Neighborhood Commercial | Heavy Industrial | Public Facilities | Highways |
| Regional Commercial | Neighborhood Mixed Use | Interest Area | Waterways |
| Service Commercial | Corridor Mixed Use | City Limits | |
| Highway Commercial | Downtown Mixed Use | 2035 Growth Boundary | |



Figure 2.3
2035 General Plan
Land Use
Sewer System Master Plan
City of Hanford



Table 2.1 Existing and Future Development

Sewer System Master Plan
City of Hanford

Land Use Classification	Existing Service Area				2035 Growth Boundary				Planned Area Boundary				Total in 2035 Growth Boundary (net acres)	Total in Planned Area Boundary (net acres)
	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)		
Residential														
Low Density	2,837	991	35	3,863	476	790	82	1,348	63	529	0	592	5,211	5,804
Medium Density	498	220	5	723	35	215	21	271	0	72	4	76	994	1,070
High Density	84	65	8	158	0	38	0	38	0	26	0	26	196	222
Subtotal - Residential	3,419	1,276	48	4,744	511	1,043	103	1,657	63	627	4	694	6,401	7,095
Mixed Use														
Office Residential	89	20	5	114	0	0	0	0	0	0	0	0	114	114
Neighborhood Mixed Use	12	42	0	54	0	15	0	15	0	0	0	0	70	70
Corridor Mixed Use	250	139	86	476	10	3	0	13	0	0	0	0	489	489
Downtown Mixed Use	81	15	28	123	0	0	0	0	0	0	0	0	123	123
Subtotal - Mixed Use	432	216	119	767	10	18	0	29	0	0	0	0	795	795
Non-Residential														
Neighborhood Commercial	27	26	0	53	8	11	1	20	0	0	0	0	73	73
Regional Commercial	216	154	6	376	0	0	0	0	18	163	6	188	376	564
Service Commercial	103	47	7	156	56	63	0	119	0	0	0	0	275	275
Highway Commercial	48	68	0	115	16	4	12	32	0	0	0	0	147	147
Office	88	30	1	119	0	0	0	0	0	0	0	0	119	119
Light Industrial	105	20	40	166	83	520	36	640	0	0	0	0	806	806
Heavy Industrial	376	535	33	943	211	2,380	227	2,817	0	0	0	0	3,761	3,761
Airport Protection	0	125	0	125	111	501	63	674	0	0	0	0	799	799
Educational Facilities	445	110	7	562	11	17	0	28	0	80	0	80	590	669
Public Facilities	438	56	0	494	3	13	0	16	0	0	0	0	510	510
Open Space	362	105	4	471	41	159	0	200	0	17	0	17	671	688
Open Space with Irrigation	16	41	4		0	105	0		0	17	0			
Open Space without Irrigation	346	65	0		41	54	0		0	0	0			
Interest Area	0	0	0	0	0	0	0	0	49	509	43	601	0	601
Subtotal - Non-Residential	2,208	1,274	98	3,580	539	3,668	340	4,547	68	769	49	886	8,127	9,012
Total														
	6,059	2,765	265	9,090	1,060	4,729	443	6,233	131	1,396	53	1,580	15,323	16,903

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Table 2.2 Historical and Projected Population

Sewer System Master Plan

City of Hanford

Year	Population	Annual Growth(%)
Historical		
2010	53,967	-
2011	54,146	0.3%
2012	54,541	0.7%
2013	54,513	-0.1%
2014	54,727	0.4%
2015	55,337	1.1%
Projected		
2016	57,070	3.1%
2017	58,803	3.0%
2018	60,536	2.9%
2019	62,270	2.9%
2020	64,003	2.8%
2021	65,736	2.7%
2022	67,469	2.6%
2023	69,202	2.6%
2024	70,935	2.5%
2025	72,669	2.4%
2026	74,402	2.4%
2027	76,135	2.3%
2028	77,868	2.3%
2029	79,601	2.2%
2030	81,334	2.2%
2031	83,067	2.1%
2032	84,801	2.1%
2033	86,534	2.0%
2034	88,267	2.0%
2035	90,000	2.0%
2036	91,890	2.1%
2037	93,820	2.1%
2038	95,790	2.1%
2039	97,801	2.1%
2040	99,855	2.1%
2041	101,952	2.1%
2042	104,093	2.1%
2043	106,279	2.1%
2044	108,511	2.1%
2045	110,790	2.1%
2046	113,116	2.1%
2047	115,492	2.1%
2048	117,917	2.1%
2049	120,393	2.1%
2050	122,922	2.1%

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Note :

1. 2035 population based on 2016 General Plan buildout population of 90,000.

CHAPTER 3 - SYSTEM PERFORMANCE AND DESIGN CRITERIA

This chapter presents the City's performance and design criteria, which were used in this master plan for evaluating the adequacy of capacity for the existing sewer system and for sizing improvements required to mitigate deficiencies and to accommodate future growth. The design criteria include: capacity requirements for the sewer facilities, flow calculation methodologies for future users, and flow peaking factors.

3.1 HYDRAULIC CAPACITY CRITERIA

In addition to applying the City design standards for evaluating hydraulic capacities; this master plan included hydraulic modeling. The modeling was a critical and essential element in identifying surcharge conditions resulting from downstream bottlenecks in the gravity sewers.

3.1.1 Gravity Sewers

Gravity sewer capacities depend on several factors including: material and roughness of the pipe, the limiting velocity and slope, and the maximum allowable depth of flow. The hydraulic modeling software used for evaluating the capacity adequacy of the City's sewer system, InfoSewer by Innovyze Inc., utilizes the Muskingum-Cunge technique for analyzing unsteady open channel flow. Pressurized pipe in the hydraulic model is assumed to flow full for the entirety of the pipe, so as to utilize the energy equation.

Manning's Equation for Pipe Capacity

The Continuity equation and the Manning equation for steady-state flow are used for calculating pipe capacities in open channel flow. Open channel flow can consist of either open conduits or, in the case of gravity sewers, partially full closed conduits. Gravity full flow occurs when the conduit is flowing full but has not reached a pressure condition.

- Continuity Equation: $Q = V A$

Where:

Q = peak flow, in cubic feet per second (cfs)

V = velocity, in feet per second (fps)

A = cross-sectional area of pipe, in square feet (sq. ft.)

- Manning Equation: $V = (1.486 R^{2/3} S^{1/2})/n$

Where:

V = velocity, fps

n = Manning's roughness coefficient

R = hydraulic radius (area divided by wetted perimeter), ft

S = slope of pipe, in feet per foot

Manning's Roughness Coefficient (n)

The Manning roughness coefficient 'n' is a friction coefficient that is used in the Manning formula for flow calculation in open channel flow. In sewer systems, the coefficient can vary between 0.009 and 0.017 depending on pipe material, size of pipe, depth of flow, root intrusion, smoothness of joints, and other factors.

For the purpose of this evaluation, and in accordance with City standards, an "n" value of 0.013 was used for both existing and proposed gravity sewer pipes unless directed otherwise by City staff based on pipe structural condition. This "n" value is an acceptable practice in planning studies.

Partial Flow Criteria (d/D)

Partial flow in gravity sewers is expressed as a depth of flow to pipe diameter ratio (d/D). For circular gravity conduits, the highest capacity is generally reached at 92 percent of the full height of the pipe (d/D ratio of 0.92). This is due to the additional wetted perimeter and increased friction of a gravity pipe.

When designing sewer pipelines, it is common practice to use variable flow depth criteria that allow higher safety factors in larger sizes. Thus, design d/D ratios may range between 0.5 and 0.92, with the lower values used for smaller pipes. The smaller pipes may experience flow peaks greater than planned or may experience blockages from debris.

The City's design standards pertaining to the d/D criteria are summarized in [Table 3.1](#). During peak dry weather flows (PDWF), the maximum allowable d/D ratio for proposed pipes smaller than 18 inches is 0.5, and for all proposed pipes larger than 18 inches, the maximum allowable d/D ratio is 0.75. The maximum allowable d/D ratio for all existing pipes (all diameters) is 0.92. The criterion for existing pipes is relaxed in order to maximize the use of the existing pipes before costly pipes improvements are required.

Minimum Pipe Sizes and Design Velocities

In order to minimize the settlement of sewage solids, it is standard practice in the design of gravity sewers to specify that a minimum velocity of 2 feet per second (fps) be maintained when the pipeline is half-full. At this velocity, the sewer flow will typically result with self-cleaning of the pipe. Due to the hydraulics of a circular conduit, velocity of half-full flows approaches the velocity of nearly full flows.

Changes in Pipe Size

When a smaller gravity sewer pipe joins a larger pipe, the invert of the larger pipe is generally to maintain the same energy gradient. One of the methods used to approximate this condition includes placing the 80 percent depth point (d/D at 0.8) from both sewers at the same elevation.

Table 3.1 Planning and Design Criteria

Sewer System Master Plan

City of Hanford

Pipeline Criteria		
Peak Dry Weather Flow Criteria		
Diameter	Maximum Allowable d/D	
(in)	Existing Trunks	Proposed Trunks
< 18	0.92	0.50
≥ 18	0.92	0.75
Peak Flow Estimation		
$Q_{peak} = 1.80 \times Q_{avg}^{0.92}$ (cubic feet per second, cfs units)		
$Q_{peak} = 1.74 \times Q_{avg}^{0.92}$ (million gallons per day, mgd units)		
Unit Flow Factor Criteria		
Land Use Classification	Unit Flow Factor	
	(gpd/acre)	
Residential		
Low Density Residential	790	
Medium Density Residential	1,350	
High Density Residential	2,450	
Mixed Use		
Office Residential	1,650	
Neighborhood Mixed Use	1,250	
Corridor Mixed Use	900	
Downtown Mixed Use	2,950	
Non-Residential		
Neighborhood Commercial	640	
Regional Commercial	790	
Service Commercial	520	
Highway Commercial	640	
Office	1,030	
Public Facilities	520	
Light Industrial	590	
Heavy Industrial	680	
Educational Facilities	800	

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For master planning purposes, and in the absence of known field data, sewer crowns were matched at the manholes.

3.1.2 Force Mains and Lift Stations

The Hazen-Williams formula is commonly used for the design of force mains as follows:

- Hazen Williams Velocity Equation: $V = 1.32 C R^{0.63} S^{0.54}$

Where:

V = mean velocity, fps

C = roughness coefficient

R = hydraulic radius, ft

S = slope of the energy grade line, ft/ft

The value of the Hazen-Williams 'C' varies and depends on the pipe material and is also influenced by the type of construction and pipe age.

The minimum recommended velocity in force mains is at 2 feet per second. The economical pumping velocity in force mains ranges between 3 and 5 fps. A maximum desired velocity is typically around 7 fps and a maximum not-to-exceed velocity is at 10 fps. C-Factors were based on the previous hydraulic model.

The capacities of pump stations are evaluated and designed to meet the peak wet weather flows with one standby pump having a capacity equal to the largest operating unit. The standby pump provides a safety factor in case the duty pump malfunctions during operations and allows for maintenance.

3.2 DRY WEATHER FLOW CRITERIA

Sewer unit flow factors are coefficients commonly used in planning level analysis to estimate future average daily sewer flows for areas with predetermined land uses. The unit factors are multiplied by the number of dwelling units or gross acreages for residential categories, and by the gross acreages for non-residential categories, to yield the average daily sewer flow projections.

3.2.1 Unit Flow Factors Methodology

Sewer unit factors are developed by using water consumption records and applying a return to sewer ratio for each land use to estimate sewer flow coefficients. There are several methods for developing the unit factors. This analysis relied on the use of the City's 2013 water consumption billing records, which lists the monthly water consumption per customer account throughout the City, to estimate the unit factors within the service area.

3.2.2 Average Daily Sewer Unit Flow Factors

A return to sewer ratio was applied to each unadjusted water demand factor for individual land uses, and sewer flows were balanced to wastewater treatment plant flows. Generally, non-residential land uses return the majority of the water demand to the sewer system. These unit

factors were estimated at 80-90 percent return to sewer ratio. The same concept can be applied to multi-family residential lots, which were estimated at a 70-75 percent return to sewer ratio. Single family residential lots often have the lowest return to sewer ratio. This is largely due to water lost for landscape irrigation. Single family lots were estimated between 35 and 65 percent return to sewer ratio. Lastly, unit factors were adjusted to 100 percent occupancy, and rounded.

This analysis generally indicates that existing residential land uses have higher flow generation factors than that of non-residential land uses. The existing unit factor analysis is shown on [Table 3.2](#).

It should be noted that additional water conservation is expected for residential land uses with the completion and implementation of water metering. Water conservation was taken into account for residential land uses and the future water demand unit factors were decreased accordingly in the water system master plan. Anticipated increases in land use densities, as identified in the General Plan, are assumed to be offset by future water conservation efforts.

While the impact of water conservation may have some impact on residential flow generation, it is not expected to reduce flows significantly, as most of the conservation is expected to be realized in landscape irrigation. Therefore, minimal adjustments were made to future residential unit factors. Existing non-residential factors were slightly lower than normal and were adjusted for future scenarios to apply a level of conservancy when projecting future sewer flows. [Table 3.3](#) shows the 2013 sewer flow factors as well as the ones used for estimating flows from future developments within the Planned Area Boundary.

3.2.3 Peaking Equations

The sewer system is evaluated based on its ability to convey peak sewer flows. Peaking factors represent the increase in sewer flows experienced above the average dry weather flows (ADWF). The various peaking conditions are numerical values obtained from a review of historical data and, at times, tempered by engineering judgment.

Typical values for peaking factors of 2.0 are generally used to estimate peak flows at treatment facilities where flow fluctuations are attenuated during the time of travel in the sewer, while peaking factors between 3.0 and 4.0 are used to estimate peak flows in the smaller upstream areas of the system where low flow conditions are prone to greater fluctuations.

The City's 1990 SSMP included a peaking factor curve for dry weather flows, which is summarized below:

- $Q_{\text{peak}} = 1.80 \times Q_{\text{avg}}^{0.92}$ (cubic feet per second, cfs units)
- $Q_{\text{peak}} = 1.74 \times Q_{\text{avg}}^{0.92}$ (million gallons per day, mgd units)

This master plan used the same peaking factor equations as included in the 1990 SSMP, which are also summarized on [Table 3.1](#).

Table 3.2 Sewer Flow Unit Factor AnalysisSewer System Master Plan
City of Hanford

Land Use Classification	Existing Development within Service Area (net acres)	2013 Average Daily Water Demand Unit Factors										2013 Average Daily Wastewater Flow Unit Factors							
		2013 Consumption			2013 Production		2013 Production at 100% Occupancy			2013 Water Unit Factor		Return to Sewer Ratio	2013 Wastewater Flows		2013 Wastewater Flows at 100% Occupancy		2013 Recommended Wastewater Unit Factor		
		Annual Consumption	Unadjusted Water Unit Factors	Balance to 2013 Consumption	Unaccounted-For-Water Rate ^a	Production (w/o Vacancy Rate)	Vacancy Rate ^a	Projected Production at 100% Occupancy		Recommended Factor	Balance Using Recommended Unit Factor		Unadjusted Wastewater Unit Factor	Balance to Existing Conditions	Projected Flows at 100% Occupancy		Recommended Wastewater Unit Factor	Balance Using Recommended Unit Factor	
		(gpd)	(gpd/net acres)	(gpd)	(%)	(gpd)	(%)	(gpd/net acres)	(gpd)	(gpd/net acres)	(gpd)		(gpd/net acres)	(gpd)	(gpd/net acres)	(gpd)			
Residential																			
Low Density	2,837	6,314,534	2,226	6,314,534	2.1%	6,451,640	8.6%	2,325	7,058,687	2,325	7,058,687	0.35	722	2,264,067	790	2,477,098	790	2,477,098	
Medium Density	498	734,868	1,476	734,868	2.1%	750,824	8.6%	2,750	821,471	2,750	821,471	0.50	1,234	245,724	1,350	268,845	1,350	268,845	
High Density	84	287,248	3,399	287,248	2.1%	293,485	8.6%	3,800	321,100	3,800	321,100	0.65	2,239	189,221	2,450	207,025	2,450	207,025	
Subtotal Residential	3,419	7,336,650		7,336,650		7,495,949			8,201,258		8,201,258			2,699,012		2,952,968		2,952,968	
Mixed use																			
Office Residential	89	175,813	1,981	175,813	2.1%	179,630	8.0%	2,200	195,250	2,200	195,250	0.75	1,518	134,723	1,650	146,438	1,650	146,438	
Neighborhood Mixed Use	12	19,787	1,598	19,787	2.1%	20,217	8.0%	1,775	21,975	1,775	21,975	0.70	1,150	14,237	1,250	15,475	1,250	15,475	
Corridor Mixed Use	250	293,162	1,171	293,162	2.1%	299,527	8.0%	1,300	325,573	1,300	325,573	0.70	828	207,365	900	225,397	900	225,397	
Downtown Mixed Use	81	304,555	3,782	304,555	2.1%	311,168	8.0%	4,200	338,226	4,200	338,226	0.70	2,714	218,558	2,950	237,564	2,950	237,564	
Subtotal Mixed Use	432	793,317	1,836	793,317		810,542			881,024		881,024			574,883		624,873		624,873	
Non-Residential																			
Neighborhood Commercial	27	19,522	720	19,522	2.1%	19,946	8.0%	800	21,680	800	21,680	0.90	644	17,452	700	18,970	700	18,970	
Regional Commercial	216	194,724	900	194,724	2.1%	198,952	8.0%	1,000	216,252	1,000	216,252	0.90	828	179,057	900	194,627	900	194,627	
Service Commercial	103	59,992	585	59,992	2.1%	61,295	8.0%	650	66,625	650	66,625	0.90	552	56,580	600	61,500	600	61,500	
Highway Commercial	48	34,289	720	34,289	2.1%	35,034	8.0%	800	38,080	800	38,080	0.90	644	30,654	700	33,320	700	33,320	
Office	88	103,257	1,171	103,257	2.1%	105,499	8.0%	1,300	114,673	1,300	114,673	0.80	966	85,211	1,050	92,621	1,050	92,621	
Light Industrial	105	71,086	675	71,086	2.1%	72,629	8.0%	750	78,945	750	78,945	0.90	644	67,787	700	73,682	700	73,682	
Heavy Industrial	376	287,531	765	287,531	2.1%	293,774	8.0%	850	319,320	850	319,320	0.90	690	259,212	750	281,753	750	281,753	
Airport Protection	0	0	0	0	2.1%	0	0.0%	0	0	0	0	0.00	0	0	0	0	0	0	
Educational Facilities	445	801,976	1,801	801,976	2.1%	819,389	8.0%	2,000	890,640	2,000	890,640	0.40	736	327,756	800	356,256	800	356,256	
Public Facilities	438	256,416	585	256,416	2.1%	261,984	8.0%	650	284,765	650	284,765	0.80	460	201,526	500	219,050	500	219,050	
Open Space	346	838,854	2,422	838,854	2.1%	857,068	0.0%	3,300	857,068	3,300	857,068	0.00	0	0	0	0	0	0	
Interest Area	0	0	0	0	2.1%	0	0.0%	0	0	0	0	0.00	0	0	0	0	0	0	
Subtotal Non-Residential	2,192	2,573,365		2,667,647		2,725,569			2,888,047		2,888,047			1,225,236		1,331,778		1,331,778	
AKEL	6,044	10,703,332		10,797,614		11,032,060			11,970,329		11,970,329			4,499,131		4,909,618		4,909,618	

Notes:

1. Residential vacancy rate extracted from 2013 United States Census American Community Survey Data

2/18/2015

Table 3.3 Unit Average Daily Sewer Flow Factors

Sewer System Master Plan
City of Hanford

Land Use Designation	Sewer Existing (gpd/net acre)	Sewer Future (gpd/net acre)
Residential		
Low Density Residential	790	790
Medium Density Residential	1,350	1,350
High Density Residential	2,450	2,450
Mixed Use		
Office Residential	1,650	1,650
Neighborhood Mixed Use	1,250	1,250
Corridor Mixed Use	900	900
Downtown Mixed Use	2,950	2,950
Non-Residential		
Neighborhood Commercial	700	640
Regional Commercial	900	790
Service Commercial	600	520
Highway Commercial	700	640
Office	1,050	1,030
Public Facilities	500	520
Light Industrial	700	590
Heavy Industrial	750	680
Educational Facilities	800	800
Non-Flow Generating		
Open Space	0	0
Airport Protection	0	0

CHAPTER 4 - EXISTING SEWER COLLECTION FACILITIES

This chapter provides a description of the City's existing sewer system facilities including gravity trunks, force mains, lift stations, and sewer collection basins. The chapter also includes a brief description of the Hanford Wastewater Treatment Plant.

4.1 SEWER COLLECTION SYSTEM OVERVIEW

The City is located approximately 30 miles southeast of the city of Fresno and 20 miles west of the city of Visalia ([Figure 1.1](#)). The City provides sewer collection services to approximately 56,000 residents, as well as commercial, industrial, and institutional establishments. The City owns, operates, and maintains the sewer collection system ([Figure 4.1](#)), which consists of gravity and force mains, with pipes up to 48-inches in size ultimately conveying the flow to the Hanford Wastewater Treatment Plant (WWTP).

The City's WWTP has a rated treatment capacity of 8.0 million gallons per day (mgd). A modeled pipe inventory, listing the total length by pipe diameter, is shown on [Table 4.1](#). This table is based on information extracted from the drawings and the atlas map provided by City staff. The 10-inch and 12-inch diameter modeled pipes account for 43 percent of the total sewer pipe lengths.

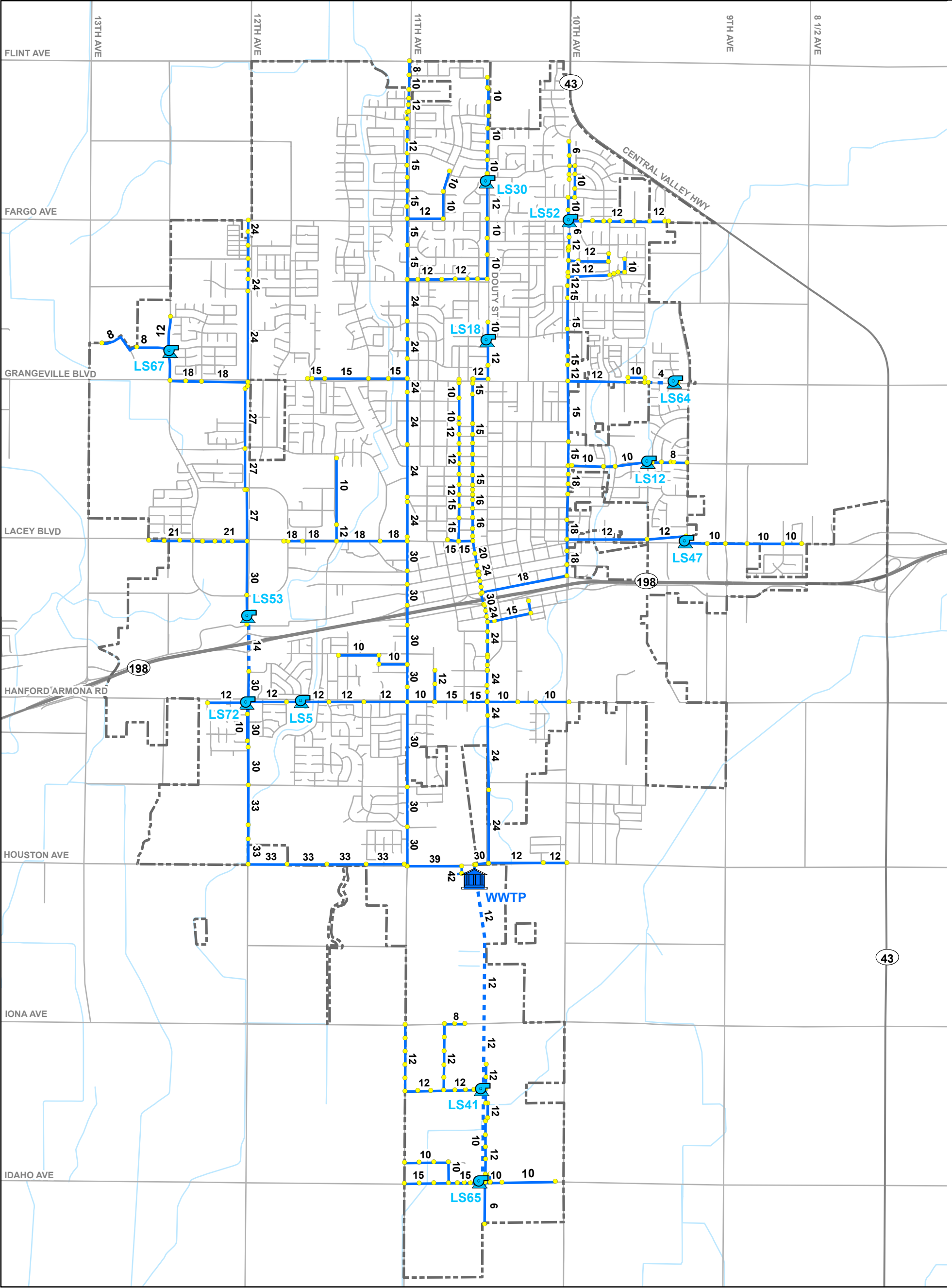
4.2 SEWER COLLECTION BASINS AND TRUNKS

Based on the City's topography, the sewer system is divided into six separate dendritic sewer collection basins, each defining the boundaries of a sewer collection trunk system. The following six major wastewater collection basins were created and shown on [Figure 4.2](#): 10th Avenue, 10 ½ Avenue, 11th Avenue, 12th Avenue, Industrial Area, and Irwin Street. The sewer trunk system for each collection basin is shown on [Figure 4.3](#), and a schematic diagram intended to simplify the connectivity between the basins and trunks is shown on [Figure 4.4](#).

4.2.1 10th Avenue Collection Basin

The 10th Avenue Collection Basin encompasses 3,023 acres in the northeast portion of the City. This basin includes the areas generally north of Highway 198 between Douty Street and Highway 43. This basin collects flows along 10th Avenue, starting at Encore Drive, where a 10-inch trunk conveys flow south to Lift Station 52, at the Fargo Avenue. Flows are pumped through a 6-inch force main to a 12-inch trunk beginning at Birch Avenue, where flow continues south to Lakewood Drive, where it continues as a 15-inch south to Florinda Street.

At Florinda Street, the 15-inch trunk increases in size to an 18-inch trunk and continues along 10th Avenue to Fourth Street, where it turns west and continues on Fourth Street before joining the 30-inch trunk in Irwin Street.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Existing System
- Gravity Mains

Force Mains

Streets

Highways

Waterways

WWTP

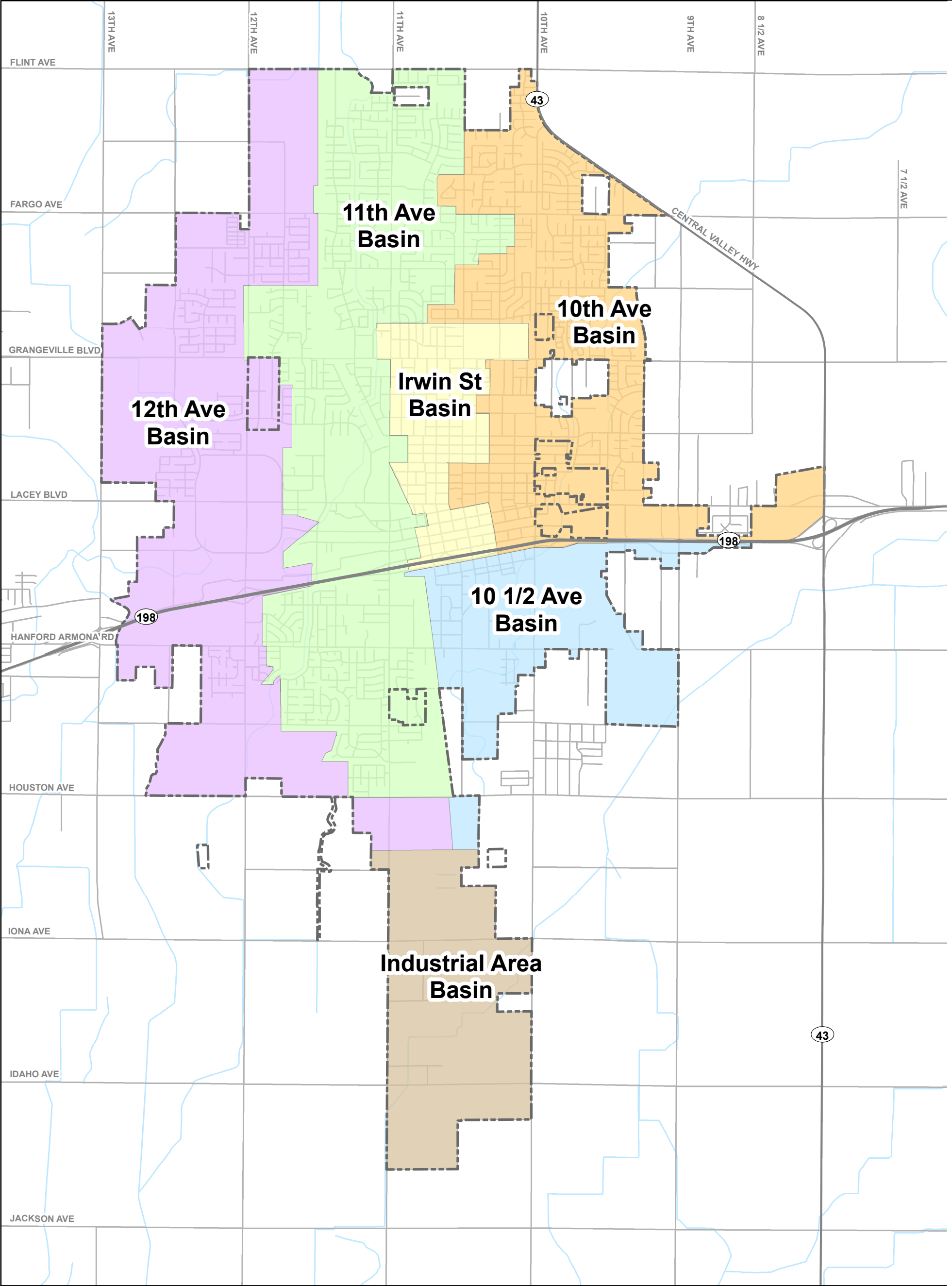
Lift Stations

Manholes

City Limits

Figure 4.1
Existing Modeled
Sewer System
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

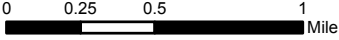
Legend

Existing Basins

- | | |
|---|---|
|  12th Ave Basin |  Streets |
|  10th Ave Basin |  Highways |
|  10 1/2 Ave Basin |  Waterways |
|  11th Ave Basin |  City Limits |
|  Industrial Area Basin | |



Update: September 2, 2016

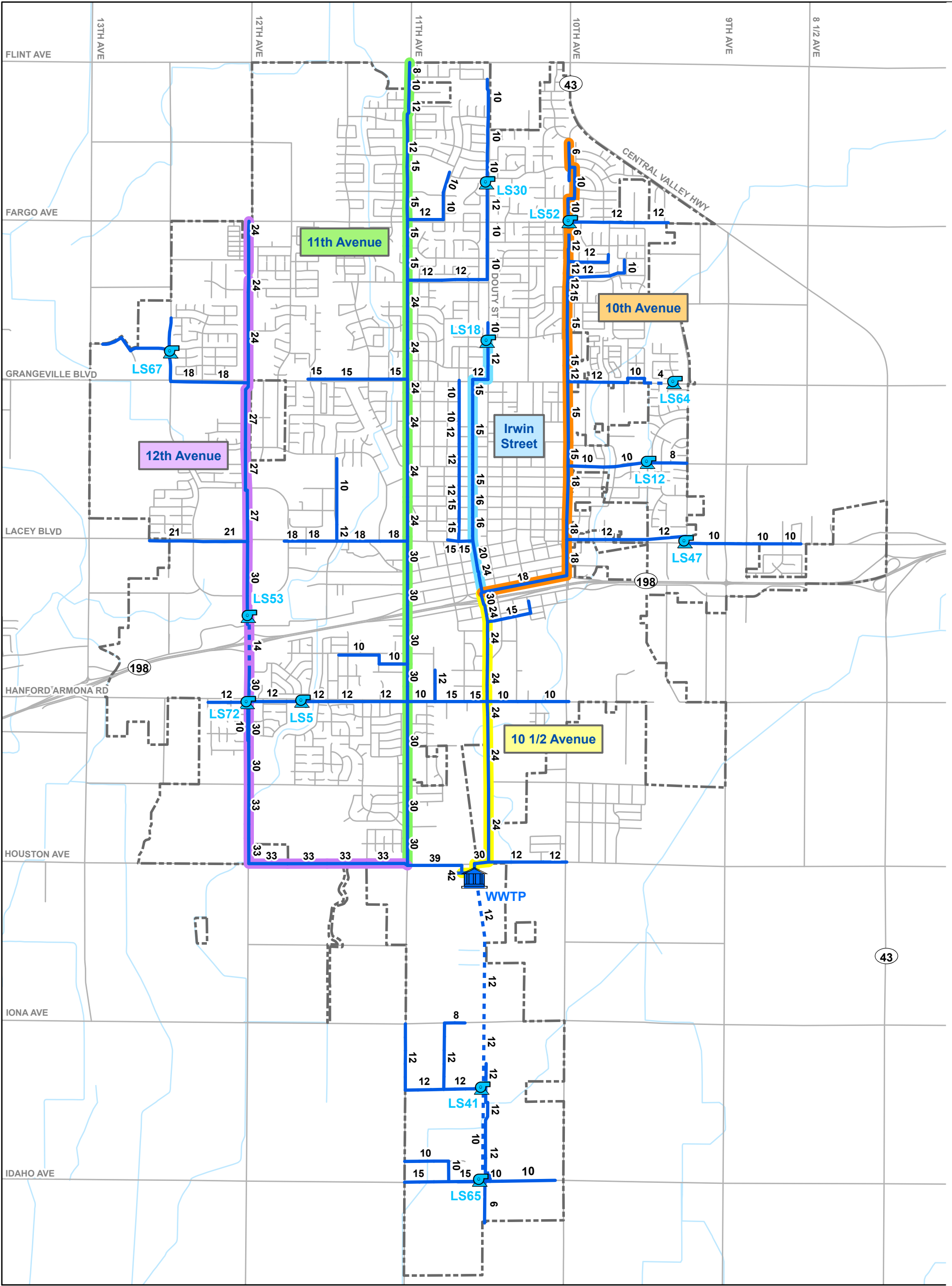


File Path: P:\GIS\GIS_Projects\Hanford\2016Sewer\Final\HCHF_Fig4-2_ExistSewerBasins_090216.mxd



Figure 4.2
Existing Sewer Collection
System Basins
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Existing System

WWTP

Lift Stations

Gravity Mains

Force Mains
- Sewer Collection Trunks

10th Avenue

10 1/2 Avenue
- 11th Avenue

12th Avenue

Irwin Street
- City Limits

Streets

Highways

Waterways

Figure 4.3
Existing Modeled
Trunk System
Sewer System Master Plan
City of Hanford



LEGEND

10th Avenue Basin



10 1/2 Basin



11th Avenue Basin



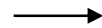
12th Avenue Basin



Irwin Street Basin



Industrial Area Basin



June 8, 2016

Figure 4.4
Sewer Basin and Trunk
Connectivity
Sewer System
Master Plan
City of Hanford

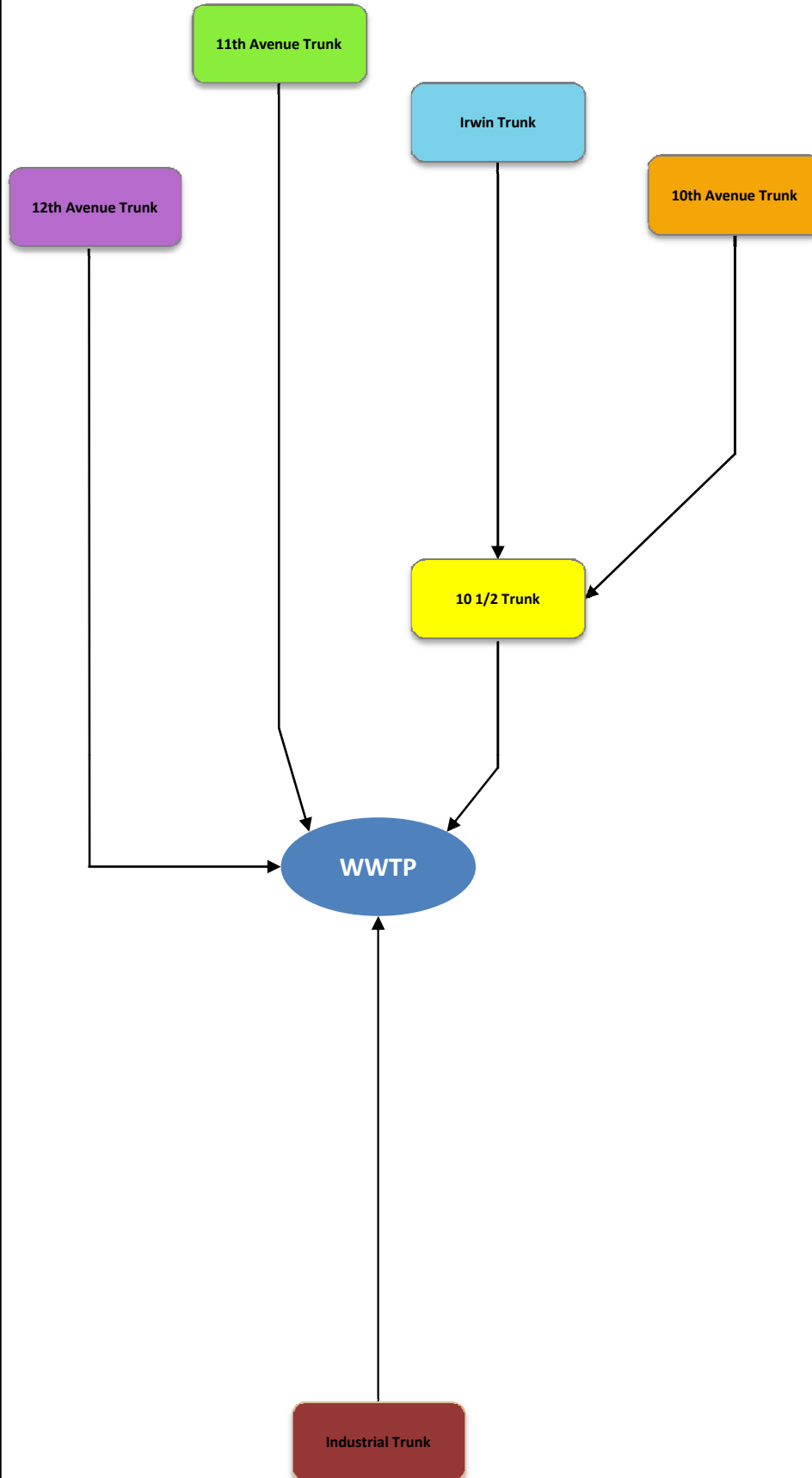


Table 4.1 Modeled Existing Pipe Inventory
 Sewer System Master Plan
 City of Hanford

Size	Length	
(in)	(ft)	(mi)
Force Mains		
4	841	0.16
6	543	0.10
10	3,119	0.59
12	7,476	1.42
14	1,800	0.34
Total	13,779	2.61
Gravity Mains		
6	2,999	0.57
8	5,157	0.98
10	34,179	6.47
12	51,840	9.82
14	160	0.03
15	25,335	4.80
16	1,544	0.29
18	14,148	2.68
20	820	0.16
21	3,262	0.62
24	23,647	4.48
27	5,389	1.02
30	18,450	3.49
33	7,928	1.50
36	424	0.08
39	1,806	0.34
42	743	0.14
48	359	0.07
Total	198,190	37.5

4.2.2 10 ½ Avenue Collection Basin

The 10 ½ Avenue Collection Basin encompasses 2,954 acres in the east-central part of the City. This basin collects flows generally east of 10 ½ Avenue, between Highway 198 and Houston Avenue. The main trunk begins at the intersection of 4th Street and Irwin Street, where a 30-inch trunk crossing Highway 198 conveys flow south to a 24-inch trunk at Third Street.

This pipe continues south along 10 ½ Avenue until reaching Houston Avenue where it connects a 30-inch trunk. This 30-inch trunk then conveys flow west along Houston Avenue and increasing in size to a 36-inch. The 36-inch trunk then increases to a 48-inch diameter trunk at the WWTP property prior to discharge at the headworks.

4.2.3 11th Avenue Collection Basin

The 11th Avenue Collection Basin encompasses 3,243 acres in central and north-central Hanford. This basin collects flow generally between 12th Avenue and 10th Avenue, starting at Flint Avenue and conveying flow south to Houston Avenue.

Starting at Flint Avenue, flow is collected along 11th Avenue in 8-inch, 10-inch, and 12-inch pipelines before entering a 15-inch at Pepper Drive. Flow continues south in a 15-inch pipeline before increasing in size to a 24-inch trunk at Cortner Street. Flow continues south along 11th Avenue before increasing in size to a 30-inch trunk at Lacey Boulevard, where it continues until joining a 39-inch trunk at Houston Avenue, where it continues to the WWTP.

4.2.4 12th Avenue Collection Basin

The 12th Avenue Collection Basin encompasses 4,218 acres in the western part of the City. This basin collects flows generally between 13th Avenue and 12th Avenue, starting at Fargo Avenue and continuing south until the City WWTP.

Starting at Fargo Avenue flow is collected along a 12th Avenue in a 24-inch trunk before increasing in size to a 27-inch trunk at Grangeville Boulevard. Flow continues in a 27-inch trunk south along 12th Avenue until increasing in size to a 30-inch trunk at Lacey Boulevard, where it continues to Lift Station 53 at Glendale Avenue. Flows are pumped through a 14-inch force main to Hayden Avenue, where it transitions to gravity flow in a 30-inch trunk and continues south to Hume Avenue. From Hume Avenue, flows continue south along 12th Avenue in a 33-inch trunk before turning west at Houston Avenue, where it continues to 11th Avenue. At 11th Avenue, the trunk diameter increases in size to a 39-inch, before continuing to the WWTP.

4.2.5 Irwin Collection Basin

The Irwin Collection Basin encompasses 670 acres in the central portion of the City. It is bound to the north by Terrace Drive and to the south by Third Street. The basin is generally bound to the east and west by 10th Avenue and 11th Avenue respectively.

Starting at Terrace Drive flow is collected in a 12-inch trunk before increasing in size to a 15-inch trunk at Grangeville Boulevard. Flow continues south along Irwin Street in a 16-inch trunk at Ivy Street, which continues south to Lacey Boulevard. At Lacey Boulevard, the trunk diameter increases to a 20-inch for a short distance, before once again increasing in size to a 24-inch trunk north of Sixth Street. Flows continue south and combine with the 10 ½ Avenue collection basin at Fourth Street.

4.2.6 Industrial Area Collection Basin

The Industrial Area Collection Basin encompasses 4,131 acres in the southern portion of the City. This basin is bound to the north by Houston Avenue and to the south by Jackson Avenue respectively. 12th Avenue and 9th Avenue serve as the western and eastern limits of this basin.

Flows are generally conveyed by gravity along Idaho Avenue in 8-inch, 10-inch, and 15-inch gravity trunks before being conveyed to Lift Station 65, where they are pumped through a 10-inch force main to Lift Station 41. Additional flows are collected along Industry Avenue and BNSF railway and conveyed by gravity in 10-inch, 12-inch, and 15-inch trunks to Lift Station 41. Flows from tributary to Lift Station 41 and pumped from Lift Station 65 are combined at Lift Station 41, where they are pumped through a 12-inch force main to the WWTP.

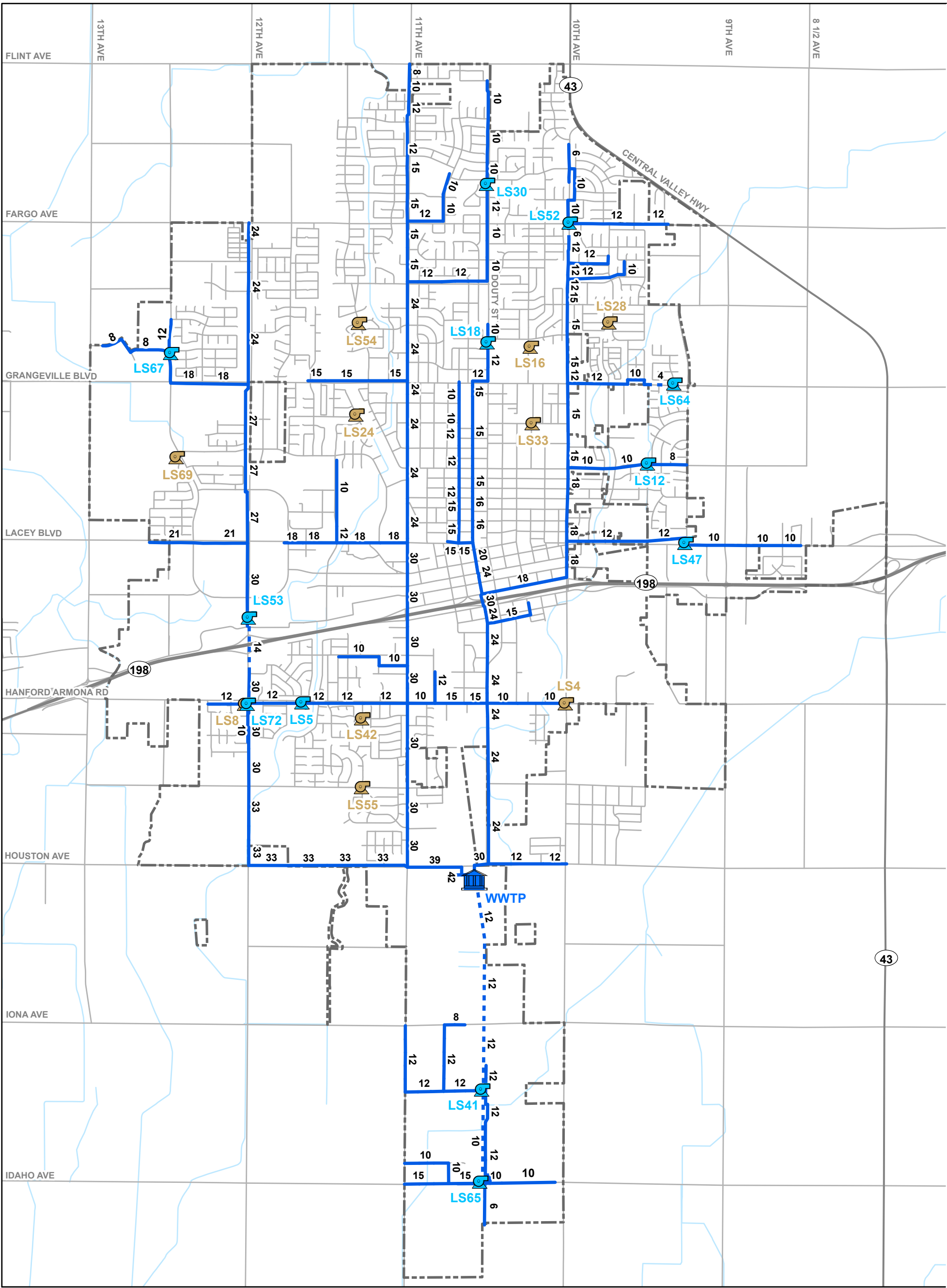
4.3 LIFT STATIONS

When routing flows by gravity is not possible due to adverse grades, lift stations are used to pump flows to a point where gravity conveyance is once again feasible. The City currently maintains 21 lift stations in the sewer collection system, as summarized on [Table 4.2](#) and shown on [Figure 4.5](#).

[Table 4.2](#) lists each lift station with relevant information obtained from the City's records including: location, year built, type, number of pumps, and horse power if data was provided. The lift stations are operated to turn "on" or "off" based on the levels in their wet wells.

The hydraulic model included 12 lift stations and an individual capacity evaluation was included along with the hydraulic modeling effort. The following lift stations were modeled:

- **Lift Station 5.** This lift station services the area along Hanford Armona Road between Bengston Avenue and 12th Avenue. The lift station is located near the intersection of Hanford Armona Road and Bengston Avenue and was built in 1960. The lift station has a firm capacity of 350 gpm and a total capacity of 700 gpm. The pump discharges into a 4-inch force main that conveys flow along Hanford Armona Road before discharging into a 12-inch gravity trunk west of Manor Avenue.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Existing System

- WWTP
- Modeled Lift Stations
- Non-Modeled Lift Stations
- Gravity Mains
- Force Mains
- City Limits
- Streets
- Highways
- Waterways



Figure 4.5
Existing Lift Stations
Sewer System Master Plan
City of Hanford



Table 4.2 Lift Station Inventory
Sewer System Master Plan
City of Hanford

Pump Station No.	Date Installed	Location	Bypass	Pit Depth (ft)	Pump Make	Firm Capacity (gpm)	Total Capacity	Motor HP	Volts	Phase	Generator Connect	Portable Connect	SCADA	Comments
Modeled Lift Stations														
5	1960	Hanford Armona Rd. and Bengston Ave.	Yes	16.1	F.M. 4"	350	700	3	230	3	Yes	No	Yes	Dry well bypass too high
12	1961	Florinda St. and Lassen Dr.	No	19.3	F.M. 4"	350	700	3	230	3	Yes	No	Yes	Dry well
18	1953	Douty St. south of Terrace St.	Yes	16.5	F.M. 4"	415	830	3	230	3	No	No	Yes	Dry well
30	1962	Douty St. and Encore Dr.	No	19.9	F.M. 4"	350	700	3	230	3	Yes	No	Yes	Dry well
41 ^{1,2}	2017	Industry Ave. east of Crown St.			HOMA AMX 434	550	1100							Wet pit
47	1985	310 N. 9 1/4 Ave.	No	23.8	Hydromatic	375	750	3	230	3	Yes	Yes	Yes	Wet pit upgraded to 3 ph Nov. 2001
52	1990	Fargo Ave. and 10th Ave.	No	22.3	Paco	425	850	10	230	3	Yes	No	Yes	Wet pit
53 ^{1,2}	2017	East side of 12th Ave. between Hwy 198 and Mall Dr.				1000	1500	20						Wet pit
64	2000	Grangeville Blvd. and Brookhollow Dr.	No	16.5	Myers sub	110	250		230	3	No	No	No	Wet pit - #1-110 grinder & #2-140 gpm
65	2002	10510 Idaho Ave.	No	25.0	Flygt sub	2170	3250	30	480	3	Yes	Yes	No	Wet pit - 1085 gpm
67	2004	1875 Centennial and W. Berkshire Ln.	No	27.6	Flygt sub	350	700	7.5	480	3	No	Yes	No	Wet pit - Impellers upgraded from "C" to "N" 11/2010 due to SHAPE Inc. error
72	2008	1716 Hanford Armona Rd.	No	26.0	Flygt sub	1000	2000	10	230	3	No	Yes	Yes	Wet pit
Non-Modeled Lift Stations														
4	1955	710 E. Hanford Armona Rd. & northeast corner of 10th Ave.	No	14.5	F.M. 350	350	350	1.5	230	3	Yes	No	Yes	Wet pit
8 ³	1962	Hanford Armona Rd. and 12th Ave.	No	17.3	F.M. 4"	350		3						
16	1959	Kensington Way	Yes	15.5	F.M. 4"	350	350	3	230	3	No	No	Yes	Dry well
24	1961	Williams St. and Malone St.	Yes	15.2	F.M. 4"	350	700	3	230	3	No	No	Yes	Dry well
28	1962	903 E. Moffat @ 125' west of Neil Way	Yes	16.0	F.M. 4"	350	700	3	230	3	No	No	Yes	Dry well
33	1964	Malone St. and Green St.	Yes	16.8	F.M. 4"	220	220	3	230	3	No	No	Yes	Dry well
42	1981	Anacapa Ave. and Tempe Dr.	No	16.0	Myers	200	400	3	230	Single	Yes	No	Yes	Wet pit (sump pump). Rehabbed Dec. 2001
54	1994	Rodgers Rd. and Raymond Dr.	Yes	15.3	Myers	40	110	2&3	230	Single	No	No	No	Wet pit - #1-70 gpm & #2-40 gpm
55	1994	Hume Ave. and Echo Ln.	No	23.3	Myers	40	230	2&5	480	3	Yes	Yes	No	Wet pit - #1-40 grinder & #2-190 gpm
69	2004	Centennial at Greenfield	No	21.8	HOMA AMX334	210	420	2.9	230	3	No	Yes	No	Wet pit - Upgrade pumps 3/2014 from 3/4 hp dewater. New pumps equipped with AMX cutter.

Notes:

1. Unless noted otherwise, lift station information extracted from "Sanitary Sewer Facilities Record", City of Hanford Utility Division, received 04/22/2014.
2. Information provided by City Staff on February 08, 2017.
3. Lift station 8 was abandoned and removed
4. Firm Capacity of the lift station equivalent to the total capacity of the lift station with the largest pump out of service.

6/2/2017

- **Lift Station 12.** This lift station services the area along Florinda Street, between Lassen Drive and 9 ¼ Avenue. The lift station is located on the intersection of Lassen Drive and Florinda Street and was built in 1961. The lift station has a firm capacity of 350 gpm and a total capacity of 700 gpm. The pump discharges into a 10-inch force main that conveys flow west along Florinda Street before discharging into a 10-inch gravity trunk east of Sequoia Circle.
- **Lift Station 18.** This lift station services the area along Douty Street between Encore Drive and Terrace Drive. The lift station is located on Douty Street, south of Terrace Avenue, and was built in 1953. The lift station has a firm capacity of 415 gpm and a total capacity of 830 gpm. The pump discharges into a 12-inch force main that conveys flow south along Douty Street before discharging into a 12-inch gravity trunk north of Lorita Way.
- **Lift Station 30.** This lift station services the area that is north of Encore Drive, bounded to the east by 10th Avenue and bounded to the west by Aspen Street and is located on the intersection of Douty Street and Encore Drive and was built in 1962. The lift station has a firm capacity of 350 gpm and a total capacity of 700 gpm. The pump discharges into a 12-inch force main that conveys flow south along Douty Street before discharging into a 10-inch gravity trunk at Fargo Avenue.
- **Lift Station 41.** This lift station services the area along Industry Ave between 11th Avenue and the BNSF railway as well as east of the BNSF railway between Iona Avenue and Idaho Avenue. The lift station is located on Industry Avenue east of Crown Street and was originally built in 1977. In early 2017, Lift Station 41 was upgraded and now has a firm capacity of 550 gpm and a total capacity of 1,100 gpm. The pump discharges into a 12-inch force main that conveys flow north before discharging at the City WWTP.
- **Lift Station 47.** This lift station services the area along Lacey Boulevard between 9 ¼ Avenue and Sierra Drive. The lift station is located at the intersection of 9 ¼ Avenue and Lacey Boulevard and was built in 1985. The lift station has a firm capacity of 375 gpm and a total capacity of 750 gpm. The pump discharges into a 12-inch force main that conveys flow north along 9 ¼ Avenue before discharging into a 12-inch gravity trunk north of Lacey Boulevard. It should be noted that Lift Station 47 is planned to be abandoned in the future and the existing flows will be conveyed into 9th Avenue through a 10-inch gravity main.
- **Lift Station 52.** This lift station services the area that is north of Fargo Avenue and east of 10th Avenue. The lift station is located on the intersection of Fargo Avenue and 10th Avenue and was built in 1990. The lift station has a firm capacity of 425 gpm and a total capacity of 850 gpm. The pump discharges into a 6-inch force main that conveys flow south along 10th Avenue before discharging into a 12-inch gravity trunk at Birch Avenue
- **Lift Station 53.** This lift station services the area along 12th Avenue north of Glendale Avenue. The lift station is located north of the intersection of 12th Avenue and Glendale

Avenue. Lift Station 53 was upgraded in early 2017 and now has a firm capacity of 1,000 gpm and a total capacity of 1,500 gpm. The pump discharges into a 14-inch force main that conveys flow south along 12th Avenue before discharging into a 30-inch gravity trunk at Hayden Avenue.

- **Lift Station 64.** This lift station services the Freedom Park area that is east of Brookhollow Drive, and north of Grangeville Boulevard. The lift station is located on the intersection of Brookhollow Drive and Grangeville Boulevard and was built in 2000. The lift station has a firm capacity of 110 gpm and a total capacity of 250 gpm. The pump discharges into a 4-inch force main that heads west along Grangeville Boulevard. It should be noted that Lift Station 64 is planned to be abandoned at buildout of the master plan.
- **Lift Station 65.** This lift station services the area along Idaho Avenue between 11th Avenue and the BNSF railway. The lift station is located at 10510 Idaho Avenue and was built in 2002. The lift station has a firm capacity of 2,170 gpm and a total capacity of 3,250 gpm. The pump discharges into a 10-inch force main that conveys flow north along the BNSF railway before discharging into Lift Station 41.
- **Lift Station 67.** This lift station services one of the western area of the city, between 13th Avenue to Centennial Drive. The lift station is located at the intersection of Berkshire Lane and Centennial Drive. The lift has a firm capacity of 350 gpm and a total capacity of 700 gpm. The flows collected at this lift station are discharged into a 6-inch force main that convey flows towards a 12-inch gravity main along Centennial Drive. The flows are then conveyed east through an 18-inch gravity main along Grangeville Boulevard, ultimately discharging into a 27-inch gravity main along 12th Avenue.
- **Lift Station 72.** This lift station services the area east of 12th Avenue between Springcrest Street and Hanford Armona Road. The lift station is located near the intersection of 12th Avenue and Hanford Armona Road and was built in 2008. The lift station has a firm capacity of 1,000 gpm and a total capacity of 2,000 gpm. The pump discharges into a 12-inch force main that conveys flow along 12th Avenue before discharging into a 30-inch gravity trunk in 12th Avenue.

4.4 HANFORD WASTEWATER TREATMENT PLANT

The Hanford WWTP is an 8.0 million gallons per day (mgd) secondary treatment facility. The facility is located on Houston Avenue with a street address of 10555 Houston Avenue. The plant was first built in 1901 and has gone under four plant expansion upgrades, the most recent being in 2004, with the intention to provide the plants current capacity and technology. The plant currently operates at an average flow of 4.7 mgd.

CHAPTER 5 – SEWER FLOWS

This chapter summarizes historical wastewater flows experienced at the City WWTP and defines flow terminologies relevant to this evaluation. This chapter discusses the wastewater flow distribution within the six collection basins, and identifies the design flows used in the hydraulic modeling effort and capacity evaluation. The design flows include the existing condition (existing customers) and the projected ultimate buildout scenario.

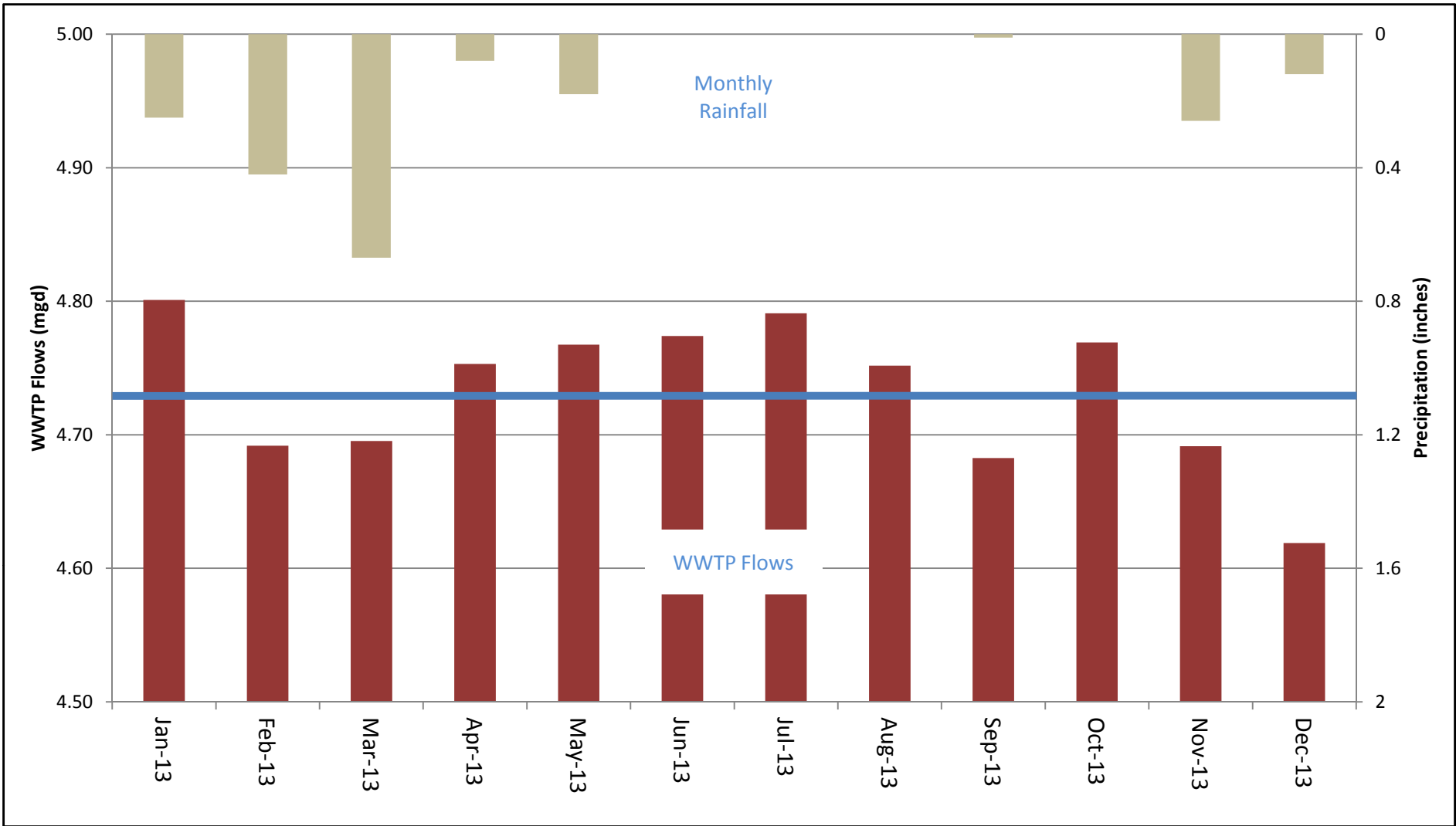
5.1 FLOWS AT THE HANFORD WWTP

The wastewater flows collected and treated at the City WWTP vary monthly, daily, and hourly. While the dry weather flows are influenced by customer uses, the wet weather flows are influenced by the severity and length of storm events. [Figure 5.1](#) shows the monthly flows versus rainfall at the WWTP for 2013.

Flow data influent to the City WWTP was obtained from City operation staff. The flow data covered a period from 2006 to 2015. From this data monthly, daily, and peak daily flows, were determined as summarized on [Table 5.1](#).

The following definitions are intended to document relevant terminologies shown on [Table 5.1](#):

- **Average Annual Flow (AAF).** The average annual flow is the total annual flow, or average monthly flow, for a given year, expressed in daily or other time units. This flow includes the combined average of the average dry weather flow (ADWF) and average wet weather flow (AWWF).
- **Average Dry Weather Flow (ADWF).** The average dry weather flow occurs on a daily basis during the dry weather season, defined as the months of May to September, with no evident reaction to rainfall. The ADWF also includes the Base Wastewater Flow (BWF). The base wastewater flow is the average flow that is generated by residential, commercial, and industrial users. The flow pattern from these users varies depending on land use types.
- **Average Wet Weather Flow (AWWF).** This average wet weather flow occurs on a daily basis during the wet weather season, defined as the months of October to April. In addition to the flow components in the ADWF, the AWWF includes infiltration and inflow from storm rainfall events.
- **Maximum Month Dry Weather Flow (MMDWF).** This maximum month flow occurs during the dry weather season.



- LEGEND**
- WWTP Inflow
 - Rainfall
 - Average Inflow

Figure 5.1
2013 Hanford WWTP Flows
Sewer System Master Plan
City of Hanford



Table 5.1 Historical Flows at the Hanford Wastewater Treatment Plant
Sewer System Master Plan
City of Hanford

Year	Population	Per Capita Flows	Average Annual Flow (AAF)	Percentage Change	Seasonal Average		Maximum Month		Maximum Day	
					ADWF ¹	AWWF ²	MMDWF	MMWWF	MDDWF	MDWWF
					(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)
Historical Flows										
2006	48,920	101	4.93	-	4.98	4.94	5.00	5.04	5.51	7.85
2007	50,534	98	4.97	0.9%	4.98	4.97	5.06	5.07	6.00	5.90
2008	51,922	99	5.16	3.7%	5.27	5.15	5.38	5.25	6.39	6.07
2009	52,970	93	4.92	-4.7%	4.87	4.98	4.93	5.16	5.72	7.60
2010	53,967	90	4.86	-1.1%	4.83	4.89	4.86	5.22	5.76	7.14
2011	54,146	87	4.73	-2.8%	4.79	4.70	4.90	4.83	5.75	7.25
2012	54,541	87	4.72	-0.2%	4.77	4.68	4.86	4.73	5.37	5.99
2013	54,513	87	4.73	0.3%	4.75	4.72	4.79	4.80	5.12	7.11
2014	54,727	86	4.69	-0.9%	4.73	4.70	4.82	4.81	5.11	5.27
2015	55,337	80	4.44	-5.3%	4.44	4.44	4.46	4.52	5.00	4.77
Historical Peaking Factors (Applied to ADWF)										
2006			0.99		1.00	0.99	1.01	1.01	1.11	1.58
2007			1.00		1.00	1.00	1.02	1.02	1.21	1.19
2008			1.01		1.00	0.98	1.02	1.00	1.21	1.15
2009			1.01		1.00	1.02	1.01	1.06	1.18	1.56
2010			0.99		1.00	1.01	1.01	1.08	1.19	1.48
2011			0.99		1.00	0.98	1.02	1.01	1.20	1.51
2012			1.00		1.00	0.98	1.02	0.99	1.13	1.25
2013			0.99		1.00	0.99	1.01	1.01	1.08	1.50
2014			1.00		1.00	0.99	1.02	1.02	1.08	1.11
2015			1.00		0.94	1.00	1.00	0.96	1.13	1.07

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Notes :

1. Dry weather months include months from May to September
2. Wet weather months include months from October to April

- **Maximum Month Wet Weather Flow (MMWWF).** This maximum month flow occurs during the wet weather season.
- **Maximum Day Dry Weather Flow (MDDWF).** This is the highest measured daily flow that occurs during a dry weather season.
- **Maximum Day Wet Weather Flow (MDWWF).** This is the highest measured daily flow that occurs during a wet weather season.
- **Peak Dry Weather Flow (PDWF).** This is the highest measured hourly flow that occurs during a dry weather season.

Table 5.1 shows the average annual flows experienced at the City WWTP have decreased from 4.93 mgd in 2006 (AAF) to 4.44 mgd in 2015, which represents a decrease of approximately 10%. **Table 5.1** also indicates that in 2015 the City's AAF is generally close to the MDDWF and the MMWWF. This indicates that there is little groundwater intrusion evident in the sewer system.

In addition to listing the 2006-2015 flows, and for comparison purposes, the table calculates the peaking factors applied to the corresponding average dry weather flows for each year. During wet weather flows, the maximum daily volume (MDWWF) experienced at the City WWTP was 1.58 times higher than the ADWF.

5.2 EXISTING SEWER FLOWS BY COLLECTION BASIN

The existing wastewater flows represented in this master plan were based on the City's existing land use and water billing consumption records. The number of acres and corresponding wastewater flows, for each sewer collection basin, are summarized on **Table 5.2**. These basins correspond to sewer trunk systems as previously discussed a previous chapter.

- **10th Avenue Basin.** This basin includes 17 percent of the total acres and 24 percent of the existing dry weather flows.
- **10 ½ Avenue Basin.** This basin includes 16 percent of the total acres and 4 percent of the existing dry weather flows.
- **11th Avenue Basin.** This basin includes 18 percent of the total acres and 42 percent of the existing dry weather flows.
- **12th Avenue Basin.** This basin includes 23 percent of the total acres and 15 percent of the existing dry weather flows.
- **Irwin Street Basin.** This basin includes 4 percent of the total acres and 11 percent of the existing dry weather flows.

Table 5.2 2013 Wastewater Flows by Basin

Sewer System Master Plan
City of Hanford

Basin	Area		Average Dry Weather Flows	
	Acres	Percent of Total (%)	Flows (gpm)	Percent of Total (%)
10th Avenue	3,023	17%	780	24%
10 1/2 Avenue	2,954	16%	118	4%
11th Avenue	3,243	18%	1,388	42%
12th Avenue	4,218	23%	507	15%
Irwin Street	670	4%	358	11%
Industrial Area	4,131	23%	149	5%
Total	18,239	100%	3,301	100%

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- **Industrial Area Basin.** This basin includes 23 percent of the total acres and 5 percent of the existing dry weather flows.

5.3 BUILDOUT WASTEWATER FLOWS

The land use methodology was used to estimate the buildout flows from the City's Planning Area and to be consistent with the General Plan. **Table 5.3** documents the total acreages for residential and non-residential land use, and the undeveloped lands designated for urbanization. The undeveloped lands were multiplied by the corresponding unit flow factor to estimate the wastewater flows. The 2013 flows were increased to 5.0 mgd to account for 100% occupancy, and the ultimate buildout flows were calculated at 13.3 mgd.

The average dry weather flows for historical and future projected years are listed in **Table 5.4** and are based on the buildout of the Planned Area Boundary as discussed in a previous chapter. At buildout of the Planned Area Boundary, the projected average dry flow is expected at 13.3 mgd.

5.4 SEWER COLLECTION SYSTEM DESIGN FLOWS

The design flows most relevant in this capacity analysis of the sewer system were the peak dry weather flows (PDWF). The PDWF is used for evaluating the capacity adequacy of the sewer system under dry weather flow conditions, and to meet the criteria set forth in the previous chapter and in the City standards.

The design flows used in evaluating the capacity adequacy of the sewer collection system are as follows:

Existing

- Average Dry Weather Flow: **5.0** mgd
- Peak Dry Weather Flow: **7.6** mgd

Buildout

- Average Dry Weather Flow: **13.3** mgd
- Peak Dry Weather Flow: **18.8** mgd

Table 5.3 Average Daily Sewer FlowsSewer System Master Plan
City of Hanford

Land Use Classifications	Buildout Sewer Flows												
	Existing Development			Future Development to be Serviced within Planned Area Boundary									
	Within Service Area			Within Service Area				Planned Area Boundary				Total	
	Existing Development (net acre)	Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	New Development (net acre)	Anticipated New Development (net acre)	Future Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	Existing Development (net acre)	New Development (net acre)	Future Sewer Unit Factor (gpd/net acre)	Average Daily Flow (gpd)	Total Development within PAB (net acres)	Average Daily Flow (gpd)
Residential													
Low Density	2,837	790	2,241,112	1,026	462	790	810,586	539	1,401	790	1,533,071	5,804	4,584,768
Medium Density	498	1,350	672,112	225	101	1,350	303,765	35	312	1,350	468,650	1,070	1,444,527
High Density	84	2,450	207,025	73	33	2,450	179,563	0	64	2,450	156,587	222	543,175
Subtotal	3,419		3,120,249	1,324	596		1,293,914	574	1,777		2,158,307	7,095	6,572,470
Mixed Use													
Office Residential	89	1,650	146,438	25	25	1,650	41,382	0	0	1,650	0	114	187,820
Neighborhood Mixed Use	12	1,250	15,475	42	42	1,250	52,290	0	15	1,250	19,316	70	87,081
Corridor Mixed Use	250	900	225,397	225	225	900	202,676	10	3	900	11,970	489	440,042
Downtown Mixed Use	81	2,950	237,564	42	42	2,950	125,021	0	0	2,950	0	123	362,585
Subtotal	432		624,873	334	334		421,369	10	18		31,286	795	1,077,528
Non-Residential													
Neighborhood Commercial	27	640	17,344	26	26	640	16,676	8	12	640	12,717	73	46,737
Regional Commercial	216	790	170,839	160	160	790	126,046	18	169	790	148,329	564	445,214
Service Commercial	103	520	53,300	54	54	520	27,862	56	63	520	61,859	275	143,020
Highway Commercial	48	640	30,464	68	68	640	43,258	16	16	640	20,550	147	94,272
Office	88	1,030	90,856	30	30	1,030	31,302	0	0	1,030	0	119	122,158
Light Industrial	105	590	62,103	61	21	590	35,701	83	557	590	377,647	806	475,452
Heavy Industrial	376	680	255,456	568	199	680	385,995	211	2,607	680	1,915,866	3,761	2,557,317
Airport Protection	0	0	0	125	125	0	0	111	563	0	0	799	0
Educational Facilities	445	800	356,256	117	117	800	93,312	11	97	800	85,928	669	535,496
Public Facilities	438	520	227,812	56	56	520	29,115	3	13	520	8,294	510	265,221
Open Space with Irrigation	16	0	0	45	33	0	0	0	121	0	0	182	0
Open Space without Irrigation	346	0	0	65		0	0	41	54	0	0	507	0
Interest Area	0	1,650	0	0		1,650	0	49	552	1,650	992,261	601	992,261
Subtotal	2,208		1,264,430	1,372	888		789,266	607	4,825		3,623,450	9,012	5,677,147
Totals	6,059		5,009,552	3,031	1,818	0	2,504,548	1,192	6,621		5,813,044	16,903	13,327,145

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Table 5.4 Projected Per Capita Sewer Flow

Sewer System Master Plan
City of Hanford

Year	Population	Annual Growth	Average Dry Weather Flows	
		(%)	(mgd)	(gpm)
Historical				
2010	53,967	-	4.83	3,353
2011	54,146	0.3%	4.79	3,330
2012	54,541	0.7%	4.77	3,314
2013	54,513	-0.1%	4.75	3,301
2014	54,727	0.4%	4.73	3,288
2015	55,337	1.1%	4.44	3,082
Projected				
2016	57,070	3.1%	4.67	3,240
2017	58,803	3.0%	4.89	3,398
2018	60,536	2.9%	5.12	3,557
2019	62,270	2.9%	5.35	3,715
2020	64,003	2.8%	5.58	3,873
2021	65,736	2.7%	5.81	4,032
2022	67,469	2.6%	6.03	4,190
2023	69,202	2.6%	6.26	4,348
2024	70,935	2.5%	6.49	4,506
2025	72,669	2.4%	6.72	4,665
2026	74,402	2.4%	6.95	4,823
2027	76,135	2.3%	7.17	4,981
2028	77,868	2.3%	7.40	5,140
2029	79,601	2.2%	7.63	5,298
2030	81,334	2.2%	7.86	5,456
2031	83,067	2.1%	8.09	5,615
2032	84,801	2.1%	8.31	5,773
2033	86,534	2.0%	8.54	5,931
2034	88,267	2.0%	8.77	6,090
2035	90,000	2.0%	9.00	6,248
2036	91,890	2.1%	9.25	6,420
2037	93,820	2.1%	9.50	6,597
2038	95,790	2.1%	9.76	6,777
2039	97,801	2.1%	10.02	6,960
2040	99,855	2.1%	10.29	7,148
2041	101,952	2.1%	10.57	7,340
2042	104,093	2.1%	10.85	7,535
2043	106,279	2.1%	11.14	7,735
2044	108,511	2.1%	11.43	7,939
2045	110,790	2.1%	11.73	8,147
2046	113,116	2.1%	12.04	8,359
2047	115,492	2.1%	12.35	8,576
2048	117,917	2.1%	12.67	8,798
2049	120,393	2.1%	12.99	9,024
2050	122,922	2.1%	13.33	9,255

CHAPTER 6 - HYDRAULIC MODEL DEVELOPMENT

This chapter describes the development of the City's sewer system hydraulic model. Hydraulic network analysis has become an effectively powerful tool in all aspects of sewer system planning, design, operation, management, and system reliability analysis. The City's hydraulic model was used to evaluate the capacity adequacy of the existing system and to plan its expansion to service anticipated future growth.

6.1 HYDRAULIC MODEL SOFTWARE SELECTION

The City's hydraulic model combines information on the physical characteristics of the sewer system (pipelines, lift stations) and operational characteristics (how they operate). The hydraulic model then performs calculations and solves series of equations to simulate flows in pipes, including backwater calculations for surcharged conditions.

There are several network analysis software products released by different manufacturers that can equally perform the hydraulic analysis satisfactorily. The selection of a particular software depends on user preferences, the sewer system's unique requirements, and the costs for purchasing and maintaining the software.

The hydraulic modeling software used for evaluating the capacity adequacy of the City's sewer system, InfoSewer by Innovyze Inc., utilizes the simplified St. Venant's equation, which is utilized to simulate backwater and surcharge conditions. The software also incorporates the use of the Manning's Equation in other calculations including upstream pipe flow conditions.

6.2 HYDRAULIC MODEL DEVELOPMENT

Computer modeling requires the compilation of large numerical databases that enable data input into the model. Detailed physical aspects, such as pipe size, ground elevation, invert elevations, and pipe lengths contribute to the accuracy of the model.

Pipes and manholes represent the physical aspect of the system within the model. A manhole is a computer representation of a place where sewer flows may be allocated into the hydraulic system, while a pipe represents the conveyance aspect of the sewer flows. In addition, selected lift station capacity and design head settings were also included into the hydraulic model.

Developing the hydraulic model included review of the previous sewer system hydraulic model, digitizing and quality control, developing pipe and manhole databases, and sewer loading allocation.

6.2.1 Existing Model Update

As part of the 1990 SSMP a hydraulic model of the City's trunk sewer system was developed for analysis and evaluation. This hydraulic model, developed using a computer program developed by Boyle Engineering Corporation called "BSWAN", was maintained and periodically updated by City staff following the completion of the 1990 SSMP. Information extracted from this model was used to develop the City's hydraulic model based in InfoSewer.

Following a review of the existing modeled sewer system, the City identified key areas to be incorporated into the updated hydraulic based on system updates and recent construction. These areas are summarized as follows:

- Florinda Street, between 9 ¼ Avenue and Lift Station 12 – Recently constructed 8-inch gravity sewer pipeline.
- 12th Avenue between Mall Drive and Houston Avenue – Recently constructed 30-inch and 33-inch gravity pipelines. Recently constructed 12-inch and 14-inch force mains.
- Houston Avenue between 12th Avenue and the City WWTP – Recently constructed 33-inch, 36-inch, and 42-inch gravity pipelines.
- 12th Avenue between Fargo Avenue and Muscat Place – Recently constructed 24-inch gravity pipeline.
- 11th Avenue between Flint Avenue and Fargo Avenue – Recently constructed gravity pipelines with diameters between 8-inch and 15-inch.
- Douty Street between Pioneer Way and Windsor Drive – recently constructed 10-inch gravity pipeline.
- 10th Avenue between Mission Drive and Greenwood Avenue – Recently constructed 10-inch gravity pipeline between Encore Drive and Lift Station 52. Recently constructed 12-inch gravity pipeline between Lift Station 52 force main north of Greenwood Road and Greenwood Road.
- Fargo Avenue between Meadow View Road and Lift Station 52 – Recently 12-inch constructed gravity pipeline.
- Grangeville Boulevard at Brookhollow Drive – Recently constructed 12-inch pipe stub intended to be put into service to convey flows toward 9 ¼ Avenue following decommissioning of Lift Station 64.
- Lacey Boulevard between Magna Carta Avenue and 12th Avenue – Recently constructed 21-inch gravity pipeline.

6.2.2 Skeletonization

The City's hydraulic model is considered a skeletonized hydraulic model; a skeletonized model does not include pipes not essential to the hydraulic analysis of the system. A skeletonized model is useful in creating a system that accurately reflects the hydraulics of the pipes within the system. In addition, skeletonizing the model will reduce complexities of large models, which will also reduce the time of analysis while maintaining accuracy, but will also comply with the limitations imposed by the computer program.

The modeled pipes generally included pipes 10-inches in diameter and larger, in addition to some critical 6-inch and 8-inch gravity sewer pipes. [Table 4.1](#) lists the total length of modeled sewer system pipes at 37.5 miles. The modeled sewer system is shown on [Figure 4.1](#).

6.2.3 Digitizing and Quality Control

For key areas throughout the system City staff conducted manhole field surveys that recorded the rim elevations, pipe invert elevations, as well as the physical manhole location. This data was incorporated into the updated hydraulic model.

During the development of the new hydraulic model, the project team consisting of City staff and Akel Engineering staff implemented a thorough quality control program to resolve discrepancies. The quality control program included the following:

- The previous hydraulic model, developed in BSWAN, and used in the 1990 master plan
- Supplemental field surveys
- As-Builts or construction drawings

6.2.4 Load Allocation

Load allocation consists of assigning sewer flow to the appropriate manholes (nodes) in the model. The goal is to distribute the loads throughout the model to best represent actual system response.

Allocating loads to manholes within the hydraulic model required multiple steps, incorporating the efficiency and capabilities of GIS and the hydraulic modeling software. For existing loads, using GIS, each customer account was geocoded to its approximate service location. A return-to-sewer ratio was then applied to each customer account water consumption, consistent with the account land use type, to determine the customer account sewer flow. The loads calculated were allocated to the nearest manhole that serves the corresponding parcel using the capabilities the hydraulic model has for allocating loads.

Future sewer loads from each anticipated future development, as presented in a previous chapter, were also allocated to the model for the purpose of sizing the required future facilities. The loads

from the Planned Area Boundary were allocated based on proposed land use and the land use acreages. As many of the areas were very large in size, loads were allocated evenly to the demand nodes within each area. Infill areas, redevelopment areas, and vacant lands were also included in the future load allocation.

CHAPTER 7 - EVALUATION AND PROPOSED IMPROVEMENTS

This section presents a summary of the sewer system capacity evaluation during peak dry weather for the existing and buildout flows. The recommended sewer system improvements needed to mitigate capacity deficiencies are also discussed in this chapter.

7.1 EAST SIDE CAPACITY STUDY

As part of the 2017 SSMP, the City initiated a capacity study of the sewer trunk lines that collect flows from the eastern portion of the City. This area is generally comprised of the 10th Avenue and Irwin Street trunks. The purpose of this capacity study was to determine the impact of future growth in the eastern portion of the City and confirm the pipe size requirements of the 9th Avenue sewer trunk.

A survey was conducted of the existing Irwin Street trunk between Lacey Boulevard and Hanford Armona Road, which revealed portions of the existing Irwin Street trunk have settled since their original construction. Due to the settlement of the existing pipelines, the hydraulic capacity of this trunk is significantly limited and is expected to experience surcharging under existing peak flow conditions.

This capacity study found the 10th Avenue and Irwin Street trunks are unable to receive the full buildout of the existing trunk tributary area. As such, and with imminent development planned in the eastern portion of the City, the trigger for the construction of the 9th Avenue sewer trunk is accelerated.

7.2 SEWER PIPELINE CAPACITY EVALUATION

The following sections summarize the evaluation of the existing sewer system pipelines under existing and buildout conditions. A summary of pipeline capacity improvements required to mitigate existing deficiencies and service future growth is also provided.

7.2.1 Existing Pipeline Capacity Evaluation

The system performance and design criteria summarized, on [Table 3.1](#), was used as a basis to estimate the capacity adequacy of the existing sewer system pipelines. The peak design flow simulated in the hydraulic model for existing conditions was 7.6 mgd.

For existing pipes, the maximum d/D ratio is allowed to extend to the theoretical maximum capacity of the pipe, or a d/D of 0.92 (full pipe capacity). This prevents accelerating costly improvements to pipelines that may not need replacement. In general, the hydraulic model

indicated that the sewer system exhibited acceptable performance to service the existing customers during peak dry weather flows ([Figure 7.1](#)).

7.2.2 Buildout Pipeline Capacity Evaluation

The design flow simulated in the hydraulic model for the buildout of the General Plan was equal to 18.8 mgd. During the peak dry weather simulations, the maximum allowable pipe d/D criteria for new pipes (0.5 for 12-inch or smaller and 0.75 for larger than 12-inches) was used. For existing pipes, the criteria were relaxed to allow a maximum d/D ratio of 0.92 (full pipe capacity) to prevent unnecessary pipe replacements.

The hydraulic model indicated several areas where sewer collection system infrastructure improvements are necessary in order to accommodate future flows at the buildout of the General Plan. Other additional sewers are required as expansion improvements, intended to connect future growth to the existing collection system.

7.2.3 Pipeline Improvements Required to Serve Future Growth

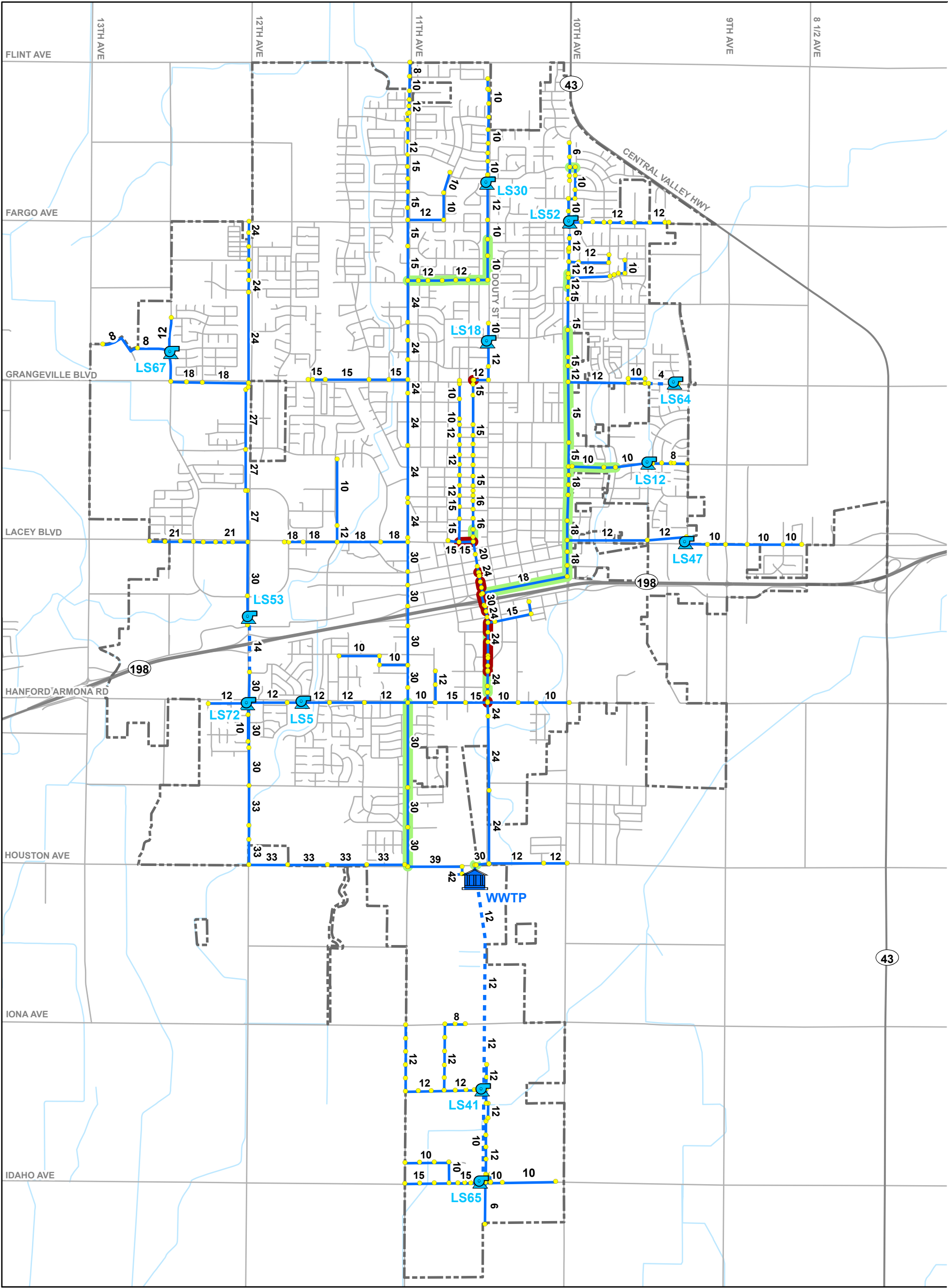
The proposed capacity improvements for the sewer system are listed on [Table 7.1](#). This table lists the master plan assigned improvement number (e.g., IND-P1), along with other relevant information including alignment description, pipe size, pipe length, and a suggested phasing. The improvement numbering includes an identifier that associates the improvement with a trunk system, and the sequential numbering of the improvements in that basin.

The proposed improvements are shown with pipe sizes on an overall exhibit on [Figure 7.2](#). Additionally, some of the improvements resulted in the abandonment of lift stations and realignment of the gravity systems. As such, the sewer flow basin boundaries are amended for the buildout conditions, and are documented on [Figure 7.3](#). The buildout improvements are summarized by sewer trunk below.

7.2.3.1 12th Avenue Trunk

This section documents pipeline improvements within the 12th Avenue Trunk sewer service area.

- Improvement 12-P1: Construct a new 12-inch gravity sewer in 12th Avenue from Flint Avenue to Fargo Avenue.
- Improvement 12-P2: Construct a new 12-inch gravity sewer in Future 12 ½ Avenue from approximately 2,650 feet north of Fargo Avenue to Fargo Avenue.
- Improvement 12-P3: Construct a new 12-inch gravity sewer in Fargo Avenue from 13th Avenue to future 12 ½ Avenue to 12th Avenue.
- Improvement 12-P4: Construct a new 15-inch gravity sewer in Fargo Avenue from future 12 ½ Avenue to 12th Avenue.



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

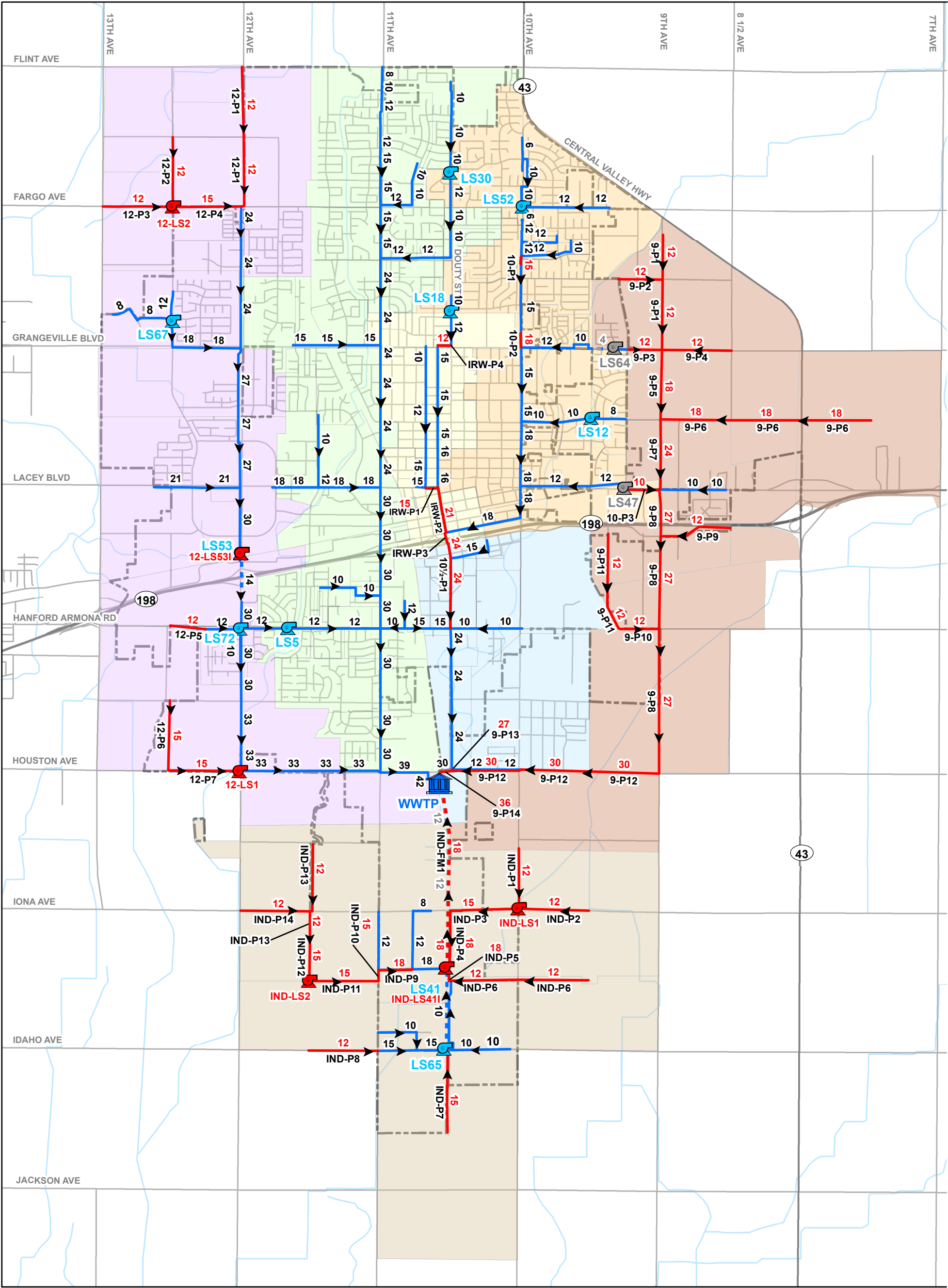
Legend

- | | | | |
|------------------|------------------------|-------------------|------------|
| Pipes d/D | Existing System | — Gravity Mains | — Streets |
| > 0.90 | WWTP | - - - Force Mains | — Highways |
| 0.75 - 0.90 | Lift Stations | City Limits | Waterways |
| 0.50 - 0.75 | Manholes | | |



Figure 7.1
Existing System
Analysis for PDWF
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Proposed Improvements

 Lift Stations and Pumps

 Gravity Mains

 Force Mains

Future Basins

 9th Ave Basin

 10th Ave Basin

 10 1/2 Ave Basin

 11th Ave Basin

 12th Ave Basin

 Irwin St Basin

 Industrial Area Basin

Abandoned

 Lift Stations

 Gravity Main

 Force Main

Existing System

 WWTP

 Lift Stations

 Gravity Mains

 Force Mains

 City Limits

 Streets

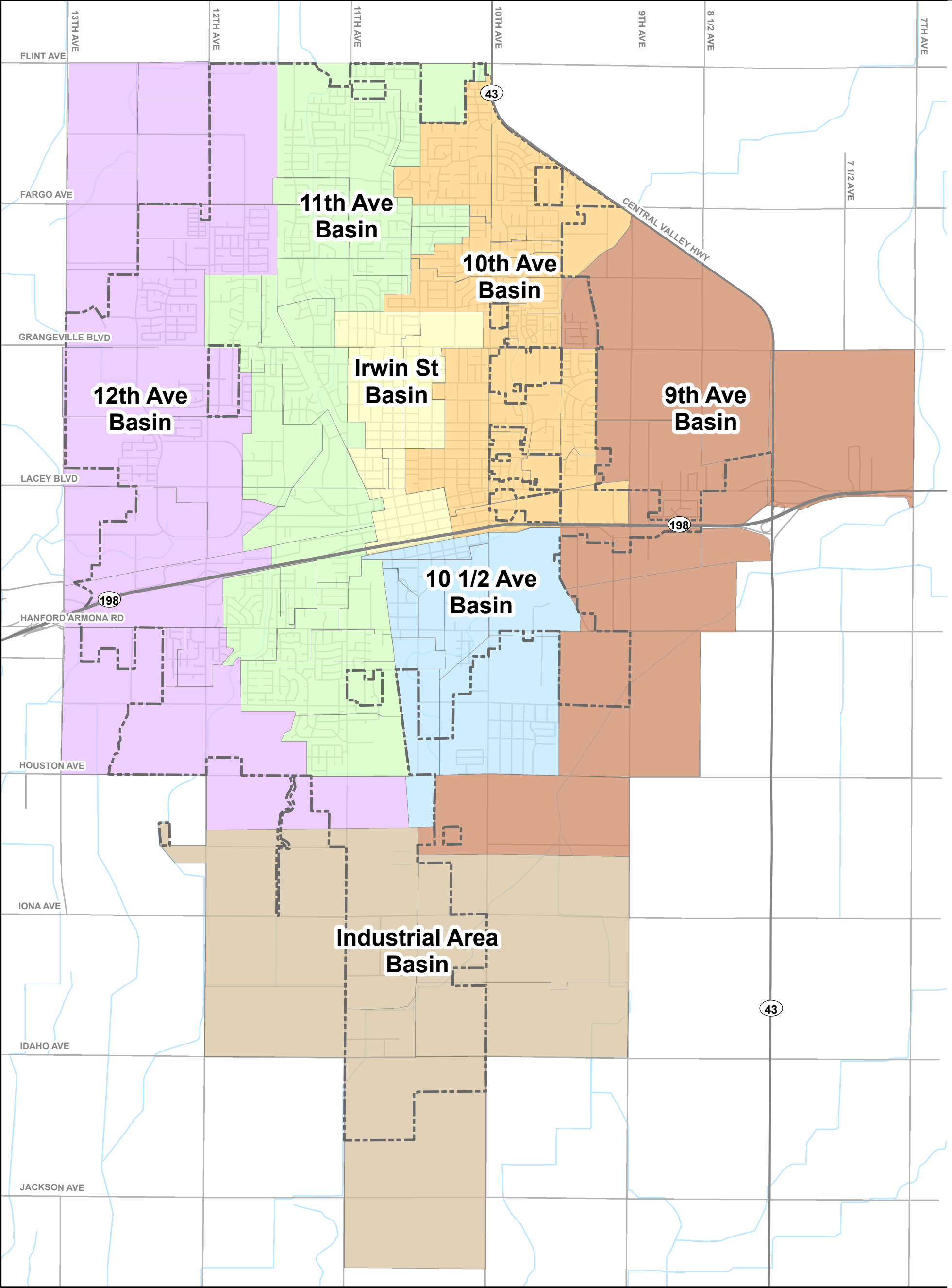
 Highways

 Waterways



Figure 7.2
Schedule of Improvements
Sewer System Master Plan
City of Hanford





Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Future Basins

- | | | | |
|---|-----------------------|---|-------------|
|  | 11th Ave Basin |  | City Limits |
|  | 9th Ave Basin |  | Streets |
|  | 10th Ave Basin |  | Highways |
|  | 10 1/2 Ave Basin |  | Waterways |
|  | 12th Ave Basin | | |
|  | Irwin St Basin | | |
|  | Industrial Area Basin | | |

Figure 7.3
Future Sewer Collection
System Basins
Sewer System Master Plan
City of Hanford



Table 7.1 Schedule of Improvements
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Existing Diameter (in)	New/Parallel/Replace	Pipeline Improvements			Casings Highway	Canal/ Slough
						Diameter (in)	Length (ft)	Railroad		
12th Avenue Trunk										
Pipeline Capacity Improvements										
12-P1	Gravity Main	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,400			1
12-P2	Gravity Main	Future 12 1/2 Ave	From approx 2,650 ft n/o Fargo Ave to Fargo Ave	-	New	12	2,675			1
12-P3	Gravity Main	Fargo Ave	From 13th Ave to future 12 1/2 Ave	-	New	12	2,675			1
12-P4	Gravity Main	Fargo Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,575			
12-P5	Gravity Main	Hanford Armona Rd	From ext. of future 12 1/2 Ave to 12th Ave		New	12	1,350			
12-P6	Gravity Main	Future 12 1/2 Ave	From ext. of Hume Ave to Houston Ave	-	New	15	2,675			
12-P7	Gravity Main	Houston Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,750			2
Lift Station Improvements						Firm Capacity				
12-LS53I	Lift Station	12th Avenue	300 ft n/o of Glendale Ave		Replace	2 @ 1,200 gpm				
12-LS1	Lift Station	Houston Ave	Intersection of Houston Ave and 12th Ave		New	1 @ 600 gpm				
12-LS2	Lift Station	Fargo Ave	2,600 ft w/o 12th Ave		New	1 @ 400 gpm				
9th Avenue Trunk										
Pipeline Capacity Improvements										
9-P1	Gravity Main	9th Ave	From Fairview Pl to Grangeville Blvd	-	New	12	4,375			
9-P2	Gravity Main	Leland Way	From 9 1/4 Ave to 9th Ave	-	New	12	1,700			
9-P3	Gravity Main	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,350			
9-P4	Gravity Main	Grangeville Blvd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650			
9-P5	Gravity Main	9th Ave	From Grangeville Blvd to Florinda St	-	New	18	2,650			
9-P6	Gravity Main	Florinda St	From approx 2,600 ft e/o HWY 43 to 9th Ave	-	New	18	8,000			
9-P7	Gravity Main	9th Ave	From Florinda St to Lacey Blvd	-	New	24	2,700	1		
9-P8	Gravity Main	9th Ave	From Lacey Blvd to Houston Ave	-	New	27	10,775	1	1	
9-P9	Gravity Main	Third St	From ext. of David St to 9th Ave	-	New	12	2,750			
9-P10	Gravity Main	Hanford Armona Rd	From approx 450 ft e/o 9 1/2 Ave to 9th Ave	-	New	12	1,500			
9-P11	Gravity Main	9 1/2 Ave	From approx 300 ft s/o Third St to Hanford Armona Rd	-	New	12	3,750			
9-P12	Gravity Main	Houston Ave	From 9th Ave to 10 1/2 Ave		New	30	7,875			1
9-P13	Gravity Main	10 1/2 Ave	From approx 50 ft n/o Houston Ave to Houston Ave	-	New	27	50			
9-P14	Gravity Main	Houston Ave	From 10 1/2 Ave to approx 500 ft w/o 10 1/2 Ave	-	New	36	725	1		
10th Avenue Trunk										
Pipeline Capacity Improvements										
10-P1	Gravity Main	10th Ave	From approx 100 ft n/o Lakewood Dr to 200 ft s/o Lakewood Dr	12	Replace	15	300			
10-P2	Gravity Main	10th Ave	From approx 150 ft s/o Cross Ave to Grangeville Blvd	12	Replace	18	575			
10-P3	Gravity Main	Lacey Blvd	From 9 1/4 Ave to 9th Ave	10	Replace	10	1,300			
10 1/2 Avenue										
Pipeline Capacity Improvements										
10½-P1	Gravity Main	Irwin St	From Third St to Hanford Armona Rd	24	Replace	24	3,350			
Irwin St Trunk										
Pipeline Capacity Improvements										
IRW-P1	Gravity Main	Lacey Blvd	From Redington St to Irwin St	15	Replace	15	525			
IRW-P2	Gravity Main	Irwin St	From Lacey Blvd to Fourth St	20, 24	Replace	21	1,850	1		
IRW-P3	Gravity Main	Irwin St	From Fourth St to 3rd St	24, 30	Replace	24	500		1	
IRW-P4	Gravity Main	Grangeville Blvd	From Douty St to Irwin St	12	Replace	12	525			
Industrial Trunk										
Pipeline Capacity Improvements										
IND-P1	Gravity Main	10th Ave	From approx 2,300 ft n/o Iona Ave to Iona Ave	-	New	12	2,300			
IND-P2	Gravity Main	Iona Ave	From future 9 1/2 Ave to ext. of 10th Ave	-	New	12	2,675			1

Table 7.1 Schedule of Improvements
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements						
				Existing Diameter (in)	New/Parallel/Replace	Diameter (in)	Length (ft)	Railroad	Casings Highway	Canal/ Slough
IND-P3	Gravity Main	Iona Ave	From 10th Avenue to 10 1/2 Ave	12	Replace	15	2,125			
IND-P4	Gravity Main	Ext. 10 1/2 Ave	From Iona Ave to Industry Ave	12	Replace	18	2,675			
IND-P5	Gravity Main	ext. 10 1/2 Ave	From approx 600 ft s/o Industry Ave to Industry Ave	12	Replace	18	600			
IND-P6	Gravity Main	Future ROW	From future 9 1/2 Ave to ext. of 10 1/2 Ave	-	New	12	5,225			1
IND-P7	Gravity Main	Ext. 10 1/2 Ave	From 3,100 ft s/o Idaho Ave to Idaho Ave	6	Replace	15	3,250			
IND-P8	Gravity Main	Idaho Ave	From approx 2,600 ft w/o 11th Avenue to 11th Avenue	-	New	12	2,650			
IND-P9	Gravity Main	Industry Ave	From 11th Avenue to Crown Avenue	12	Replace	18	1,325			
IND-P10	Gravity Main	11th Ave	From approx 420 ft s/o Industry Ave to Industry Ave	-	New	15	425			
IND-P11	Gravity Main	Future ROW	From future 11 1/2 Ave to 11th Ave	-	New	15	2,600			
IND-P12	Gravity Main	Future 11 1/2 Ave	From approx 1,350 ft s/o Iona Ave to approx 420 ft s/o Industry Ave	-	New	15	1,325			
IND-P13	Gravity Main	Future 11 1/2 Ave	From approx 2,530 ft n/o Iona Ave to approx 1,350 ft s/o Iona Ave	-	New	12	3,975			1
IND-P14	Gravity Main	Iona Ave	From 12th Ave to future 11 1/2 Ave	-	New	12	2,650			
IND-FM1	Force Main	Ext. 10 1/2 Ave	From Industry Ave to Houston Ave	12	Replace	18	7,275			
Lift Station Improvements						Firm Capacity				
IND-LS41I	Lift Station	Industry Ave	1,300 e/o Crown Ave		Replace	2 @ 1,500 gpm				
IND-LS1	Lift Station	Iona Ave	Intersection of Iona Ave and 10th Ave		New	1 @ 500 gpm				
IND-LS2	Lift Station	Future 11 1/2 Ave	2,650 ft s/o Iona Ave		New	1 @ 500 gpm				

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- Improvement 12-P5: Construct a new 12-inch gravity sewer in Hanford Armona Road from exterior of future 12 ½ Avenue to 12th Avenue.
- Improvement 12-P6: Construct a new 15-inch gravity sewer in Future 12 ½ Avenue to from exterior of Hume Avenue to Houston Avenue.
- Improvement 12-P7: Construct a new 15-inch gravity sewer in Houston Avenue from future 12 ½ Avenue to 12th Avenue. 9th Avenue Trunk

7.2.3.2 9th Avenue Trunk

This section documents pipeline improvements within the 9th Avenue Trunk sewer service area.

- Improvement 9-P1: Construct a new 12-inch gravity sewer in 9th Avenue from Fairview Place to Grangeville Boulevard.
- Improvement 9-P2: Construct a new 12-inch gravity sewer in Leland Way from 9 ¼ Avenue to 9th Avenue.
- Improvement 9-P3: Construct a new 12-inch gravity sewer in Grangeville Boulevard from 9 ¼ Avenue to 9th Avenue. This improvement is meant to redirect flow from LS 64 to the 9th Avenue Trunk.
- Improvement 9-P4: Construct a new 12-inch gravity sewer in Grangeville Boulevard from 8 ½ Avenue to 9th Avenue.
- Improvement 9-P5: Construct a new 18-inch gravity sewer in 9th Avenue from Grangeville Boulevard to Florinda Street.
- Improvement 9-P6: Construct a new 18-inch gravity sewer in Florinda Street from approximately 2,600 feet east of Highway 43 to 9th Avenue.
- Improvement 9-P7: Construct a new 24-inch gravity sewer in 9th Avenue from Florinda Street to Lacey Boulevard.
- Improvement 9-P8: Construct a new 27-inch gravity sewer in 9th Avenue from Lacey Boulevard to Houston Avenue.
- Improvement 9-P9: Construct a new 12-inch gravity sewer in Third Street from extension of David Street to 9th Avenue.
- Improvement 9-P10: Construct a new 12-inch gravity sewer in Hanford Armona Road from approximately 450 feet east of 9 ½ Avenue to 9th Avenue
- Improvement 9-P11: Construct a new 12-inch gravity sewer in 9 ½ Avenue from approximately 300 feet south of Third Street to Hanford Armona Road.

- Improvement 9-P12: Construct a new 30-inch gravity sewer in Houston Avenue from 9th Avenue to 10 ½ Avenue.
- Improvement 9-P13: Construct a new 27-inch gravity sewer in 10 ½ Avenue from approximately 50 feet north of Houston Avenue to Houston Avenue.
- Improvement 9-P14: Construct a new 36-inch gravity sewer in Houston Avenue from 10 ½ Ave to approximately 500 feet west of 10 ½ Avenue.

7.2.3.3 10th Avenue Trunk

This section documents pipeline improvements within the 10th Avenue Trunk sewer service area.

- Improvement 10-P1: Replace the existing 12-inch gravity sewer with a new 15-inch gravity sewer in 10th Avenue from approximately 100 feet north of Lakewood Drive to 200 feet south of Lakewood Drive.
- Improvement 10-P2: Replace the existing 12-inch gravity sewer with a new 18-inch gravity sewer in 10th Avenue from approximately 150 feet south Crass Avenue to Grangeville Boulevard.
- Improvement 10-P3: Replace the existing 10-inch gravity sewer with a new 10-inch gravity sewer in Lacey Boulevard from 9 ¼ Avenue to 9th Avenue. This improvement is meant to redirect flow from LS47 to the 9th Avenue trunk.

7.2.3.4 10 ½ Avenue Trunk

This section documents pipeline improvements within the 10 ½ Avenue Trunk sewer service area.

Improvement 10 ½ -P1: Replace the existing 24-inch gravity sewer with a new 24-inch gravity sewer in Irwin Street from Third Street to Hanford Armona Road. This improvement is intended to mitigate existing pipe deficiencies and comply with minimum slope design criteria.

7.2.3.5 Irwin Street Trunk

This section documents pipeline improvements within the Irwin Street Trunk sewer service area.

- Improvement IRW-P1: Replace the existing 15-inch gravity sewer with a new 15-inch gravity sewer in Lacey Boulevard from Redington Street to Irwin Street. This improvement is meant to mitigate existing pipe deficiencies and comply with minimum slope design criteria.
- Improvement IRW-P2: Replace the existing 20-inch and 24-inch gravity sewer mains with a new 21-inch gravity sewer main in Irwin Street from Lacey Boulevard to Fourth Street. This improvement is meant to mitigate existing pipe deficiencies and comply with minimum slope design criteria.

- Improvement IRW-P3: Replace the existing 24-inch and 30-inch gravity sewer mains with a new 24-inch gravity sewer in Irwin Street from Fourth Street to Third Street. This improvement is meant to mitigate existing pipe deficiencies and comply with minimum slope design criteria.
- Improvement IRW-P4: Replace the existing 12-inch gravity sewer with a new 12-inch gravity sewer in Grangeville Boulevard from Douty Street to Irwin Street. This improvement is meant to mitigate existing pipe deficiencies and comply with minimum slope design criteria.

7.2.3.6 Industrial Trunk

This section documents pipeline improvements within the Industrial Trunk sewer service area.

- Improvement IND-P1: Construct a new 12-inch gravity sewer in 10th Avenue from approximately 2,300 feet north of Iona Avenue to Iona Avenue.
- Improvement IND-P2: Construct a new 12-inch gravity sewer in Iona Ave from future 9 ½ Avenue to exterior of 10th Avenue.
- Improvement IND-P3: Replace the existing 12-inch gravity sewer with a new 15-inch gravity sewer in Iona Avenue from 10th Avenue to 10 ½ Avenue.
- Improvement IND-P4: Replace the existing 12-inch gravity sewer with a new 18-inch gravity sewer in exterior 10 ½ Avenue from Iona Avenue to Industry Avenue.
- Improvement IND-P5: Replace the existing 12-inch gravity sewer with a new 18-inch gravity sewer in exterior 10 ½ Avenue from approximately 600 feet south of Industry Avenue to Industry Avenue.
- Improvement IND-P6: Construct a new 12-inch gravity sewer in future Right-of-Way from future 9 ½ Avenue to exterior of 10 ½ Avenue.
- Improvement IND-P7: Replace the existing 6-inch gravity sewer with a new 15-inch gravity sewer in exterior of 10 ½ Ave from 3,100 feet south of Idaho Avenue to Idaho Avenue.
- Improvement IND-P8: Construction a new 12-inch gravity sewer in Idaho Avenue from approximately 2,600 feet west of 11th Avenue to 11th Avenue.
- Improvement IND-P9: Replace the existing 12-inch gravity sewer with a new 18-inch gravity sewer in Industry Avenue from 11th Avenue to Crown Avenue.
- Improvement IND-P10: Construct a new 15-inch gravity sewer in 11th Avenue from approximately 420 feet south of Industry Avenue to Industry Avenue.

- Improvement IND-P11: Construct a new 15-inch gravity sewer in future Right-of-Way from 11 ½ Avenue to 11th Avenue.
- Improvement IND-P12: Construct a new 15-inch gravity sewer in future 11 ½ Avenue from approximately 1,350 feet south of Iona Avenue to approximately 420 feet south of Industry Avenue.
- Improvement IND-P13: Construct a new 12-inch gravity sewer in future 11 ½ Avenue from approximately 2,530 feet north of Iona Avenue to approximately 1,350 feet south of Iona Avenue.
- Improvement IND-P14: Construct a new 12-inch gravity sewer in Iona Avenue from 12th Avenue to future 11 ½ Avenue.

7.3 LIFT STATION AND FORCE MAIN CAPACITY EVALUATION

The City currently operates 21 lift stations that convey collected sewer flows to the WWTP. The modeled lift stations and corresponding force mains were evaluated under existing and buildout conditions to determine the capacity adequacy and identify necessary improvements.

7.3.1 Lift Station Evaluation

For the development of the hydraulic model, 12 of the 21 lift stations were modeled for the sewer system hydraulic analysis. An inventory of the lift stations operated by the city is shown in [Table 4.2](#). A lift station evaluation was completed for existing and buildout condition and is documented [Table 7.2](#) and summarized below.

- **Lift Station 5:** The maximum modeled lift station inflow is 0.08 mgd under existing PDWF condition and 0.11 mgd under PDWF condition at buildout. This lift station experiences an increase in flow.
- **Lift Station 12:** The maximum modeled lift station inflow is 0.18 mgd under existing PDWF condition and 0.19 mgd under PDWF condition at buildout. This lift station experiences a very slight increase in flow.
- **Lift Station 18:** The maximum modeled lift station inflow is 0.07 mgd under existing PDWF condition and 0.08 mgd under PDWF condition at buildout.
- **Lift Station 30:** The maximum modeled lift station inflow is 0.17 mgd under existing PDWF condition and 0.26 mgd under PDWF condition at buildout.
- **Lift Station 41:** The maximum modeled lift station inflow is 0.46 mgd under existing PDWF condition and 4.30 mgd under PDWF condition at buildout. Under buildout PDWF conditions this lift station experiences a firm capacity deficiency of approximately

Table 7.2 Lift Station Evaluation

Sewer System Master Plan
City of Hanford

Lift Station ID	Total Capacity		Firm Capacity		Existing Capacity Evaluation		Future Capacity Evaluation		Recommended Improvement
	(gpm)	(mgd)	(gpm)	(mgd)	Peak Inflow (mgd)	Surplus/ Deficiency (mgd)	Peak Inflow (mgd)	Surplus/ Deficiency (mgd)	
5	700	1.01	350	0.50	0.08	0.43	0.11	0.39	
12	700	1.01	350	0.50	0.18	0.32	0.19	0.31	
18	830	1.20	415	0.60	0.07	0.53	0.08	0.52	
30	700	1.01	350	0.50	0.17	0.34	0.26	0.25	
41 ¹	1,100	1.58	550	0.79	0.46	0.33	4.30	-3.51	Replace existing pumps with 3 @ 1,500 gpm (2 Duty + 1 Standby)
47 ²	750	1.08	375	0.54	0.13	0.41	-	-	
52	850	1.22	425	0.61	0.36	0.25	0.57	0.04	
53 ¹	1,500	2.16	1,000	1.44	1.19	0.25	3.41	-1.97	Replace existing pumps with 3 @ 1,200 gpm (2 Duty + 1 Standby)
64 ²	250	0.36	110	0.16	0.08	0.08	-	-	
65	3,250	4.68	2,170	3.12	0.02	3.10	1.14	1.98	
67	700	1.01	350	0.50	0.01	0.49	0.19	0.31	
72	2,000	2.88	1,000	1.44	0.11	1.33	0.16	1.28	

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Notes :

1. Firm Capacity based on information provided by City Staff on 02/24/2017.
2. Lift Station 47 and 64 to be abandoned.

3.5 mgd. To mitigate this deficiency, it is recommended to replace the pumps at the lift station with three pumps at 1,500 gpm capacity with a firm lift station capacity of 3,000 gpm.

- **Lift Station 47:** The maximum modeled lift station inflow is 0.13 mgd under existing PDWF condition. This lift station is planned to be abandoned upon the construction of the 9th Avenue trunk. The flow tributary to the lift station will be rerouted to the 9th Avenue trunk.
- **Lift Station 52:** The maximum modeled lift station inflow is 0.36 mgd under existing PDWF condition and 0.57 mgd under PDWF condition at buildout.
- **Lift Station 53:** The maximum modeled lift station inflow is 1.19 mgd under existing PDWF condition and 3.41 mgd under PDWF condition at buildout. Under buildout PDWF conditions this lift station experiences a firm capacity deficiency of approximately 1.97 mgd. It is recommended to upgrade the lift station with three pumps at 1,200 gpm capacities with a firm lift station capacity of 2,400 gpm.
- **Lift Station 64:** The maximum modeled lift station inflow is 0.08 mgd under existing PDWF condition. This lift station is planned to be abandoned upon the construction of the 9th Avenue trunk. The flow tributary to the lift station will be rerouted to the 9th Avenue trunk.
- **Lift Station 65:** The maximum modeled lift station inflow is 0.02 mgd under existing PDWF condition and 1.14 mgd under PDWF condition at buildout.
- **Lift Station 67:** The maximum modeled lift station inflow is 0.01mgd under existing PDWF condition and 0.19 mgd under PDWF condition at buildout.
- **Lift Station 72:** The maximum modeled lift station inflow is 0.11 mgd under existing PDWF condition and 0.16 mgd under PDWF condition at buildout.

7.3.2 Lift Station Capacity Improvements

As summarized on [Table 7.2](#), Lift Station 41 and Lift Station 53 are undersized to convey the peak inflows due to the buildout of the General Plan. The improvements to mitigate these capacity deficiencies are describe as follows:

- **Improvement IND-LS41I:** This improvement upgrades the existing Lift Station 41 with a firm capacity of 3,000 gpm and total capacity of 4,500 gpm.
- **Improvement 12-LS53I:** This improvement upgrades the existing Lift Station 53 with a firm capacity of 2,400 gpm and total capacity of 3,600 gpm.

The buildout of the General Plan will require the construction of new lift stations to convey collected sewer flows from areas of new growth to the existing sewer system. These planned lift stations are shown graphically on [Figure 7.2](#) and summarized as follows:

- Improvement 12-LS1: Construct a new lift station location at intersection of Houston Avenue and 12th Avenue with a firm capacity of 600 gpm and total capacity of 1,200 gpm.
- Improvement 12-LS2: Construct a new lift station located 2,600 feet west of 12th Avenue on Fargo Avenue with a firm capacity of 400 gpm and total capacity of 800 gpm.
- Improvement IND-LS1: Construct a new lift station located on Iona Avenue at the intersection of Iona Avenue and 10th Avenue with a firm capacity of 500 gpm and total capacity of 1,000 gpm.
- Improvement IND-LS2: Construct a new lift station located 2,650 south of Iona Avenue on Future 11 ½ Avenue with a firm capacity of 500 gpm and total capacity of 1,000 gpm.

7.3.3 Force Main Evaluation

Force mains are intended to convey sewer flows under pressure from a lift station to a point where gravity conveyance is once again feasible. Force mains may be short in length, and simply “lift” sewer flows to an elevated position, or convey sewer flows over a greater length when gravity flow is not feasible. An evaluation of the modeled force mains is documented on [Table 7.3](#). The force mains were evaluated for existing and buildout peak dry weather flow condition.

The analysis results indicate that the modeled force mains are generally adequate for conveying the existing and buildout sewer flows. The existing 12-inch force main downstream of Lift Station 41 will require upsizing to an 18-inch to accommodate the buildout flows of the industrial area (Improvement IND-FM1). It should be noted that the analysis indicates that the force main associated with Lift Station 5 is deficient under the peak velocity criteria. However, as this force main is a small diameter and short in length, improvement of this pipeline may be deferred to the end of its useful life, or if it is possible to consolidate with another project at the lift station.

Table 7.3 Force Main Evaluation

Sewer System Master Plan
City of Hanford

Lift Station ID	Force Main Diameter (in)	Force Main Length (ft)	Peak Flow		Peak Velocity		Recommended Improvement
			Existing (mgd)	Future (mgd)	Existing (ft/s)	Future (ft/s)	
5	4	17	0.08	0.11	8.9	8.9	
12	10	30	0.18	0.19	1.4	1.4	
18	12	6	0.07	0.08	1.0	1.0	
30	12	45	0.17	0.26	1.0	1.0	
41	12	6,989	0.43	3.95	2.3	8.5	Replace with 18"
47 ¹	12	202	0.13	0.20	1.1	1.1	
52	6	504	0.36	0.57	4.8	4.8	
53	14	1,800	1.19	3.41	1.0	5.0	
64 ¹	4	824	0.08	-	6.4	-	
65	10	3,050	0.02	1.14	4.4	4.4	
67	6	39	0.00	0.19	0.0	4.0	
72	12	29	0.11	0.16	2.8	2.8	

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2/28/2017

Notes :

1. Lift Station 47 and 64 to be abandoned.

CHAPTER 8 - CAPITAL IMPROVEMENT PROGRAM

This chapter provides a summary of the recommended Capital Improvement Program (CIP) for the City's sewer system. The program is based on the evaluation of the City's sewer system and on the recommended projects described in the previous chapters. The CIP has been prepared to assist the City in planning and constructing the collection system improvements through the ultimate buildout scenario. This chapter also presents the cost criteria and methodologies for developing the capacity improvement costs.

8.1 COST ESTIMATE ACCURACY

Cost estimates presented in the capacity improvement costs were prepared for general master planning purposes and, where relevant, for further project evaluation. Final costs of a project will depend on several factors including the final project scope, costs of labor and material, and market conditions during construction.

The Association for the Advancement of Cost Engineering (AACE International), formerly known as the American Association of Cost Engineers, has defined three classifications. These classifications are presented in order of increasing accuracy: Order of Magnitude, Budget, and Definitive.

- **Order of Magnitude Estimate.** This classification is also known as an “original estimate”, “study estimate”, or “preliminary estimate”, and is generally intended for master plans and studies.

This estimate is not supported with detailed engineering data about the specific project, and its accuracy is dependent on historical data and cost indices. It is generally expected that this estimate would be accurate within -30 percent to +50 percent.

- **Budget Estimate.** This classification is also known as an “official estimate” and generally intended for pre-design studies. This estimate is prepared to include flow sheets and equipment layouts and details. It is generally expected that this estimate would be accurate within -15 percent to +30 percent.
- **Definitive Estimate.** This classification is also known as a “final estimate” and prepared during the time of contract bidding. The data includes complete plot plans and elevations, and equipment data sheets, and complete specifications. It is generally expected that this estimate would be accurate within -5 percent to +15 percent.

Costs developed in this study should be considered “Order of Magnitude” and have an expected accuracy range of **-30 percent** and **+50 percent**.

8.2 COST ESTIMATE METHODOLOGY

Cost estimates presented in this chapter are opinions of probable construction and other relevant costs developed from several sources including cost curves, Akel experience on other master planning projects, and input from City staff on the development of public and private cost sharing. Where appropriate, costs were escalated to reflect the more current Engineering News Records (ENR) Construction Cost Index (CCI).

This section documents the unit costs used in developing the opinion of probable construction costs, the Construction Cost Index, the land acquisition costs, and markups to account for construction contingency and other project related costs.

8.2.1 Unit Costs

The unit cost estimates used in developing the Capital Improvement Program are summarized on [Table 8.1](#). The unit costs are intended for developing the Order of Magnitude estimate, and do not account for site specific conditions, labor or material costs during the time of construction, final project scope, implementation schedule, detailed utility and topography surveys, investigation of alternative routings for pipes, and other various factors. These factors are assumed included in the contingencies applied to the final capital improvement cost.

The unit costs include:

- **Pipeline Unit Costs.** Unit costs were escalated from the 1990 SSMP and compared to bid tabulations provided by City Staff to determine accurate representation of construction costs within the City.
- **Pump Station Costs.** These costs are based on a lift station project equation as shown on [Table 8.1](#).

8.2.2 Construction Cost Index

Costs estimated in this study are adjusted utilizing the Engineering News Record (ENR) Construction Cost Index (CCI), which is widely used in the engineering and construction industries. The costs in this Sewer System Master Plan were benchmarked using a 20-City national average ENR CCI of 10,532, reflecting a date of January 2017.

8.2.3 Land Acquisition

Construction of pipelines is assumed to generally be within existing or future street right-of-way's. As such, land acquisition for easements are not included in the pipeline cost. Land acquisition for lift stations is included in the equation used for unit cost.

Table 8.1 Unit Costs
Sewer System Master Plan
City of Hanford

Pipeline Diameter (in)	Unit Cost (\$/lineal foot)
Gravity Pipes	
10	\$222
12	\$228
15	\$239
18	\$258
21	\$280
24	\$291
27	\$336
30	\$395
36	\$491
Pipeline Casings	
\$22 per inch diameter per linear foot	
Lift Stations	
Estimated Lift Station Project Cost = $8,764*Q^2 + 244,811*Q + 331,618$, where Q is in mgd	
	

Note:

7/21/2017

1. January 2017 ENR CCI of 10532 used to estimate unit costs.

8.2.4 Construction Contingency Allowance

Knowledge about site-specific conditions for each proposed project is limited at the master planning stage; therefore, construction contingencies were used. The estimated construction costs in this master plan include a **15 percent** contingency allowance to account for unforeseen events and unknown field conditions.

8.2.5 Project Related Costs

The capital improvement costs also account for project-related costs, comprising of engineering design, project administration (developer and City staff), construction management and inspection, and legal costs. The project related costs in this master plan were estimated by applying an additional **15 percent** to the estimated construction costs.

8.3 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement costs for the previously identified projects are summarized on **Table 8.2**. The Capital Improvement Program lists the type of improvement, location, cost, construction trigger, and cost sharing.

Each improvement was assigned a unique coded identifier associated with the improvement type, which corresponds to the summary figure (**Figure 8.1**) that shows the location and identifiers of each improvement. The suggested capital improvements costs include the contingencies described in the previous section.

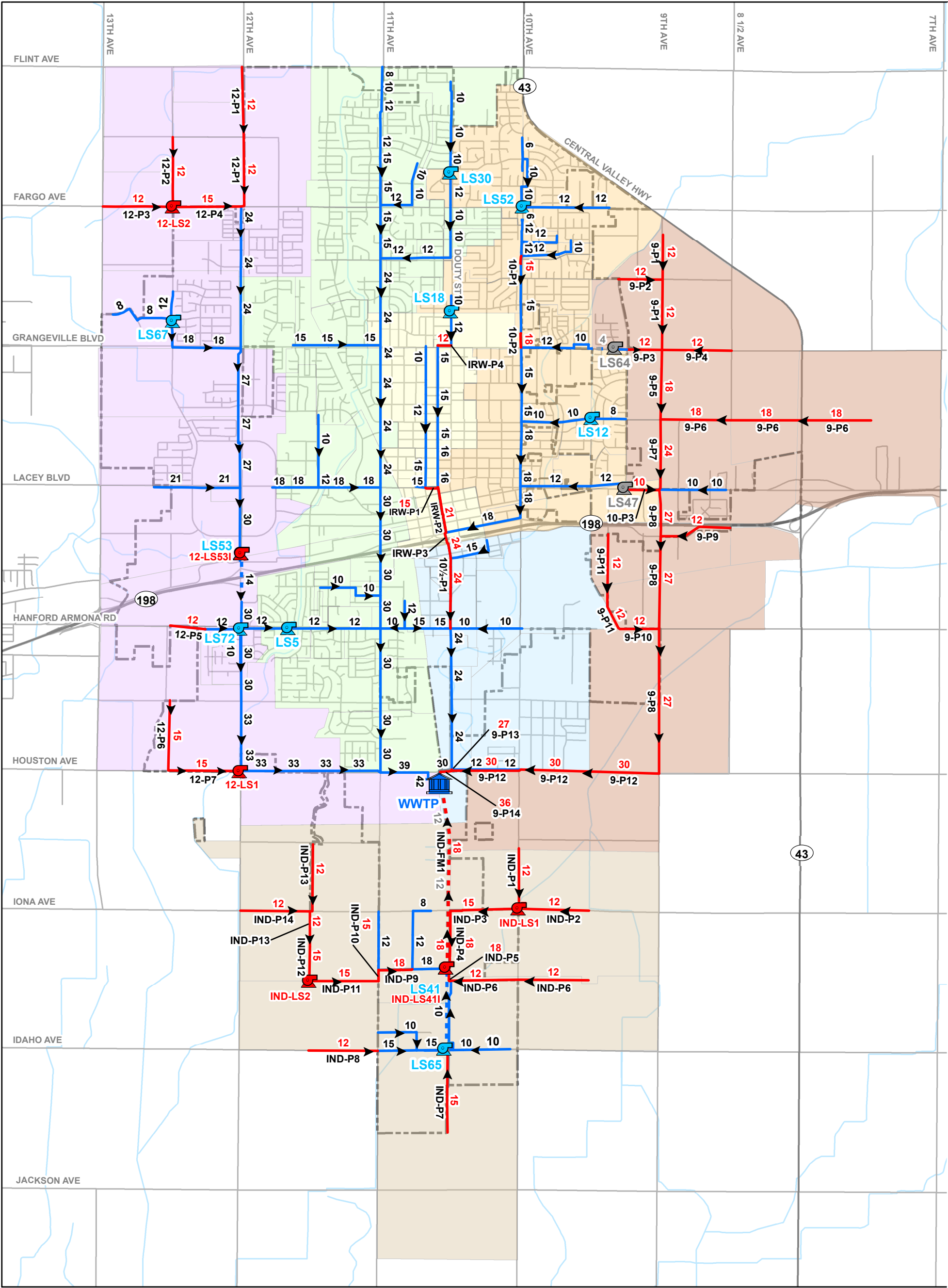
8.3.1 Pipelines

The recommended pipeline improvements are grouped by collection basin and listed on **Table 8.2**. Each improvement includes a general description of the street alignment and limits as well as existing pipe diameter and length.

The following three pipeline improvements categories were identified:

- **New Pipeline.** The new pipeline is proposed where none exists.
- **Replacement Pipeline.** This improvement is intended as a replacement to an existing pipeline and along the same alignment. The existing pipeline should be abandoned when the replacement pipeline has been constructed.
- **Parallel Pipeline.** This improvement is intended as a parallel to an existing pipeline. The existing pipeline should remain in service, even when this new improvement is constructed.

The opinion of probable construction costs, for the projects included in this master plan, are based on the pipe unit costs summarized on **Table 8.1**. It is assumed that any replacement pipes will be in the same alignment and at the same slope as the existing pipe, except in the cases where the



Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Proposed Improvements

 Lift Stations and Pumps

 Gravity Mains

 Force Mains

Future Basins

 9th Ave Basin

 10th Ave Basin

 10 1/2 Ave Basin

 11th Ave Basin

 12th Ave Basin

 Irwin St Basin

 Industrial Area Basin

Abandoned

 Lift Stations

 Gravity Main

 Force Main

Existing System

 WWTP

 Lift Stations

 Gravity Mains

 Force Mains

 City Limits

 Streets

 Highways

 Waterways



Figure 8.1
Capital Improvement
Program
Sewer System Master Plan
City of Hanford



Table 8.2 Capital Improvement Program
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements					Infrastructure Costs			Baseline Constr. Consts	Estimated Constr. Costs ³	Capital Improv. Costs ⁴	Suggested Cost Allocation		Cost Sharing		
				Existing Diameter	New/Parallel/Replace	Diameter	Length	Railroad	Casings		Pipe Unit Cost				Pipe Cost ^{1,2}	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)		Highway	Canal/ Slough	(\$/unit)				(\$)	(%)	(%)	(\$)	(\$)
12th Avenue Trunk																			
Pipeline Capacity Improvements																			
12-P1	Gravity Main	12th Ave	From Flint Ave to Fargo Ave	-	New	12	5,400			1	228	1,370,042	1,370,042	1,575,548	1,811,880	0%	100%	0	1,811,880
12-P2	Gravity Main	Future 12 1/2 Ave	From approx 2,650 ft n/o Fargo Ave to Fargo Ave	-	New	12	2,675			1	228	749,730	749,730	862,190	991,518	0%	100%	0	991,518
12-P3	Gravity Main	Fargo Ave	From 13th Ave to future 12 1/2 Ave	-	New	12	2,675			1	228	749,730	749,730	862,190	991,518	0%	100%	0	991,518
12-P4	Gravity Main	Fargo Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,575				239	616,660	616,660	709,160	815,533	0%	100%	0	815,533
12-P5	Gravity Main	Hanford Armona Rd	From ext. of future 12 1/2 Ave to 12th Ave		New	12	1,350				228	307,310	307,310	353,407	406,418	0%	100%	0	406,418
12-P6	Gravity Main	Future 12 1/2 Ave	From ext. of Hume Ave to Houston Ave	-	New	15	2,675				239	640,608	640,608	736,700	847,205	0%	100%	0	847,205
12-P7	Gravity Main	Houston Ave	From future 12 1/2 Ave to 12th Ave	-	New	15	2,750			2	239	975,369	975,369	1,121,675	1,289,926	0%	100%	0	1,289,926
Lift Station Improvements																			
12-LS53I	Lift Station	12th Avenue	300 ft n/o of Glendale Ave		Replace	2 @ 1,200 gpm					-	1,207,973	1,207,973	1,389,169	1,597,545	35%	65%	558,274	1,039,270
12-LS1	Lift Station	Houston Ave	Intersection of Houston Ave and 12th Ave		New	1 @ 600 gpm					-	550,707	550,707	633,313	728,310	0%	100%	0	728,310
12-LS2	Lift Station	Fargo Ave	2,600 ft w/o 12th Ave		New	1 @ 400 gpm					-	477,677	477,677	549,329	631,728	0%	100%	0	631,728
Subtotal - 12th Avenue Trunk													7,645,808	8,792,679	10,111,581			558,274	9,553,307
9th Avenue Trunk																			
Pipeline Capacity Improvements																			
9-P1	Gravity Main	9th Ave	From Fairview Pl to Grangeville Blvd	-	New	12	4,375				228	995,914	995,914	1,145,301	1,317,096	0%	100%	0	1,317,096
9-P2	Gravity Main	Leland Way	From 9 1/4 Ave to 9th Ave	-	New	12	1,700				228	386,984	386,984	445,031	511,786	0%	100%	0	511,786
9-P3 ⁵	Gravity Main	Grangeville Blvd	From 9 1/4 Ave to 9th Ave	-	New	12	1,350				228	307,310	307,310	353,407	406,418	63%	37%	255,271	151,147
9-P4	Gravity Main	Grangeville Blvd	From 8 1/2 Ave to 9th Ave	-	New	12	2,650				228	603,239	603,239	693,725	797,784	0%	100%	0	797,784
9-P5	Gravity Main	9th Ave	From Grangeville Blvd to Florinda St	-	New	18	2,650				258	683,439	683,439	785,954	903,847	7%	93%	65,111	838,736
9-P6	Gravity Main	Florinda St	From approx 2,600 ft e/o HWY 43 to 9th Ave	-	New	18	8,000				258	2,063,211	2,063,211	2,372,692	2,728,596	0%	100%	0	2,728,596
9-P7	Gravity Main	9th Ave	From Florinda St to Lacey Blvd	-	New	24	2,700	1			291	996,352	996,352	1,145,804	1,317,675	2%	98%	32,046	1,285,629
9-P8	Gravity Main	9th Ave	From Lacey Blvd to Houston Ave	-	New	27	10,775	1	1		336	4,565,788	4,565,788	5,250,657	6,038,255	7%	93%	450,149	5,588,106
9-P9	Gravity Main	Third St	From ext. of David St to 9th Ave	-	New	12	2,750				228	626,003	626,003	719,903	827,889	0%	100%	0	827,889
9-P10	Gravity Main	Hanford Armona Rd	From approx 450 ft e/o 9 1/2 Ave to 9th Ave	-	New	12	1,500				228	341,456	341,456	392,675	451,576	0%	100%	0	451,576
9-P11	Gravity Main	9 1/2 Ave	From approx 300 ft s/o Third St to Hanford Armona Rd	-	New	12	3,750				228	853,640	853,640	981,686	1,128,939	0%	100%	0	1,128,939
9-P12	Gravity Main	Houston Ave	From 9th Ave to 10 1/2 Ave		New	30	7,875			1	395	3,346,232	3,346,232	3,848,167	4,425,392	7%	93%	311,967	4,113,424
9-P13	Gravity Main	10 1/2 Ave	From approx 50 ft n/o Houston Ave to Houston Ave	-	New	27	50				336	16,777	16,777	19,293	22,187	70%	30%	15,454	6,733
9-P14	Gravity Main	Houston Ave	From 10 1/2 Ave to approx 500 ft w/o 10 1/2 Ave	-	New	36	725	1			491	619,831	619,831	712,806	819,727	40%	60%	325,862	493,865
Subtotal - 9th Avenue Trunk													16,406,175	18,867,102	21,697,167			1,455,860	20,241,307
10th Avenue Trunk																			
Pipeline Capacity Improvements																			
10-P1	Gravity Main	10th Ave	From approx 100 ft n/o Lakewood Dr to 200 ft s/o Lakewood Dr	12	Replace	15	300				239	71,844	71,844	82,621	95,014	65%	35%	61,759	33,255
10-P2	Gravity Main	10th Ave	From approx 150 ft s/o Cross Ave to Grangeville Blvd	12	Replace	18	575				258	148,293	148,293	170,537	196,118	73%	27%	143,166	52,952
Slope Deficiency Improvements																			
10-P3 ⁶	Gravity Main	Lacey Blvd	From 9 1/4 Ave to 9th Ave	10	Replace	10	1,300				222	289,086	289,086	332,449	382,317	50%	50%	191,158	191,158
Subtotal - 10th Avenue Trunk													509,224	585,607	673,448			396,083	277,365
10 1/2 Avenue																			
Slope Deficiency Improvements																			
10%-P1	Gravity Main	Irwin St	From Third St to Hanford Armona Rd	24	Replace	24	3,350				291	974,170	974,170	1,120,295	1,288,339	79%	21%	1,017,090	271,249
Subtotal - 10 1/2 Avenue Trunk													974,170	1,120,295	1,288,339			1,017,090	271,249
Irwin St Trunk																			
Slope Deficiency Improvements																			

Attachment: Sewer System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Table 8.2 Capital Improvement Program
Sewer System Master Plan
City of Hanford

Improv. No.	Improv. Type	Alignment	Limits	Pipeline Improvements						Infrastructure Costs		Suggested Cost Allocation			Cost Sharing				
				Existing Diameter	New/Parallel/Replace	Diameter	Length	Railroad	Casings		Pipe Unit Cost	Pipe Cost ^{1,2}	Baseline Constr. Consts	Estimated Constr. Costs ³	Capital Improv. Costs ⁴	Existing Users	Future Users	Existing Users	Future Users
									Highway	Canal/ Slough									
IRW-P1	Gravity Main	Lacey Blvd	From Redington St to Irwin St	15	Replace	15	525				239	125,727	125,727	144,586	166,274	92%	8%	152,719	13,555
IRW-P2	Gravity Main	Irwin St	From Lacey Blvd to Fourth St	20, 24	Replace	21	1,850	1			280	729,700	729,700	839,155	965,028	79%	21%	766,182	198,847
IRW-P3	Gravity Main	Irwin St	From Fourth St to 3rd St	24, 30	Replace	24	500		1		291	778,998	778,998	895,848	1,030,225	79%	21%	818,544	211,681
IRW-P4	Gravity Main	Grangeville Blvd	From Douty St to Irwin St	12	Replace	12	525				228	119,510	119,510	137,436	158,051	96%	4%	151,099	6,952
Subtotal - Irwin Street Trunk													1,753,935	2,017,025	2,319,579			1,888,544	431,036
Industrial Trunk																			
Pipeline Capacity Improvements																			
IND-P1	Gravity Main	10th Ave	From approx 2,300 ft n/o Iona Ave to Iona Ave	-	New	12	2,300				228	523,566	523,566	602,101	692,416	0%	100%	0	692,416
IND-P2	Gravity Main	Iona Ave	From future 9 1/2 Ave to ext. of 10th Ave	-	New	12	2,675		1		228	749,730	749,730	862,190	991,518	0%	100%	0	991,518
IND-P3	Gravity Main	Iona Ave	From 10th Avenue to 10 1/2 Ave	12	Replace	15	2,125				239	508,895	508,895	585,229	673,013	0%	100%	0	673,013
IND-P4	Gravity Main	ext. 10 1/2 Ave	From Iona Ave to Industry Ave	12	Replace	18	2,675				258	689,886	689,886	793,369	912,374	6%	94%	53,771	858,603
IND-P5	Gravity Main	ext. 10 1/2 Ave	From approx 600 ft s/o Industry Ave to Industry Ave	12	Replace	18	600				258	154,741	154,741	177,952	204,645	12%	88%	24,979	179,666
IND-P6	Gravity Main	Future ROW	From future 9 1/2 Ave to ext. of 10 1/2 Ave	-	New	12	5,225		1		228	1,330,205	1,330,205	1,529,736	1,759,197	0%	100%	0	1,759,197
IND-P7	Gravity Main	ext. 10 1/2 Ave	From 3,100 ft s/o Idaho Ave to Idaho Ave	6	Replace	15	3,250				239	778,309	778,309	895,056	1,029,314	32%	68%	329,018	700,296
IND-P8	Gravity Main	Idaho Ave	From approx 2,600 ft w/o 11th Avenue to 11th Avenue	-	New	12	2,650				228	603,239	603,239	693,725	797,784	32%	68%	252,053	545,730
IND-P9	Gravity Main	Industry Ave	From 11th Avenue to Crown Avenue	12	Replace	18	1,325				258	341,719	341,719	392,977	451,924	31%	69%	139,155	312,768
IND-P10	Gravity Main	11th Ave	From approx 420 ft s/o Industry Ave to Industry Ave	-	New	15	425				239	101,779	101,779	117,046	134,603	0%	100%	0	134,603
IND-P11	Gravity Main	Future ROW	From future 11 1/2 Ave to 11th Ave	-	New	15	2,600				239	622,647	622,647	716,045	823,451	0%	100%	0	823,451
IND-P12	Gravity Main	Future 11 1/2 Ave	From approx 1,350 ft s/o Iona Ave to approx 420 ft s/o Industry Ave	-	New	15	1,325				239	317,311	317,311	364,907	419,643	19%	81%	77,724	341,919
IND-P13	Gravity Main	Future 11 1/2 Ave	From approx 2,530 ft n/o Iona Ave to approx 1,350 ft s/o Iona Ave	-	New	12	3,975		1		228	1,045,659	1,045,659	1,202,507	1,382,884	0%	100%	0	1,382,884
IND-P14	Gravity Main	Iona Ave	From 12th Ave to future 11 1/2 Ave	-	New	12	2,650				228	603,239	603,239	693,725	797,784	0%	100%	0	797,784
IND-FM1	Force Main	ext. 10 1/2 Ave	From Industry Ave to Houston Ave	12	Replace	18	7,275				258	1,876,232	1,876,232	2,157,667	2,481,317	11%	89%	266,908	2,214,409
Lift Station Improvements																			
IND-LS41I	Lift Station	Industry Ave	1,300 e/o Crown Ave		Replace	2 @ 1,500 gpm						1,552,759	1,552,759	1,785,673	2,053,524	11%	89%	220,891	1,832,632
IND-LS1	Lift Station	Iona Ave	Intersection of Iona Ave and 10th Ave		New	1 @ 500 gpm						512,425	512,425	589,289	677,682	0%	100%	0	677,682
IND-LS2	Lift Station	Future 11 1/2 Ave	2,650 ft s/o Iona Ave		New	1 @ 500 gpm						512,425	512,425	589,289	677,682	0%	100%	0	677,682
Subtotal - Industrial Avenue Trunk													12,824,767	14,748,482	16,960,754			1,364,501	15,596,253
Subtotal - Pipeline Capacity Improvements													35,300,112	40,595,129	46,684,398			5,901,186	40,783,211
Subtotal - Lift Station Improvements													4,813,966	5,536,061	6,366,470			779,165	5,587,305
Total Improvement Costs													40,114,078	46,131,190	53,050,868			6,680,352	46,370,517

AKEL
ENGINEERING GROUP, INC.

Notes:

1. Railroad and canal/slough casings assumed at a length of 200 feet. Highway casings assumed at a length of 600 feet.
2. Unit costs based on a January 2017 ENR CCI of 10,532.
3. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.
4. Estimated construction cost plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.
5. Improvement 9-P3 is meant to redirect flow from Lift Station 64 to the 9th Avenue Trunk.
6. Improvement 10-P2 is meant to redirect flow from Lift Station 47 to the 9th Avenue Trunk.

improvement is meant to mitigate existing pipe deficiencies and comply with minimum slope design criteria. However, this study recommends an investigation of the alignment during the pre-design stage of each project.

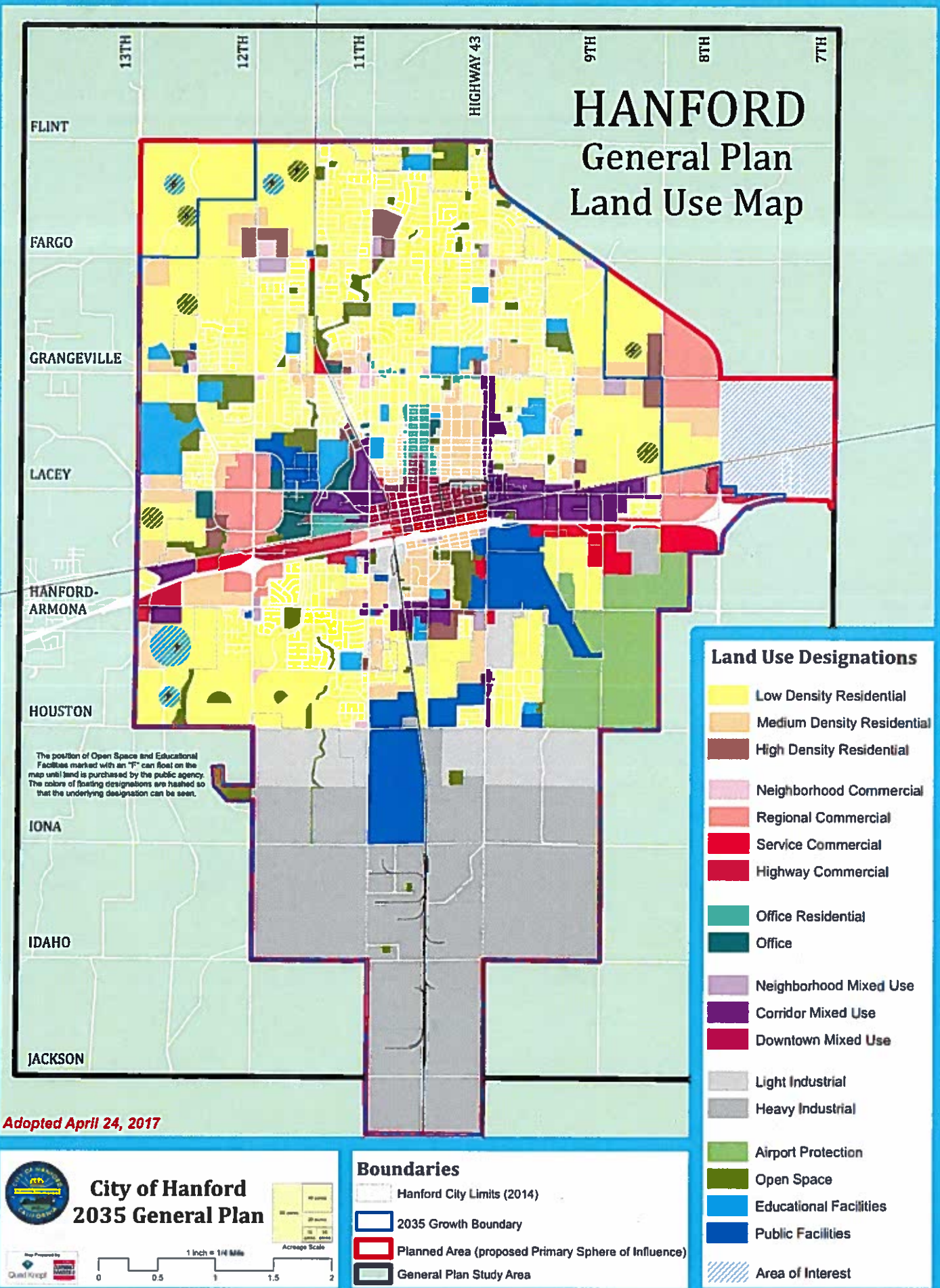
8.3.2 Recommended Cost Allocation Analysis

Capacity allocation analysis is needed to identify improvement funding sources, and to establish a nexus between development impact fees and improvements needed to service growth. In compliance with the provisions of Assembly Bill AB 1600, the analysis differentiates between the project needs of servicing existing users and for those required to service anticipated future developments. [Table 8.2](#) lists each improvement and separates the cost by responsibility between existing and future users. The cost responsibility is based on model parameters for existing and future land use, and may change depending on the nature of development.

2017
City of Hanford

APPENDIX A

General Plan Land Use Map

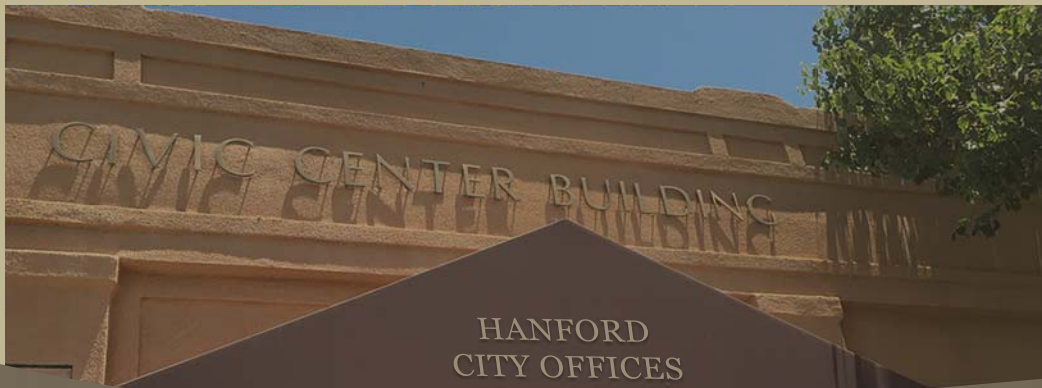
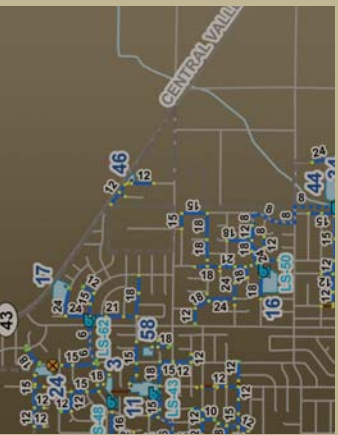


Adopted April 24, 2017



SEPTEMBER 2017
FINAL

City of Hanford Storm Drainage System Master Plan



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)



CITY OF HANFORD

2017

STORM DRAINAGE SYSTEM MASTER PLAN

Final

September 2017



AKEL
ENGINEERING GROUP, INC.



Smart Planning Our Water Resources

September 29, 2017

City of Hanford
319 Douty Street
Hanford CA, 93230

Attention: Lou Camara, P.E.
Director of Public Works

Subject: 2017 Storm Drainage System Master Plan – Final Report

Dear Lou:

We are pleased to submit the final report for the City of Hanford Storm Drainage System Master Plan. This master plan is a standalone document, though it was prepared as part of the integrated infrastructure master plans for the water, sewer, and storm drainage master plans. The master plan documents the following:

- Existing system facilities, acceptable hydrologic and hydraulic performance criteria, and projected stormwater runoff consistent with the Planned Area Boundary.
- Development of the City's GIS-based hydrologic and hydraulic stormwater models.
- Capacity evaluation of the existing system with improvements to mitigate existing deficiencies and to accommodate policy updates and future growth.
- Capital Improvement Program (CIP) with an opinion of probable construction costs and suggestions for cost allocations to meet AB 1600.
- Hydrologic analysis and modeling completed by Hydmet.

We extend our thanks to you; John Doyel, Deputy Director of Public Utilities / City Engineer; Darlene Mata, Community Development Director; and other City staff whose courtesy and cooperation were valuable components in completing this study.

Sincerely,

AKEL ENGINEERING GROUP, INC.

Tony Akel, P.E.
Principal

Enclosure: Report



Acknowledgements

City Council

David Ayers, Mayor

Sue Sorensen, Vice Mayor

Martin Devine

Francisco Ramirez

Justin Mendes

Management Personnel

Lou Camara, Director of Public Works

John Doyel, Deputy Director of Public Utilities / City Engineer

Darlene Mata, Community Development Director

Mike Cosenza, Utilities Superintendent

Other City Engineering, Planning, and Operations Staff

City of Hanford

Storm Drainage System Master Plan

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Storm Drainage System Master Plan

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City of Hanford Storm Drainage System Master Plan

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APPENDICES

Appendix A Hanford General Plan Land Use Map

EXECUTIVE SUMMARY

This executive summary presents a brief background of the City's stormwater drainage system, the planning area characteristics, the hydrology and hydraulic criteria, and the hydrology and hydraulic model developments.

These hydrology and hydraulic models were used to evaluate the capacity adequacy of the existing stormwater drainage system, for recommending improvements to mitigate existing deficiencies and for servicing future growth. The prioritized capital improvement program accounts for growth throughout the Hanford Planning Area.

ES.1 STUDY OBJECTIVES

The City of Hanford recognizes the importance of planning, developing, and financing system facilities to provide sewer collection services to existing customers and for servicing anticipated growth within the Hanford Planning Area, the City initiated the preparation of the 2017 Sewer System Master Plan (SSMP).

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. The plan included a capacity analysis of the City's stormwater drainage system using hydrology and hydraulic models, recommended prioritized capacity improvements, and water quality related improvements to meet the anticipated requirements from the Regional Water Quality Control Board.

The planning boundary and horizon for the master plan were developed in accordance with the City's recently adopted General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

The City of Hanford authorized Akel Engineering Group Inc. to complete the following tasks:

- Summarize the City's existing stormwater system facilities.
- Document growth planning assumptions and known future developments.
- Update the Storm Drainage system performance criteria.
- Project future stormwater flows.
- Evaluate the storm drainage facilities to address hydraulic capacity requirements from existing and projected developments, and water quality requirements from recent regulations.
- Perform a capacity analysis for the existing collection system and recommending improvements.
- Recommend a Capital Improvement Program (CIP) with an opinion of probable costs.

- Perform a capacity allocation analysis for cost sharing purposes.
- Develop a Storm Drainage System Master Plan report.

ES.2 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer System Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, they have been coordinated for consistency with the City's General Plan document. Additionally, each report has been cross referenced to reflect relevant analysis results with the other reports.

ES.3 STUDY AREA DESCRIPTION

The City of Hanford is located in Kings County, approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure ES.1](#)). The City's closest neighbor, the City of Lemoore is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City Service area.

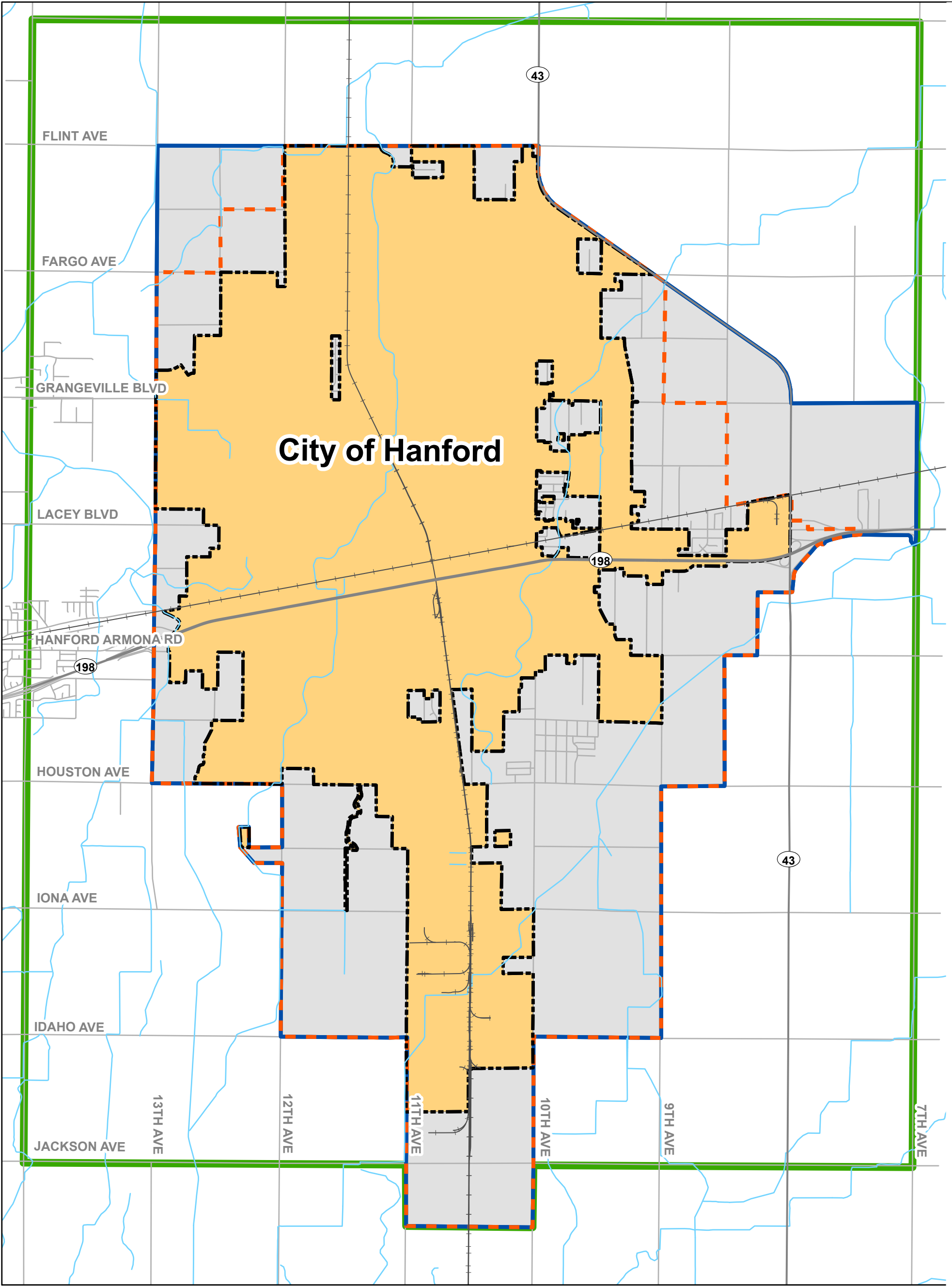
The City operates and maintains a storm drainage system that covers the majority of the area within the City limits. Currently, stormwater runoff discharges to detention basins and canals that are located throughout the City.

ES.4 SYSTEM PERFORMANCE AND DESIGN CRITERIA

This report documents the City's performance and design criteria that were used for evaluating hydrologic and hydraulic systems within the City's drainage watershed ([Table ES.1](#)). Hydrologic criteria are developed to characterize the flood routing of rainfall runoff in a defined drainage system. Akel Engineering Group retained the services of Dr. Jack Humphrey of Hydmet Inc. to complete the hydrologic evaluation of this project. The hydraulic criteria for the storm drainage system were used to evaluate the capacity requirements of conveyance facilities, retention basins, and pump stations.

ES.5 HYDROLOGIC AND HYDRAULIC MODEL DEVELOPMENT

Factors critical to the hydrologic model development include watersheds, drainage basins within each watershed, overland flow routing within drainage subbasins, and conveyance that makes full use of pipes as well as streets for routing 100-year design storm events. A hydraulic model was developed for the City's existing storm drainage system ([Figure ES.2](#)), which includes facilities



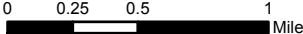
Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



Update: September 1, 2016

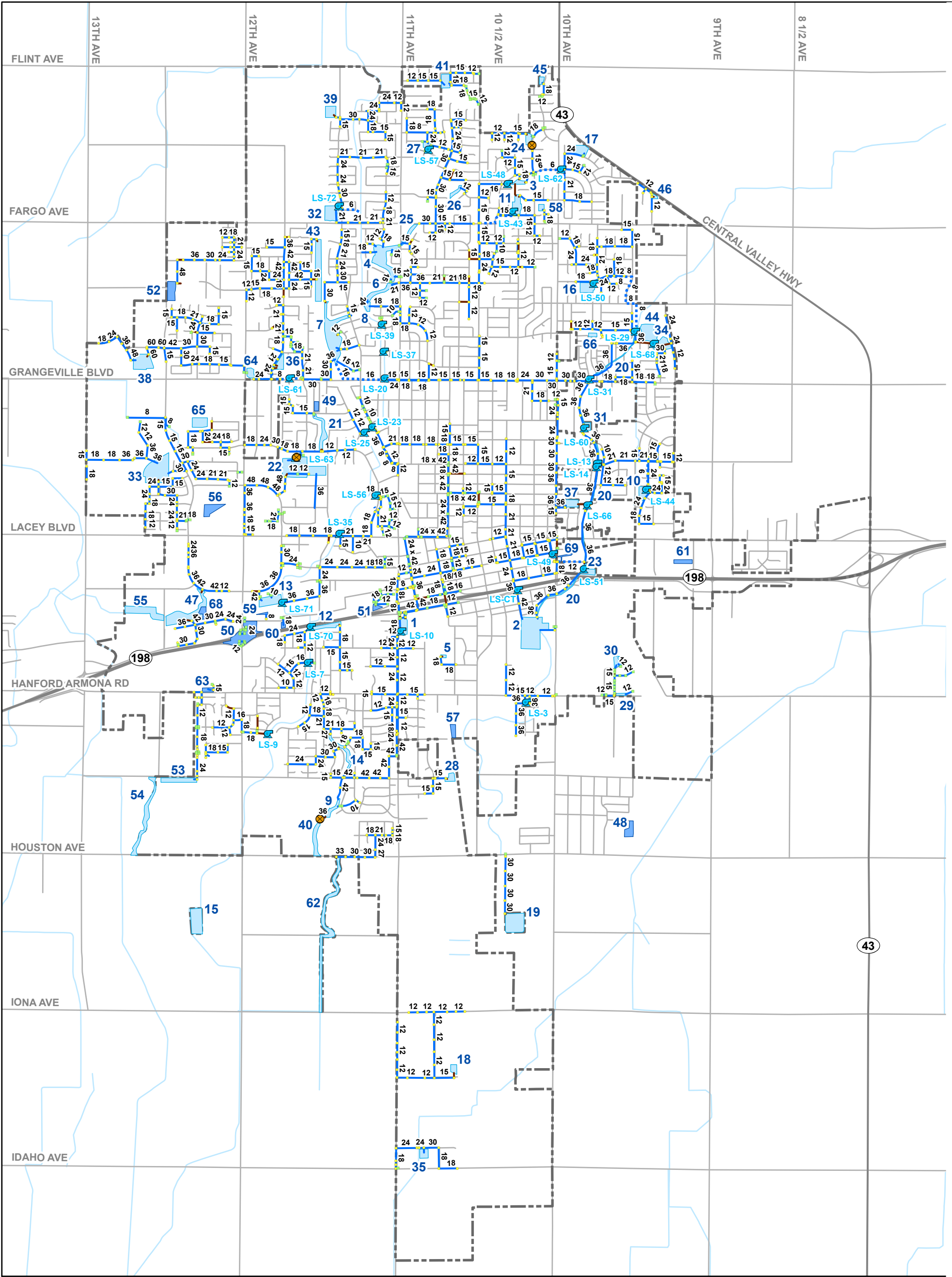


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**ES. 1
Planning Area**
Storm Drainage System Master Plan
City of Hanford





Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Existing System**
- Force Mains
 - Unknown Pipe Size
 - City Storm Basins
 - Private Storm Basins
 - City Limits
 - Streets
 - Waterways
 - Lift Stations
 - Valves
 - Catch Basins
 - Manholes
 - Gravity Pipes



Update: September 6, 2016

0 0.25 0.5 1 Mile

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ES. 2
Existing Storm
Drainage System
Storm Drainage System Master Plan
City of Hanford



Table ES.1 Hydrologic and Hydraulic Design Criteria

Storm Drainage System Master Plan
City of Hanford

Hydrology and Hydraulics Design Criteria	
Ponding Basins (Existing and Future)	
Design Storm	
Detention	100 year - 2 day
Retention	100 year - 10 day
Flooding for Developments	All Basins: Development pad elevations shall be designed to mitigate flood damage from a 100 year - 30 day event. Allowable flooding up to 1.5 feet above the gutter flowline.
Retention	Existing/Future: Responsible for full retention of design storm. No flooding of street during design storm.
Detention	Existing/Future: Responsible for full detention of design storm. No flooding in streets during design storm. Discharge to ditch or other drainage facility upon approval of City engineer.
Pipelines	
Design Storm	Residential: 2 year - 6 hour Commercial: 5 year - 6 hour
Street Flooding	Existing: Allowable flooding up to 1.5 feet above the gutter flowline Future: No flooding in streets during design storm
Minimum Pipe Size	12 inches
Pump Stations	
Detention Pumps	Sizing requirements based on emptying detention basin in 5 to 7 days for the design storm
Direct Discharge Pumps	Sizing requirements based on design flow, with allowable flooding of up to 1.5 feet above the gutter flowline at the lowest system elevation

such as conveyance facilities, outfalls, pump stations, and retention basins. This section discusses the existing watersheds, the delineation of drainage basins and subbasins, and the components of the storm drainage system.

ES.6 CAPACITY EVALUATION

The hydrologic and hydraulic models were used for evaluating the storm drainage system to identify capacity deficiencies and to recommend improvements required to serve future growth. The criteria used for evaluating the capacity adequacy of the storm drainage system (pipelines, stormwater collection basins, and pump stations) and used for sizing recommended improvements were discussed and summarized in the System Performance and Design Criteria chapter.

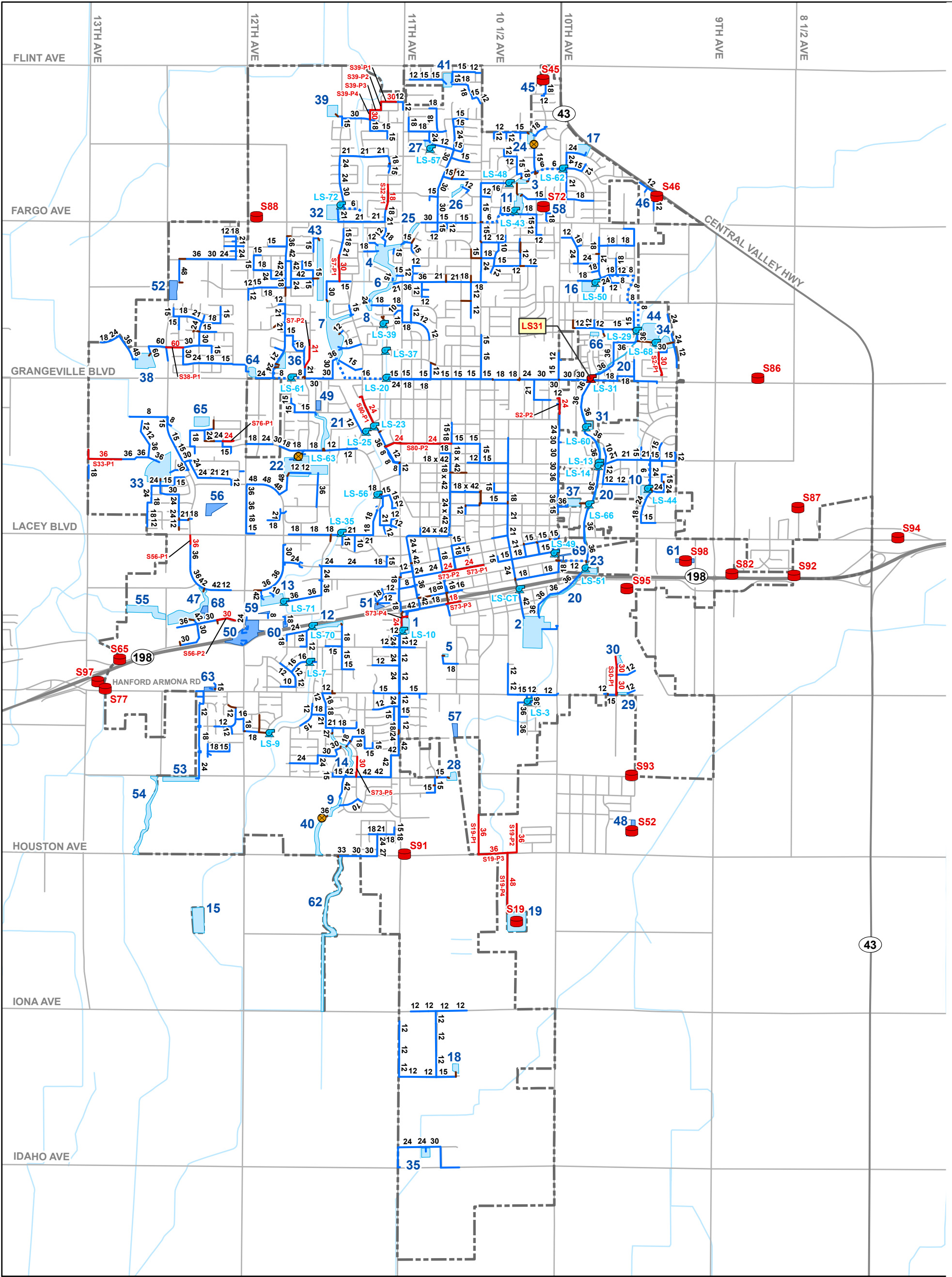
The evaluation of the City's existing storm drainage system was conducted by Dr. Jack Humphrey of Hydmet Inc. These sections summarize the evaluation of the existing system performed by Hydmet Inc. and the improvements recommended to mitigate exiting deficiencies and serve future growth.

ES.7 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program costs for the projects identified in this master plan for mitigating existing system deficiencies and for serving anticipated future growth throughout the City are summarized on [Table ES.2](#) and are graphically represented on [Figure ES.3](#).

The estimated construction costs include the baseline costs plus **15 percent** contingency allowance to account for unforeseen events and unknown field conditions. Capital improvement costs include the estimated construction costs plus **15 percent** project-related costs (engineering design, project administration, construction management and inspection, and legal costs).

The costs in this sewer system master plan were benchmarked using a 20-City national average Engineering News Records (ENR) Construction Cost Index (CCI) of 10,532, reflecting a date of January 2017. In total, the CIP includes approximately 10 miles of pipeline improvements, and one lift station improvement, and 18 retention basin improvements, with a project cost totaling over 29 million dollars.



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Future Improvements

- Basins
- Lift Stations
- Pipes

Existing System

- Lift Stations
- Valves
- Gravity Pipes
- Force Mains
- Unknown Pipe Size

- City Storm Basins
- Private Storm Basins
- City Limits
- Streets
- Waterways



ES. 3
Proposed Improvements
Storm Drainage System Master Plan
City of Hanford



Table ES.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing	
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)		(\$/LF)	(\$)	(\$)	(\$)	(\$)	%	%	(\$)	(\$)
Existing System Improvements																	
Existing Pipeline Improvements																	
Basin S2																	
S2-P1	Pipe	Brookhollow Dr	From Hoover Way to Waterview St	18	Replace	30	825	-	241	198,603	198,603	228,394	262,653	100%	0%	262,653	0
S2-P2	Pipe	10th Ave	From Bass St to approximately 190 ft n/o Malone St	15	Replace	24	600	-	196	117,357	117,357	134,960	155,204	0%	100%	0	155,204
											Subtotal - S2					262,653	155,204
Basin S7																	
S7-P1	Pipe	Glacier Way	From approximately 100 ft n/o Muir Way to Cortner St	24	Replace	30	900	-	241	216,658	216,658	249,157	286,531	90%	10%	257,878	28,653
S7-P2	Pipe	Kings Rd	From Crescent Way to Claridge Ln	-	New	21	975	-	166	161,365	161,365	185,570	213,406	80%	20%	170,724	42,681
											Subtotal - S7					428,602	71,334
Basin S19																	
S19-P1	Pipe	10 1/2 Ave	From 1,350 ft n/o Houston Ave to Houston Ave	-	New	36	1,350	-	286	385,923	385,923	443,811	510,383	0%	100%	0	510,383
S19-P2	Pipe	ROW	ROW between 10 1/2 Ave and 10 th Ave from 1,000 ft n/o Houston Ave to Houston Ave	-	New	36	1,275	-	286	364,482	364,482	419,155	482,028	0%	100%	0	482,028
S19-P3	Pipe	Houston Ave	From 10 1/2 Ave to 1,000 ft e/o 10 1/2 Ave	-	New	36	1,000	-	286	285,869	285,869	328,749	378,061	0%	100%	0	378,061
S19-P4	Pipe	ROW	ROW between 10 1/2 Ave and 10th Ave from Houston Ave to 2,000 ft s/o Houston Ave	30	Replace	48	2,025	-	391	792,157	792,157	910,980	1,047,627	0%	100%	0	1,047,627
											Subtotal - S19					0	2,418,099
Basin S30																	
S30-P1	Pipe	9 1/4 Ave	From Hanford Armona Rd to 1,350 ft n/o Hanford Armona Rd	15	Replace	30	1,300	-	241	312,951	312,951	359,893	413,878	100%	0%	413,878	0
											Subtotal - S30					413,878	0
Basin S32																	
S32-P1	Pipe	Fountain Plaza Dr	From West Pebble Dr to Willow St	12	Replace	18	850	-	135	115,100	115,100	132,365	152,219	100%	0%	152,219	0
											Subtotal - S32					152,219	0
Basin S33																	
S33-P1	Pipe	Learning Center Main Access	From 13th Ave to School	18	Replace	36	1,425	-	286	407,363	407,363	468,467	538,737	100%	0%	538,737	0
											Subtotal - S33					538,737	0
Basin S38																	
S38-P1	Pipe	Berkshire Ln	From Bordeaux St to Centennial Dr	42	Replace	60	575	-	451	259,539	259,539	298,469	343,240	100%	0%	343,240	0
											Subtotal - S38					343,240	0
Basin S39																	
S39-P1	Pipe	Imperial Way	From Plum Ln to Cajun Way	24	Replace	30	500	-	241	120,366	120,366	138,421	159,184	80%	20%	127,347	31,837
S39-P2	Pipe	Cajun Way	From Imperial Way to Millbrook St	24	Replace	30	275	-	241	66,201	66,201	76,131	87,551	80%	20%	70,041	17,510
S39-P3	Pipe	Milbrook St	From Cajun Way to Zion Way	24	Replace	30	375	-	241	90,274	90,274	103,815	119,388	80%	20%	95,510	23,878
S39-P4	Pipe	Zion Way	From Millbrook St to Saffron St	24	Replace	30	325	-	241	78,238	78,238	89,973	103,469	80%	20%	82,776	20,694
											Subtotal - S39					375,673	93,918
Basin S56																	
S56-P1	Pipe	Centennial Dr	From Lacey Blvd to 300 ft s/o Lacey Blvd	24	Replace	36	300	-	286	85,761	85,761	98,625	113,418	0%	100%	0	113,418
S56-P2	Pipe	Glendale Ave	From approximately 800 ft w/o 12th Ave to approximately 300 w/o 12th Ave	24	Replace	30	625	-	241	150,457	150,457	173,026	198,980	0%	100%	0	198,980
											Subtotal - S56					0	312,398
Basin S73																	
S73-P1	Pipe	Sixth St	From Douty St to Redington St	15	Replace	24	875	-	196	171,145	171,145	196,817	226,339	0%	100%	0	226,339
S73-P2	Pipe	Sixth St	From Redington St to Phillips St	18	Replace	24	535		196	104,643	104,643	120,339	138,390	0%	100%	0	138,390
S73-P3	Pipe	Third St	From approximately 80 ft w/o Redington St to Phillips St	12	Replace	18	500	-	135	67,706	67,706	77,862	89,541	0%	100%	0	89,541
S73-P4	Pipe	11th Ave	From approximately 70 ft n/o Silverado St to approximately 150 ft s/o Third St	18	Replace	24	550	-	196	107,577	107,577	123,713	142,270	0%	100%	0	142,270
S73-P5	Pipe	Echo Ln	From 100 ft n/o Echo Ct to Hume Ave	12	Replace	30	675	-	241	162,494	162,494	186,868	214,898	50%	50%	107,449	107,449

Table ES.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing		
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users	
				(in)		(in)	(ft)		(\$/LF)	(\$)	(\$)	(\$)	(\$)	%	%	(\$)	(\$)	
Basin S76											Subtotal - S73		811,439			107,449	703,990	
S76-P1	Pipe	Hopkins Dr	From Cogswell Pl to Scripps Ct	18	Replace	24	375	-	196	73,348	73,348	84,350	97,003	100%	0%	97,003	0	
											Subtotal - S76		97,003			97,003	0	
Basin S80																		
S80-P1	Pipe	Rodgers Rd	From Neville Ave to Lift Station 23	10	Replace	24	1,175	-	196	229,823	229,823	264,297	303,941	100%	0%	303,941	0	
S80-P2	Pipe	Cameron St	From Redington St to Rodgers Rd	18	Replace	24	2,225	-	196	435,197	435,197	500,477	575,548	100%	0%	575,548	0	
											Subtotal - S80		879,490			879,490	0	
Existing Retention Basin Improvements				(AF)		(AF)												
S-19	Existing Retention Basin		Approximately 2,600 ft se/o 10 1/2 Ave and Houston Ave	72.3	Capacity Expansion	23.7						89,345	102,747	118,159	87%	13%	102,798	15,361
S-45	Existing Retention Basin		Approximately 500 ft n/o Capistrano St and Mission Rd	3.8	Capacity Expansion	6.2						49,899	57,383	65,991	62%	38%	40,914	25,077
S-46	Existing Retention Basin		Approximately 900 ft n/o Meadow View and Fargo Ave	3.0	Capacity Expansion	1.0						36,240	41,676	47,928	0%	100%	0	47,928
S-52	Existing Retention Basin		Approximately 2,700 feet ne/o Houston Ave and 10th Ave	7.0	Capacity Expansion	29.0						100,386	115,443	132,760	82%	18%	108,863	23,897
Existing Lift Station Improvements				Firm Capacity		Firm Capacity												
Basin S2																		
LS-31	Lift Station		Lift Station 31 : Approximately 250 ft w/o intersection of Grangeville Blvd and Arroyo Rd	1 @ 2,500	Replace	3 @ 1,200 gpm						1,836,241	2,111,677	2,428,428	100%	0%	2,428,428	0
						Subtotal - Existing Pipeline Improvements					5,560,595	6,394,684	7,353,887			3,598,944	3,754,943	
						Subtotal - Retention Basin Improvements					275,869	317,250	364,837			252,575	112,262	
						Subtotal - Lift Station Improvements					1,836,241	2,111,677	2,428,428			2,428,428	0	
Future System Improvements																		
Pipelines Servicing Future Retention Basins ⁵																		
S65-P1	Pipe		2,000 ft upstream of Retention Basin S65	-	New	42	2,000	-	331	662,011	662,011	761,313	875,510	0%	100%	0	875,510	
S72-P1	Pipe		2,000 ft upstream of Retention Basin S72	-	New	24	2,000	-	196	391,189	391,189	449,867	517,347	0%	100%	0	517,347	
S77-P1	Pipe		2,000 ft upstream of Retention Basin S77	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694	
S82-P1	Pipe		2,000 ft upstream of Retention Basin S82	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877	
S86-P1	Pipe		2,000 ft upstream of Retention Basin S86	-	New	96	2,000	-	767	1,534,663	1,534,663	1,764,862	2,029,592	0%	100%	0	2,029,592	
S87-P1	Pipe		2,000 ft upstream of Retention Basin S87	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877	
S88-P1	Pipe		2,000 ft upstream of Retention Basin S88	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694	
S91-P1	Pipe		2,000 ft upstream of Retention Basin S91	-	New	36	2,000	-	286	571,737	571,737	657,498	756,122	0%	100%	0	756,122	
S92-P1	Pipe		2,000 ft upstream of Retention Basin S92	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877	
S93-P1	Pipe		2,000 ft upstream of Retention Basin S93	-	New	66	2,000	-	497	993,017	993,017	1,141,970	1,313,265	0%	100%	0	1,313,265	
S94-P1	Pipe		2,000 ft upstream of Retention Basin S94	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877	
S95-P1	Pipe		2,000 ft upstream of Retention Basin S95	-	New	30	2,000	-	241	481,463	481,463	553,682	636,735	0%	100%	0	636,735	
S97-P1	Pipe		2,000 ft upstream of Retention Basin S97	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694	
S98-P1	Pipe		2,000 ft upstream of Retention Basin S98	-	New	36	2,000	-	286	571,737	571,737	657,498	756,122	0%	100%	0	756,122	

Table ES.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing	
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users
				(in)					(\$/LF)								
Future Retention Basins						(AF)											
S-65	New Retention Basin		Approximately 1,500 ft w/o Aquifer Dr and Highway 198		Future	6.0					98,803	113,623	130,667	0%	100%	0	130,667
S-72	New Retention Basin		Approximately 600 ft ne/o Fargo Ave and Fairmont Ave		Future	6.0					98,803	113,623	130,667	0%	100%	0	130,667
S-77	New Retention Basin		Approximately 3,300 ft w/o Greenbrier Dr and Hanford Harmona Rd		Future	18.0					154,239	177,374	203,981	0%	100%	0	203,981
S-82	New Retention Basin		Approximately 600 ft ne/o Highway 198 and 9th Ave		Future	20.0					162,915	187,352	215,455	0%	100%	0	215,455
S-86	New Retention Basin		Approximately at intersection of 8 1/2 Ave and Grangeville Blvd		Future	64.0					337,665	388,314	446,561	0%	100%	0	446,561
S-87	New Retention Basin		Approximately 1,050 ft n/o intersection of Lacey Blvd and Vista Ave		Future	58.0					314,954	362,197	416,527	0%	100%	0	416,527
S-88	New Retention Basin		Approximately 300 ft ne/o 12th Ave and Fargo Ave		Future	20.0					162,915	187,352	215,455	0%	100%	0	215,455
S-91	New Retention Basin		Approximately at the intersection of Houston Ave and 11th Ave		Future	16.0					145,440	167,256	192,345	0%	100%	0	192,345
S-92	New Retention Basin		Approximately 300 ft se/o Curtis St and David St		Future	42.0					253,061	291,021	334,674	0%	100%	0	334,674
S-93	New Retention Basin		Approximately 4,000 ft nw/o Houston Ave and 9th Ave		Future	100.0					470,108	540,624	621,718	0%	100%	0	621,718
S-94	New Retention Basin		Approximately 850 ft e/o of Lacey Blvd and 8th Ave		Future	146.0					633,259	728,248	837,485	0%	100%	0	837,485
S-95	New Retention Basin		Approximately 1,000 ft sw/of Third St and 9 1/2 Ave		Future	3.0					83,409	95,920	110,309	0%	100%	0	110,309
S-97	New Retention Basin		Approximately at the intersection of Highway 198 and Hanford Armona Rd		Future	4.0					88,652	101,950	117,242	0%	100%	0	117,242
S-98	New Retention Basin		Approximately 1,500 ft nw/o at intersection of 9 1/8 Ave and Highway 198		Future	10.0					118,115	135,832	156,207	0%	100%	0	156,207
						Subtotal - Future Pipeline Improvements					11,163,920	12,838,508	14,764,284			0	14,764,284
						Subtotal - Future Retention Basins					3,122,338	3,590,688	4,129,292			0	4,129,292
						Total											
						Pipeline Improvements					16,724,515	19,233,192	22,118,171			3,598,944	18,519,228
						Retention Basin Improvements					3,398,207	3,907,938	4,494,129			252,575	4,241,553
						Lift Station Improvements					1,836,241	2,111,677	2,428,428			2,428,428	0
						Total Capital Improvement Costs					21,958,963	25,252,807	29,040,728			6,279,947	22,760,781



Notes:

1. Costs are based on ENR Construction Cost Index from January 2017.

2. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.

3. Estimated construction costs plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

4. New retention basin depth assumed to be equal to 25 feet.

5. Pipelines servicing future retention basins are placeholders for future trunk systems of this basin

6. Casing price is estimated at \$22/in/l-ft.

7/19/2017

CHAPTER 1 - INTRODUCTION

This chapter provides a brief background of the City's Storm Drainage system, the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

1.1 BACKGROUND

The City of Hanford (City) is located approximately 30 miles southeast of the city of Fresno and 20 miles west of the city of Visalia ([Figure 1.1](#)). The City provides storm drainage service to approximately 56,000 residents, as well as commercial, industrial, and institutional establishments. The City currently owns and operates more than 65 miles of storm drainage pipeline, 30 pump stations, and more than 60 storm drainage basins.

In 1995, the City developed a Storm Drainage System Master Plan that identified capacity deficiencies and flooding problem areas caused by stormwater runoff. Recognizing the importance of planning, developing, and financing system facilities to provide enhanced stormwater drainage to existing developed areas and for servicing anticipated growth within the City's future sphere of influence, the City initiated updating elements of the 1995 Storm Drainage Master Plan, to reflect current land use conditions.

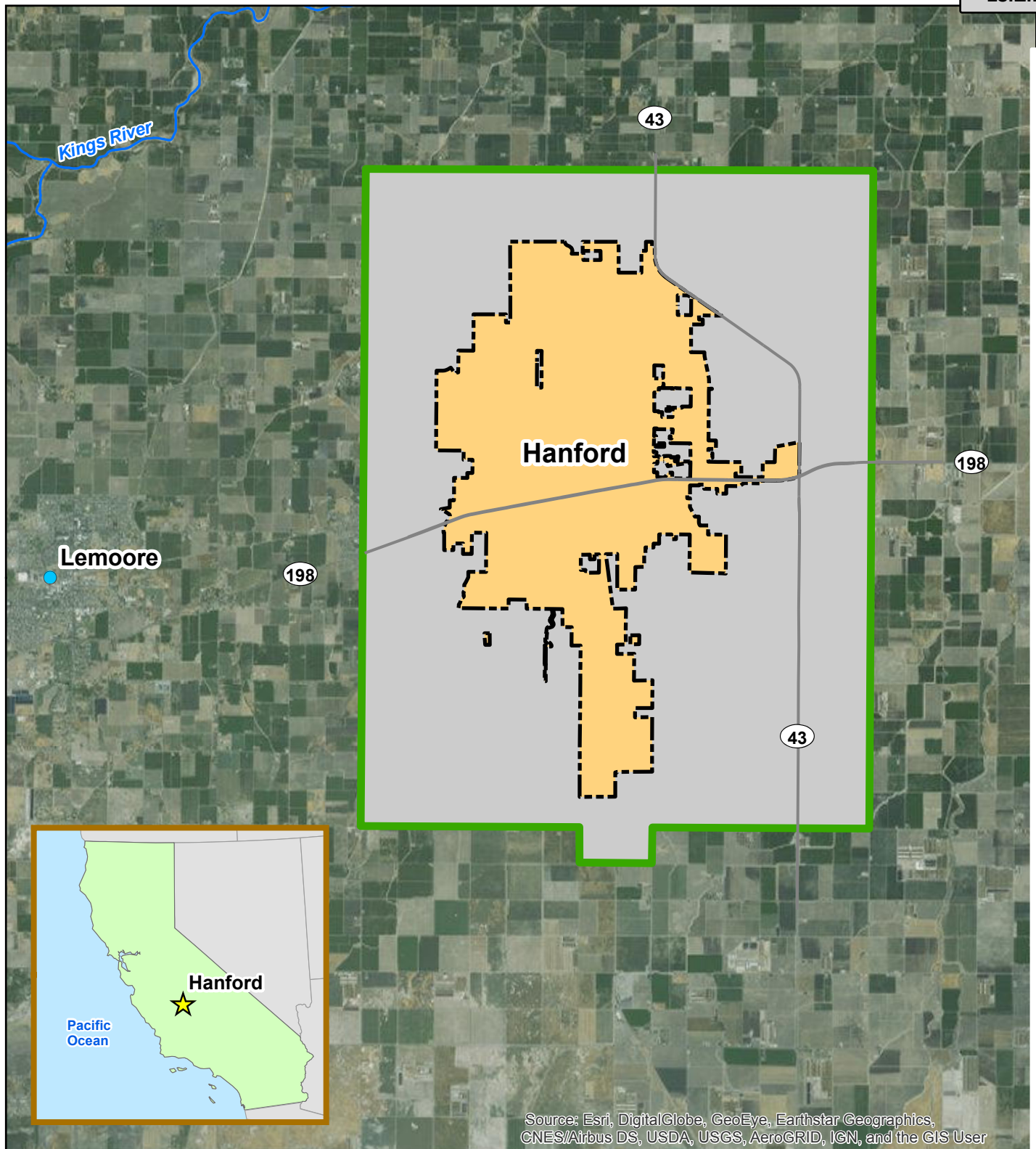
1.2 SCOPE OF WORK

City Council approved Akel Engineering Group Inc. to prepare this master plan in November of 2013. The plan included a capacity analysis of the City's stormwater drainage system using hydrology and hydraulic models, recommended prioritized capacity improvements, and water quality related improvements to meet the anticipated requirements from the Regional Water Quality Control Board.

The planning boundary and horizon for the master plan were developed in accordance with the City's recently adopted General Plan. Should planning conditions change, and depending on their magnitude, adjustments to the master plan recommendations might be necessary.

The City of Hanford authorized Akel Engineering Group Inc. to complete the following tasks:

- Summarize the City's existing stormwater system facilities.
- Document growth planning assumptions and known future developments.
- Update the Storm Drainage system performance criteria.
- Project future stormwater flows.



Legend

- Cities
- City Limits Area
- General Plan Area
- Highways
- ~ River

AKEL
ENGINEERING GROUP, INC.

Update: January 18, 2016

0 0.5 1 2 Miles



File Path: P:\GIS\GIS_Projects\Hanford\2016\StormFinal\HC\HF_Fig1-1_RLM_011816.mxd

Figure 1.1 Regional Location Map

Storm Drainage System Master Plan
City of Hanford



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- Evaluate the storm drainage facilities to address hydraulic capacity requirements from existing and projected developments, and water quality requirements from recent regulations.
- Perform a capacity analysis for the existing collection system and recommending improvements.
- Recommend a Capital Improvement Program (CIP) with an opinion of probable costs.
- Perform a capacity allocation analysis for cost sharing purposes.
- Develop a Storm Drainage System Master Plan report.

1.3 INTEGRATED APPROACH TO MASTER PLANNING

The City implemented an integrated master planning approach and contracted the services of Akel Engineering Group to prepare the following documents:

- Water System Master Plan
- Sewer System Master Plan
- Storm Drainage System Master Plan

While each of these reports is published as a standalone document, they have been coordinated for consistency with the City's General Plan document. Additionally, each report has been cross referenced to reflect relevant analysis results with the other reports.

1.4 PREVIOUS MASTER PLANS

The City's most recent storm drainage system master plan was completed in 1995. This master plan included evaluation of servicing growth to the Planned Area Boundary, evaluating the existing system, and identifying storm drainage improvements required to serve future growth. Additionally, the 1995 Master Plan included the development of hydrologic and hydraulic models which were used for evaluating the storm drainage system. Improvements were recommended for servicing existing and future growth areas, and a corresponding Capital Improvement Program was developed to quantify the corresponding costs.

1.5 RELEVANT REPORTS

The City's storm drainage requirements have undergone multiple transformations since the completion of the 1995 Storm Drainage System Master Plan. The following lists relevant reports that were used in the completion of this master plan, as well as a brief description of each document:

- **Storm Drainage System Master Plan, August 1995 (1995 SDMP).** This report documents the planning and performance criteria, evaluates the storm drainage system, recommends improvements and provides an estimate of costs.

- **City of Hanford 2017 General Plan Update (2017 General Plan).** The City's General Plan provides future land use planning, and growth assumptions for the Planning Area. Additionally, this report establishes the planning horizon for improvements in this master plan.

1.6 REPORT ORGANIZATION

This Storm Drainage System Master Plan report contains the following chapters:

Chapter 1 – Introduction. This chapter provides a brief background of the City's Storm Drainage system, the need for this master plan, and the objectives of the study. Abbreviations and definitions are also provided in this chapter.

Chapter 2 – Planning Area Characteristics. This chapter presents a discussion of the planning area characteristics affecting the hydrologic and hydraulic analysis of this master plan. These characteristics include soil, topography, floodplains, and land use.

Chapter 3 – System Performance and Design Criteria. This chapter presents the City's planning and design criteria that were used for evaluating hydrologic and hydraulic systems within the City's drainage watershed.

Chapter 4 – Existing Facilities Model Development. This chapter defines the hydrologic delineation of storm drainage basins, routing to their respective receiving facilities, and includes the hydrologic model development. Additionally, this chapter includes an overview of the storm drainage system, and the model development.

Chapter 5 –Evaluation and Proposed Improvements. This chapter presents a summary of the storm drainage system evaluation and identifies improvements needed to mitigate existing deficiencies as well as improvements needed to expand the system and service future growth.

Chapter 6 – Capital Improvement Program. This chapter provides a summary of the recommended storm drainage system improvements intended to mitigate existing capacity deficiencies and for accommodating anticipated future growth. The chapter also presents the cost criteria and methodologies for developing the Capital Improvement Program (CIP).

1.7 ACKNOWLEDGEMENTS

Obtaining the necessary information to successfully complete the analysis presented in this report, and developing the long term strategy for mitigating the existing system deficiencies and for accommodating future growth, was accomplished with the strong commitment and very active input from dedicated team members including:

- **Lou Camara**, Director of Public Works
- **John Doyel**, Director of Public Utilities / City Engineer
- **Darlene Mata**, Community Development Director

- [Mike Cosenza](#), Utilities Superintendent
- [QK Inc](#), General Plan Consultant
- [John Zumwalt](#), City of Hanford Consultant

This report was prepared in conjunction with the General Plan Update, and included coordination with QK and John Zumwalt, who were the General Plan consultants.

As part of the preparation of this Storm Drainage System Master Plan, Hydmet provided hydrological and meteorological planning services to the City and Akel Engineering Group. Hydmet was a valuable partner in the development of this master plan.

1.8 UNIT CONVERSIONS AND ABBREVIATIONS

Engineering units were used in reporting flow rates and volumes pertaining to the design and operation of various components of the storm drainage system. Where it was necessary to report values in smaller or larger quantities, different sets of units were used to describe the same parameter.

Values reported in one set of units can be converted to another set of units by applying a multiplication factor. A list of multiplication factors for units used in this report is shown on [Table 1.1](#).

Various abbreviations and acronyms were also used in this report to represent relevant stormwater system terminologies and engineering units. A list of abbreviations and acronyms is included in [Table 1.2](#).

1.9 GEOGRAPHIC INFORMATION SYSTEMS

This master planning effort made use of Geographic Information Systems (GIS) technology, for completing the following tasks:

- Delineate stormwater tributary basins, and outlining watershed areas.
- Delineate critical pipeline and retention basin infrastructure
- Generate maps and exhibits used in this master plan.

Table 1.1 Unit Conversions

Storm Drainage System Master Plan City of Hanford

Volume Unit Calculations		
To Convert From:	To:	Multiply by:
acre feet	gallons	325,851
acre feet	cubic feet	43,560
acre feet	million gallons	0.3259
cubic feet	gallons	7.481
cubic feet	acre feet	2.296×10^{-5}
cubic feet	million gallons	7.481×10^{-6}
gallons	cubic feet	0.1337
gallons	acre feet	3.069×10^{-6}
gallons	million gallons	1×10^{-6}
million gallons	gallons	1,000,000
million gallons	cubic feet	133,672
million gallons	acre feet	3.069
Flow Rate Calculations		
To Convert From:	To:	Multiply By:
ac-ft/yr	mgd	8.93×10^{-4}
ac-ft/yr	cfs	1.381×10^{-3}
ac-ft/yr	gpm	0.621
ac-ft/yr	gpd	892.7
cfs	mgd	0.646
cfs	gpm	448.8
cfs	ac-ft/yr	724
cfs	gpd	646,300
gpd	mgd	1×10^{-6}
gpd	cfs	1.547×10^{-6}
gpd	gpm	6.944×10^{-4}
gpd	ac-ft/yr	1.12×10^{-3}
gpm	mgd	1.44×10^{-3}
gpm	cfs	2.228×10^{-3}
gpm	ac-ft/yr	1.61
gpm	gpd	1,440
mgd	cfs	1.547
mgd	gpm	694.4
mgd	ac-ft/yr	1,120
mgd	gpd	1,000,000

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Table 1.2 Abbreviations and Acronyms
Storm Drainage System Master Plan
City of Hanford

Abbreviation	Expansion	Abbreviation	Expansion
AACE International	Association for the Advancement of Cost Engineering	gpd	gallons per day
AC	acre	GPS	Global Positioning System
ACP	Asbestos Cement Pipe	HEC	Hydrologic Engineering Center
AF	Acre Feet	HEC-HMS	Hydrologic Engineering Center - Hydrologic Modeling System
Akel	Akel Engineering Group, Inc.	in	inch
City	City of Hanford	KCWD	Kings County Water District
CCI	Construction Cost Index	LF	linear feet
cfs	cubic feet per second	MG	million gallons
CIP	Capital Improvement Program	MGD	million gallons per day
County	County of Kings	mi	miles
CVRWQCB	Central Valley Regional Water Quality Control Board	NRCS	National Resource Conservation Service
DWR	Department of Water Resources	PAB	Planned Area Boundary
ENR	Engineering News Record	PDC	Peoples Ditch Company
EPA	Environmental Protection Agency	ROW	Right of Way
FEMA	Federal Emergency Management Agency	RWCQB	Regional Water Quality Control Board
ft	feet	SCS	Soil Conservation Service
fps	feet per second	SWRCB	State Water Resources Control Board
GIS	Geographic Information Systems	TBD	to be determined
gpm	gallons per minute		

CHAPTER 2 – PLANNING AREA CHARACTERISTICS

This chapter presents a discussion of the planning area characteristics affecting the hydrologic and hydraulic analysis of this master plan. These characteristics include soil, topography, floodplains, and land use.

2.1 STUDY AREA DESCRIPTION

The City of Hanford is located in Kings County, approximately 30 miles southeast of the City of Fresno and 20 miles west of the City of Visalia ([Figure 2.1](#)). The City's closest neighbor, the City of Lemoore is located 8 miles to the west. Highway 198 bisects the southern boundary of the City in the east west direction, while Highway 43 is adjacent to the City's eastern boundary. In 2002, the City outlined the long-term Urban Growth Boundary (UGB), which was approved by City Council, and identified lands intended for future urbanization within the City Service area.

The City operates and maintains a storm drainage system that covers the majority of the area within the City limits. Currently, stormwater runoff discharges to detention basins and canals that are located throughout the City.

2.2 PLANNING AREA BOUNDARIES

The City's 2017 General Plan update designates two boundaries for defining urban expansion:

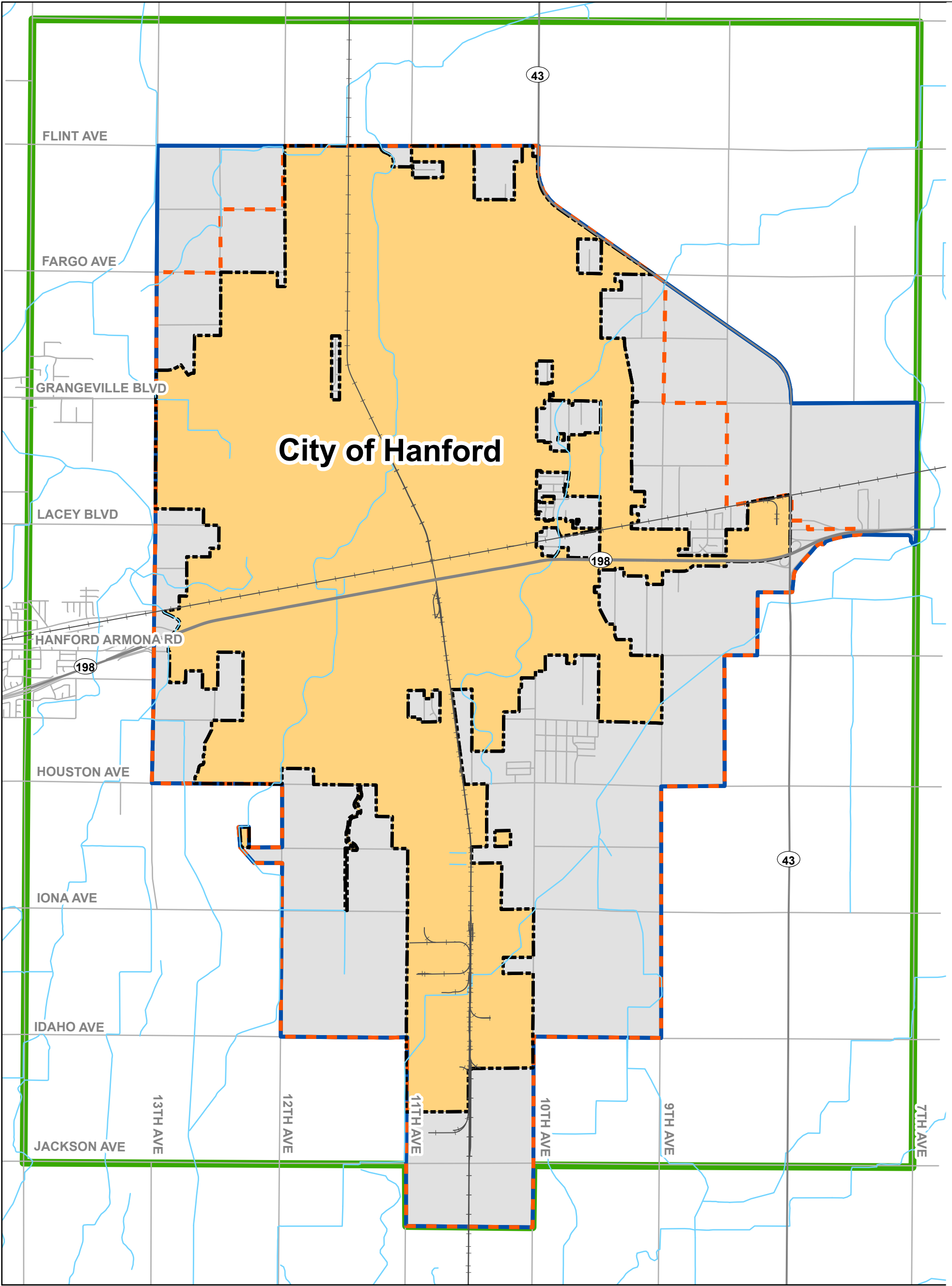
Planned Area Boundary: This boundary serves as the maximum extent of the area planned for urban development.

2035 Growth Boundary: This boundary serves as the extent of development with urban uses planned to occur during the 2015 to 2035 planning period.

It should be noted that for the purposes of this master plan, City Staff has requested improvements to be sized to account for the development of the Planned Area Boundary. Based on growth assumptions consistent with the 2017 General Plan Update, buildout of the Planned Area Boundary is not expected until approximately 2050.

2.3 WATERSHEDS AND DRAINAGE AREAS

The City of Hanford maintains a rich diversity of land use types, which contribute to a varying degree of stormwater runoff containment needs. Several creeks, a vast array of agricultural lands, small pockets of development, and the City itself comprises the wide array of runoff generation and conveyance within the Planned Area Boundary.



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Streets
- Waterways
- City Limits
- 2035 Growth Boundary
- Planned Area Boundary
- General Plan Study Area Boundary



Figure 2.1
Planning Area
Storm Drainage System Master Plan
City of Hanford



2.3.1 Watersheds

The City has four major watersheds within the Planned Area Boundary that collect and convey stormwater runoff within the City Planned Area Boundary. These watersheds were developed by the United States Department of Agriculture (USDA), and are as follows: Jacobs Slough, Sand Slough, Guernsey Slough, and Jacobs Ditch ([Figure 2.2](#)). The following are brief descriptions of the four watersheds:

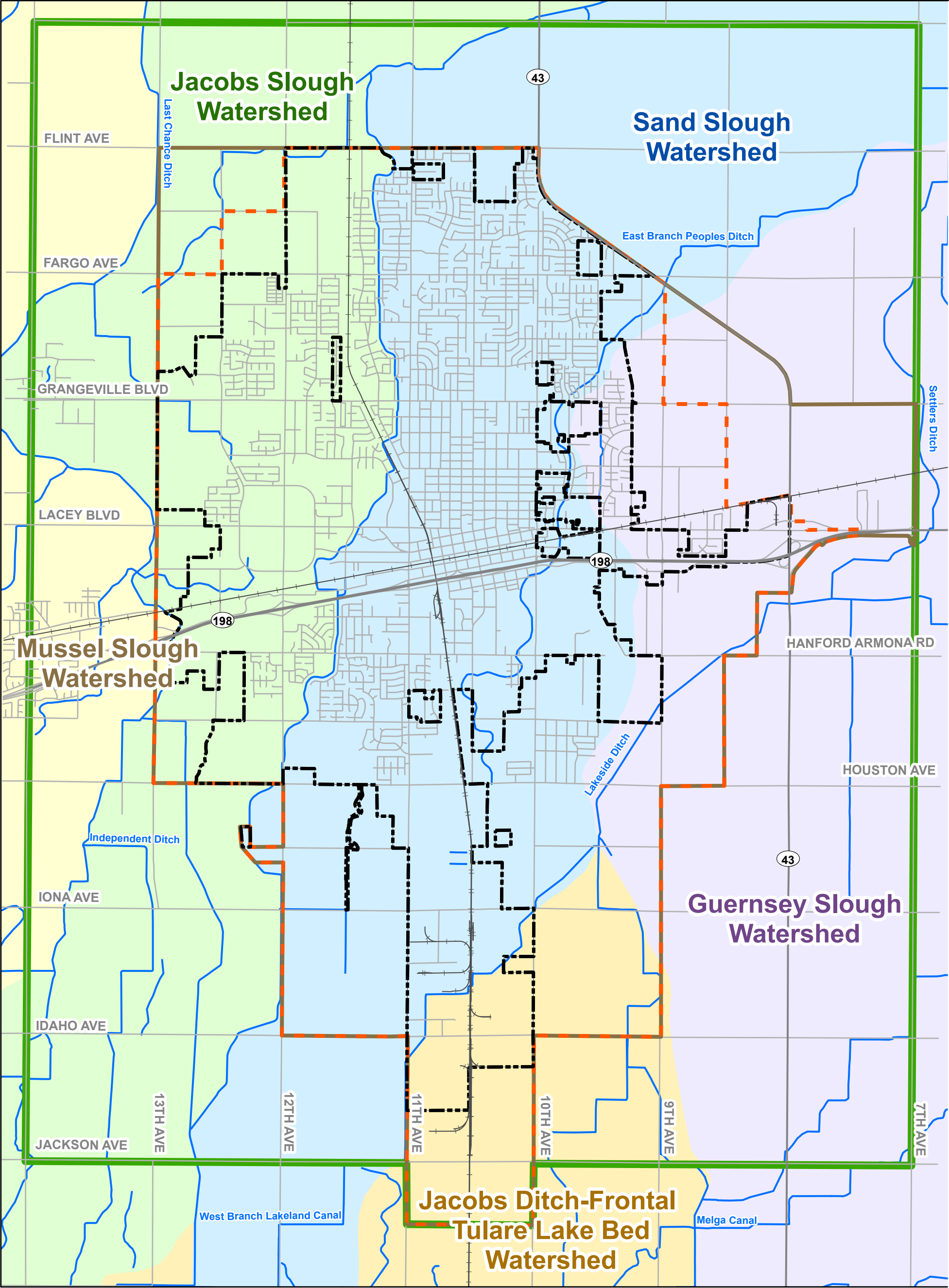
- **Jacobs Slough Watershed:** The Jacob Slough Watershed is generally defined as the area between Last Chance Ditch to the west and Peoples Ditch to the east. The Jacob Slough watershed generally covers the western half of the City limits.
- **Sand Slough Watershed:** The Sand Slough Watershed is generally defined as the area between Peoples Ditch to the west and the Peoples Ditch East Branch to the east. The Sand Slough Watershed generally covers the eastern half of the City limits.
- **Guernsey Slough Watershed:** The Guernsey Slough Watershed is generally defined as the area between Peoples Ditch East Branch to the west and Lakeside Ditch East Branch to the east. The Guernsey Slough watershed covers outlying portions of the study area along the eastern boundary of the City limits.
- **Jacobs Ditch Watershed:** The Jacobs Ditch Watershed is generally defined as the area between the Lemoore Canal to the west and Lakeside Canal East Branch to the east. The Tulare Lake canal forms the southern boundary of this watershed. The Jacobs Ditch watershed covers outlying portions of the City along the southern boundary of the City limits.

2.3.2 Drainage Areas

While watersheds are typically comprised of smaller drainage basins defined by topographical features, the drainage areas in the City of Hanford, due to the generally flat topography, do not necessarily align with the NRCS defined watersheds. The City's storm drainage system consists of many complex systems, which divert, retain, and dispose of stormwater runoff through a series of conveyance networks. These networks have different means of disposing of stormwater runoff, such as outfalling to East Peoples Ditch, the Central Peoples Ditch, or diversion to detention facilities, which hold stormwater runoff during peak rainfall events before being conveyed to the canals and sloughs throughout the City. Drainage areas for the City are discussed in further detail in a later chapter.

2.4 FLOODPLAINS

Floodplains are important for delineating the extent of water-level rise during major floods. Typically, floodplains are estimated for the historic 100-Year and 500-Year flood. Most of the floodplains for the City are located along the Peoples Ditch and Central Peoples Ditch. The creeks and rivers in and around the City Planned Area Boundary are shown on [Figure 2.2](#).



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Watersheds

- Guernsey Slough
- Sand Slough
- Mussel Slough
- Jacobs Slough
- Jacobs Ditch-Frontal Tulare Lake Bed

- City Limits
- General Plan Study Area Boundary
- Streets
- Waterways



Figure 2.2
Watersheds and Waterways
Storm Drainage System Master Plan
City of Hanford



The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps that show areas subject to flooding during major storm events. The flood risk information that is conveyed is based on historical data, including meteorological, hydrological, and hydraulic data for the specified area. The map creation is a result of the 1968 National Flood Insurance Program, aimed at reducing or preventing property owner losses due to flooding by allowing premiums to be paid for those in need of protection.

The flood boundaries for mapping purposes were not readily available in the development of this master plan; however, the National Flood Insurance Program has updated the flood mapping in June 2009, and mapping is available through FEMA.

2.5 EXISTING SERVICE AREA AND LAND USE

The City's water system services residential and non-residential lands within the City limits, as summarized on [Table 2.1](#). This service area includes:

- 6,059 net acres of developed lands inside the City limits.
- 2,765 net acres of undeveloped lands inside the City limits.
- 265 net acres of underutilized lands inside the City limits that are expected to redevelop.

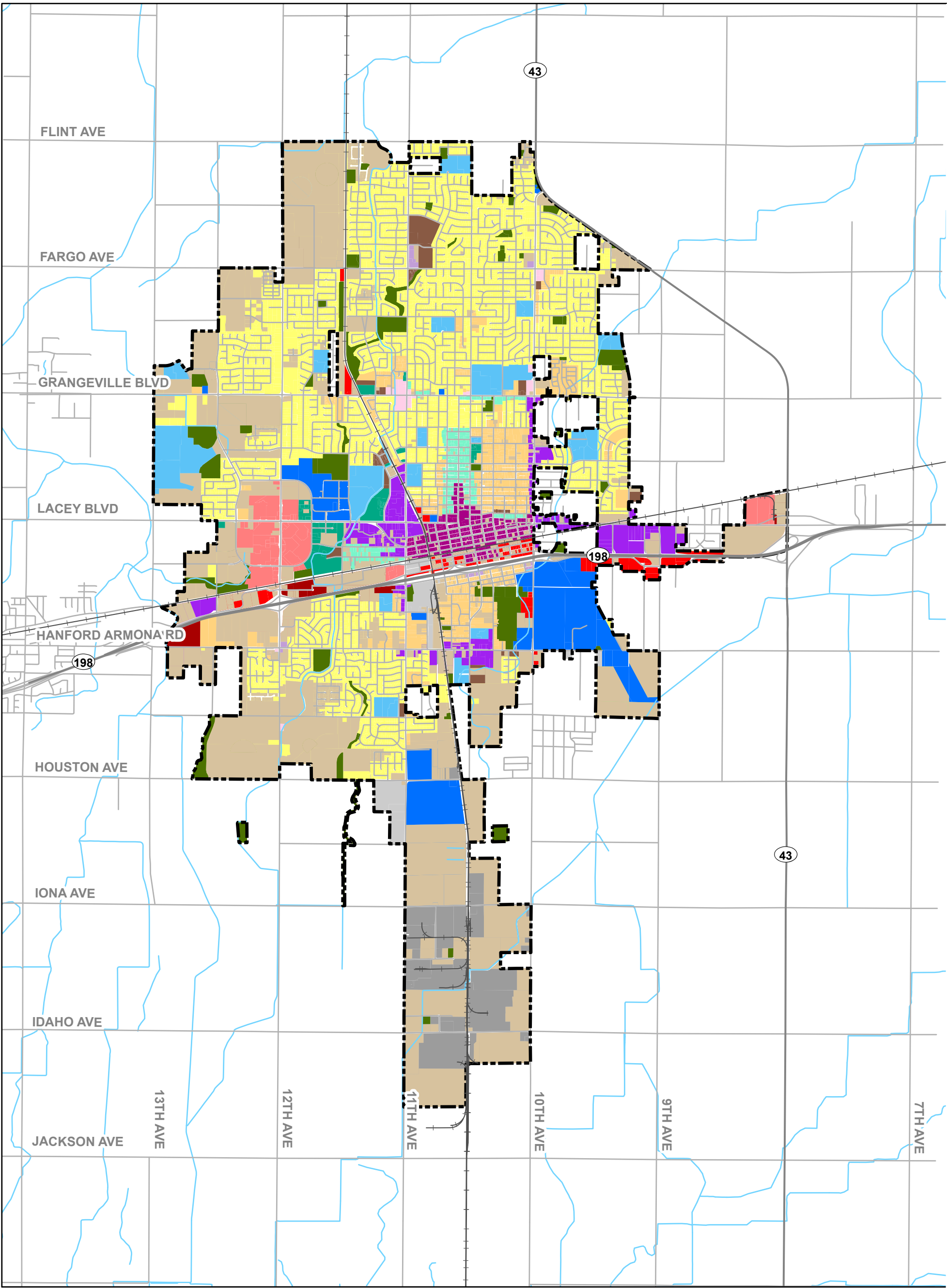
The existing land use statistics were based on the land use information provided by the consulting firm Quad Knopf (QK), which is summarized on [Figure 2.3](#). The land use information provided included developed and undeveloped areas, which were classified into the following subtypes:

- Net Area. Net areas are typically fully developed, and exclude street and other associated right of ways.
- Gross Area. Gross areas are typically large undeveloped parcels, which may be subdivided in future developments. Part of these areas will include street and other right of ways.

For the purpose of this master plan, existing and future land use was consolidated into net acres. In order to convert the areas that were identified as gross areas to net areas, the following reduction factors were applied:

- Single Family Residential land use types: 1 gross acre = 0.80 net acre
- Multi-Family Residential / Mixed Use land use types: 1 gross acre = 0.85 net acre
- Commercial / Industrial land use types: 1 gross acre = 0.90 net acre

The City's General Plan anticipates approximately 16,900 net acres of residential and non-residential development at ultimate buildout of the Planned Area Boundary. The land use designations utilized in this master plan are consistent with the Land Use Element of the City's General Plan, as shown on [Figure 2.4](#).



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

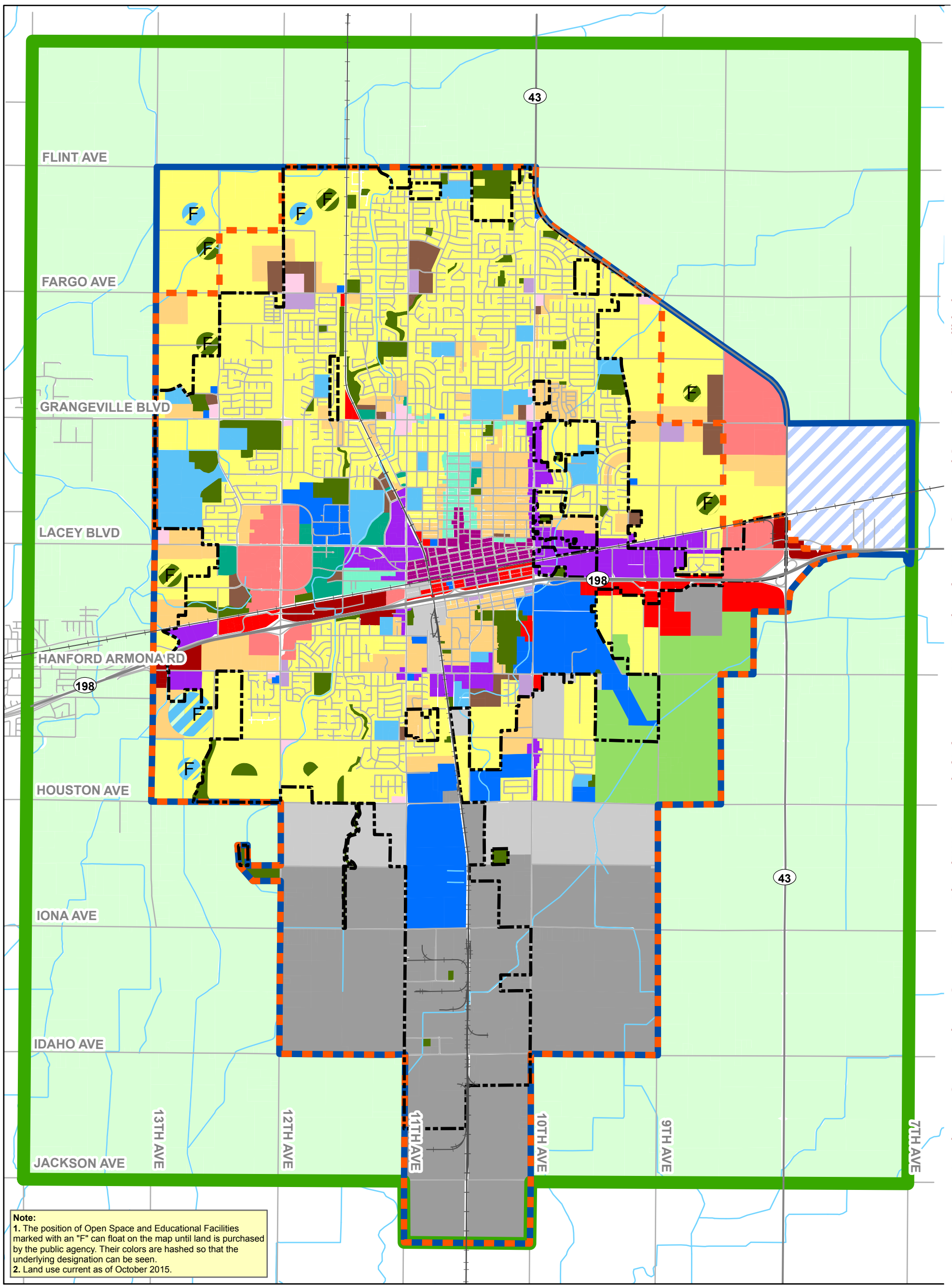
Legend

- | | | | |
|----------------------------|------------------------|------------------------|-----------|
| Low Density Residential | Office Residential | Airport Protection | Streets |
| Medium Density Residential | Office | Open Space | Waterways |
| High Density Residential | Light Industrial | Educational Facilities | |
| Neighborhood Commercial | Heavy Industrial | Public Facilities | |
| Regional Commercial | Neighborhood Mixed Use | Interest Area | |
| Service Commercial | Corridor Mixed Use | Vacant/Agriculture | |
| Highway Commercial | Downtown Mixed Use | City Limits | |



Figure 2.3
Existing Land Use
Storm Drainage System Master Plan
City of Hanford





Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- | | | | |
|----------------------------|------------------------|------------------------|----------------------------------|
| Low Density Residential | Office Residential | Airport Protection | Planned Area Boundary |
| Medium Density Residential | Office | Open Space | General Plan Study Area Boundary |
| High Density Residential | Light Industrial | Educational Facilities | Streets |
| Neighborhood Commercial | Heavy Industrial | Public Facilities | Highways |
| Regional Commercial | Neighborhood Mixed Use | Interest Area | Waterways |
| Service Commercial | Corridor Mixed Use | City Limits | |
| Highway Commercial | Downtown Mixed Use | 2035 Growth Boundary | |



Figure 2.4
2035 General Plan
Land Use
Storm Drainage System Master Plan
City of Hanford



Table 2.1 Existing and Future Development
Storm Drainage System Master Plan
City of Hanford

Land Use Classification	Existing Service Area				2035 Growth Boundary				Planned Area Boundary				Total in 2035 Growth Boundary	Total in Planned Area Boundary
	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)	Developed (acres)	Undeveloped (acres)	Underutilized (acres)	Subtotal (acres)	(net acres)	(net acres)
Residential														
Low Density	2,837	991	35	3,863	476	790	82	1,348	63	529	0	592	5,211	5,804
Medium Density	498	220	5	723	35	215	21	271	0	72	4	76	994	1,070
High Density	84	65	8	158	0	38	0	38	0	26	0	26	196	222
Subtotal - Residential	3,419	1,276	48	4,744	511	1,043	103	1,657	63	627	4	694	6,401	7,095
Mixed Use														
Office Residential	89	20	5	114	0	0	0	0	0	0	0	0	114	114
Neighborhood Mixed Use	12	42	0	54	0	15	0	15	0	0	0	0	70	70
Corridor Mixed Use	250	139	86	476	10	3	0	13	0	0	0	0	489	489
Downtown Mixed Use	81	15	28	123	0	0	0	0	0	0	0	0	123	123
Subtotal - Mixed Use	432	216	119	767	10	18	0	29	0	0	0	0	795	795
Non-Residential														
Neighborhood Commercial	27	26	0	53	8	11	1	20	0	0	0	0	73	73
Regional Commercial	216	154	6	376	0	0	0	0	18	163	6	188	376	564
Service Commercial	103	47	7	156	56	63	0	119	0	0	0	0	275	275
Highway Commercial	48	68	0	115	16	4	12	32	0	0	0	0	147	147
Office	88	30	1	119	0	0	0	0	0	0	0	0	119	119
Light Industrial	105	20	40	166	83	520	36	640	0	0	0	0	806	806
Heavy Industrial	376	535	33	943	211	2,380	227	2,817	0	0	0	0	3,761	3,761
Airport Protection	0	125	0	125	111	501	63	674	0	0	0	0	799	799
Educational Facilities	445	110	7	562	11	17	0	28	0	80	0	80	590	669
Public Facilities	438	56	0	494	3	13	0	16	0	0	0	0	510	510
Open Space	362	105	4	471	41	159	0	200	0	17	0	17	671	688
Open Space with Irrigation	16	41	4		0	105	0		0	17	0			
Open Space without Irrigation	346	65	0		41	54	0		0	0	0			
Interest Area	0	0	0	0	0	0	0	0	49	509	43	601	0	601
Subtotal - Non-Residential	2,208	1,274	98	3,580	539	3,668	340	4,547	68	769	49	886	8,127	9,012
Total														
	6,059	2,765	265	9,090	1,060	4,729	443	6,233	131	1,396	53	1,580	15,323	16,903

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CHAPTER 3 – SYSTEM PERFORMANCE AND DESIGN CRITERIA

This chapter presents the City's planning and design criteria that were used for evaluating hydrologic and hydraulic systems within the City's drainage watershed.

3.1 HYDROLOGIC CRITERIA

Hydrologic criteria are developed to characterize the flood routing of rainfall runoff in a defined drainage system. Akel Engineering Group retained the services of Hydmet Inc. to complete the hydrologic evaluation of this project. This section discusses the precipitation characteristics, the design storms used in this master plan, and soil imperviousness.

3.1.1 Precipitation Characteristics

A dominating factor in the generation of rainfall in California, including the Central California interior and the City, is the oscillation of the semi-permanent high pressure area of the north Pacific Ocean. This high pressure center moves north in the summer and south in the winter, adjusting the flow of moisture into California. In the winter, when the high pressure center is south, moisture can move south and bring widespread rainfall.

In certain instances when circulation patterns allow for subtropical moisture to enter California from a southwesterly direction, rainfall amounts can be quite heavy, and can result in widespread flooding. The City receives an average 8.3 inches of total precipitation per year. The City's wet weather season typically starts in November and ends in April.

3.1.2 Design Storms

Design storms are typically defined by three important features: depth, duration and frequency.

- **Depth.** The depth of the storm identifies the amount of precipitation occurring during a specific time interval.
- **Duration.** The duration of the storm identifies how long it lasted. The 1995 Storm Drainage System Master Plan recommended two different design storms for evaluation of conveyance facilities, a design storm for evaluation of detention basins, and additional storm duration for evaluation of retention facilities.

Design storm durations for the City are listed as follows:

- o **24-Hour Storm**, which is used to represent a typical rainfall event for the City. This storm is used for evaluating conveyance facilities.

- o **2-Day Storm**, which is used as a means for evaluating the performance of detention facilities in the City, and the response to prolonged periods of precipitation.
- o **10-Day Storm**, which is used as a means for evaluating the performance of retention facilities in the City, and the response to prolonged periods of precipitation.
- o **30-Day Storm**, which is used as a means for evaluating the structural integrity of retention facilities in the City, and the response to prolonged periods of precipitation.
- **Frequency.** The frequency of the storm is the recurrence interval at which the storm may occur at a given area.

This master plan includes the precipitation depth-duration-frequency table as provided in NOAA Atlas 14 Volume 6 Version 2 (**Table 3.1**). The depth-duration-frequency values reflect rainfall events specific to the City and lists precipitations, in inches and inches per hour, for return intervals up to 100 years.

The design storms used in this evaluation, and which are specific to the City, are listed on **Table 3.2**. The values used in evaluating the storm drainage system are as follows:

- **2-year 6-hour.** This design storm is used to evaluate existing residential drainage facilities as well as to size future ones. This storm was quantified at 0.68 inches in the analysis specific to the City of Hanford.
- **5-year 6-hour.** This design storm is used to evaluate existing commercial drainage facilities, as well as size future ones. This storm was quantified at 0.86 inches in the analysis specific to the City of Hanford.
- **100-year 2-day.** This design storm is used to evaluate existing and future detention basins. This storm was quantified at 4.00 inches in the analysis specific to the City of Hanford.
- **100-year 10-day.** This design storm is used to evaluate existing retention basins and size future ones. This storm was quantified at 5.69 inches in the analysis specific to the City of Hanford.
- **100-year 30-day.** This design storm is used to evaluate the ability of existing and future retention and detention basins to mitigate development flooding. This storm was quantified at 8.48 inches in the analysis specific to the City of Hanford.

Table 3.1 Precipitation Depth-Duration-Frequency Data

Storm Drainage System Master Plan

City of Hanford

Duration	2-Year		5-Year		10-Year		100-Year	
	(in)	(in/hr)	(in)	(in/hr)	(in)	(in/hr)	(in)	(in/hr)
5 min	0.08	0.96	0.10	1.20	0.13	1.56	0.23	2.76
10 min	0.12	0.72	0.15	0.90	0.18	1.08	0.34	2.04
15 min	0.14	0.56	0.18	0.72	0.22	0.88	0.41	1.64
30 min	0.20	0.40	0.25	0.50	0.30	0.60	0.56	1.12
1 hr	0.27	0.27	0.34	0.34	0.42	0.42	0.78	0.78
2 hr	0.40	0.20	0.50	0.25	0.59	0.30	1.02	0.51
3 hr	0.49	0.16	0.62	0.21	0.73	0.24	1.22	0.41
6 hr	0.68	0.11	0.86	0.14	1.02	0.17	1.64	0.27
12 hr	0.92	0.08	1.21	0.10	1.45	0.12	2.29	0.19
24 hr	1.22	0.05	1.66	0.07	2.02	0.08	3.19	0.13
2 day	1.50	0.03	2.06	0.04	2.50	0.05	4.00	0.08
10 day	2.22	0.01	2.89	0.01	3.46	0.01	5.69	0.02
30 day	3.27	0.01	4.26	0.01	5.12	0.01	8.48	0.01

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Note:

1. Source: NOAA Atlas 14 Volume 6 version 2 for station "HANFORD 1 S".

Table 3.2 Relevant Design Storms

Storm Drainage System Master Plan City of Hanford

Design Criteria ¹	Design Storm
2 year - 6 hour	Used to evaluate existing and size future residential drainage facilities. Quantified at 0.68 inches.
5 year - 6 hour	Used to evaluate existing and size future commercial drainage facilities. Quantified at 0.86 inches.
100 year - 2 day	Used to evaluate existing and future detention basins. Quantified at 4.00 inches.
100 year - 10 day	Used to evaluate existing and future retention basins. Quantified at 5.69 inches.
100 year - 30 day	Used to evaluate potential structural damage to retention basins due to floodwater accumulation. Quantified at 8.48 inches.

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Note:

1. Source: City of Hanford 1995 Storm Drainage System Master Plan

3.1.3 Soil Imperviousness

In determining the quantity of rainfall runoff generated from a given land use type, three factors dictate the volume of water that enters the storm drainage system: effective imperviousness, ineffective imperviousness, and effective pervious area.

- **Effective Impervious.** An effective impervious area is the percentage of impervious area that generates stormwater runoff entering the storm drainage system. The effective impervious percentages are based on land uses identified in the General Plan, and are included in [Table 3.3](#). It should be noted that the effective percent-impervious values have been increased from the 1995 SDMP for consistency with current City landscaping practices.
- **Ineffective Impervious.** An ineffective impervious area is land that has no flow path, or the flow path results in delayed timing of the runoff, to the storm drainage system. These areas are typically noted as residential backyards, pools, or dense shrub landscaping.
- **Effective Pervious.** Effective pervious areas contribute to runoff based on the National Resource Conservation Service (NRCS) Soil Classification Group, and the subsequent SCS Curve Number.

3.2 HYDRAULIC CRITERIA

The hydraulic criteria for the storm drainage system were used to evaluate the capacity requirements of conveyance facilities, retention basins, and pump stations.

3.2.1 Gravity Conveyance Facilities

Gravity pipeline capacities depend on several factors including: material and roughness of the pipe, the limiting velocity and slope, and the maximum allowable depth of flow. The hydraulic modeling software used for evaluating the capacity adequacy of the City storm drainage system was based on the Hydrologic Engineering Center Flood Hydrograph Package (HEC-1). This software incorporates hydrologic routing tools for overland flow, precipitation, and Manning's Equation to simulate pipe flow.

Storm Hydraulic Design

The City's storm drainage system was evaluated using a 5-year 6-hour design storm for pipelines conveying runoff from non-residential land use, and using a 2-year 6-hour design storm for pipelines conveying only residential runoff ([Table 3.4](#)). In future development areas planned to contain both residential and non-residential land use types, the 5-year 6-hour design storm was used for evaluation and the sizing of improvements. During the hydraulic analysis of the 100-year 30-day design storm, City streets were sometimes allowed to flood to provide reasonable conveyance and storage capacity, thus reducing additional costly improvements.

Table 3.3 Effective Percent Imperviousness and Infiltration Losses

Storm Drainage System Master Plan
City of Hanford

Land Use Classification	Effective Imperviousness (%)	Const. Loss (in/hr)
Residential¹		
Low Density	50	0.4
Medium Density	55	0.3
High Density	60	0.3
Mixed Use		
Office Residential	60	0.3
Neighborhood Mixed Use	60	0.3
Corridor Mixed Use	60	0.3
Downtown Mixed Use	70	0.3
Non-Residential		
Neighborhood Commercial	90	0.2
Regional Commercial	90	0.2
Service Commercial	90	0.2
Highway Commercial	90	0.2
Office	90	0.3
Light Industrial	80	0.2
Heavy Industrial	80	0.2
Airport Protection	10	0.5
Educational Facilities	70	0.3
Public Facilities	70	0.3
Open Space	10	0.5
Interest Area	90	0.2

Table 3.4 Hydrologic and Hydraulic Design Criteria

Storm Drainage System Master Plan

City of Hanford

Hydrology and Hydraulics Design Criteria	
Ponding Basins (Existing and Future)	
Design Storm	
Detention	100 year - 2 day
Retention	100 year - 10 day
Flooding for Developments	All Basins: Development pad elevations shall be designed to mitigate flood damage from a 100 year - 30 day event. Allowable flooding up to 1.5 feet above the gutter flowline.
Retention	Existing/Future: Responsible for full retention of design storm. No flooding of street during design storm.
Detention	Existing/Future: Responsible for full detention of design storm. No flooding in streets during design storm. Discharge to ditch or other drainage facility upon approval of City engineer.
Pipelines	
Design Storm	Residential: 2 year - 6 hour Commercial: 5 year - 6 hour
Street Flooding	Existing: Allowable flooding up to 1.5 feet above the gutter flowline Future: No flooding in streets during design storm
Minimum Pipe Size	12 inches
Pump Stations	
Detention Pumps	Sizing requirements based on emptying detention basin in 5 to 7 days for the design storm
Direct Discharge Pumps	Sizing requirements based on design flow, with allowable flooding of up to 1.5 feet above the gutter flowline at the lowest system elevation

Manning's Equation for Pipe Capacity

The Continuity Equation and the Manning's Equation for steady-state flow are used for calculating pipe capacities in open channel flow. Open channel flow can consist of either open conduits or, in the case of gravity pipelines, partially full closed conduits. Gravity full flow occurs when the conduit is flowing full but has not reached a pressure condition.

- Continuity Equation: $Q = V A$

Where:

Q = peak flow, in cubic feet per second (cfs)

V = velocity, in feet per second (fps)

A = cross-sectional area of pipe, in square feet (sq. ft.)

- Manning Equation: $V = (1.486 R^{2/3} S^{1/2})/n$

Where:

V = velocity, in feet per second (fps)

n = Manning's roughness coefficient

R = hydraulic radius, area divided by wetted perimeter (ft)

S = slope of pipe, in feet per foot (ft/ft)

Manning's Roughness Coefficient (n)

The Manning Roughness Coefficient 'n' is a friction coefficient that is used in the Manning formula for flow calculation in open channel flow. In conveyance systems, the coefficient can vary between 0.011 and 0.017 depending on pipe material, size of pipe, depth of flow, root intrusion, smoothness of joints, and other factors.

For the purpose of this evaluation, an "n" value of 0.013 was used for both existing and proposed gravity pipes.

3.2.2 Retention and Detention Basins

The capacities of existing detention basins were evaluated to meet the runoff requirements of a 100-year 2-day design storm, while the retention basins were evaluated to meet the requirements of the 100-year 10-day storm event. The 100-year 30-day storm was used to evaluate the potential for structural damage to homes and businesses. The criterion does not allow for percolation during these storm events.

3.2.3 Pump Stations

Pump stations were sized to empty basin volume in five to seven days following the 100-year 2-day design storm. Pump station sizing requirements may be reduced based on available sump storage at the pump station. It should be noted that under normal operating conditions, pump stations should include a contingency for having the equivalent of the largest capacity pump out of service as a standby. During the 100-year storm, the standby contingency is waived.

3.3 LAND DEVELOPMENT REVIEW

For the purposes of evaluating land development, and as the hydrological models may not be available for all developments, it is recommended that the following steps be taken to evaluate system impacts:

Step 1. Evaluate the land use for consistency with the General Plan land use incorporated in this Master Plan evaluation.

- If the Land Use is consistent. If the land use is consistent with the General Plan, see step 2.
- If the Land Use is different. As part of the General Plan Amendment, a hydrologic and hydraulic evaluation should be completed by the developer's engineer, and confirmed through the use of the City's hydrology models by City staff or preferred other.

Step 2. Confirm that development engineering evaluation has used Effective Percent Impervious and Rainfall values consistent with the Design Criteria of this Master Plan. If the Soil Conservation Service method is used for evaluation, also check the consistency of the Constant Loss values. It is preferred that, unless there is a site-specific soil study, a "D" soil should be used in evaluations.

Step 3. Complete the evaluation using a City-preferred hydrologic routing method. Please note that all evaluations are subject to the approval of the City Engineer.

CHAPTER 4 – EXISTING FACILITIES AND MODEL DEVELOPMENT

This chapter defines the hydrologic delineation of storm drainage basins, routing to their respective receiving facilities, and includes the hydrologic model development. Additionally, this chapter includes an overview of the storm drainage system, and the model development.

4.1 HYDROLOGIC SYSTEM OVERVIEW

Factors critical to the hydrologic model development include watersheds, drainage basins within each watershed, overland flow routing within drainage subbasins, and conveyance that makes full use of pipes as well as streets for routing 100-year design storm events. This section discusses the existing watersheds, and the delineation of drainage basins and subbasins.

4.1.1 Watersheds

Watersheds within the City Planned Area Boundary and outlying areas were defined based on the receiving tributary creek or river system, with topographical or physical barriers dictating the limits of the watershed. The City has four major watersheds within the Planned Area Boundary that collect and convey stormwater runoff. These watersheds were developed by the United States Department of Agriculture (USDA), and are as follows: Jacobs Slough, Sand Slough, Guernsey Slough, and Jacobs Ditch ([Figure 2.2](#)).

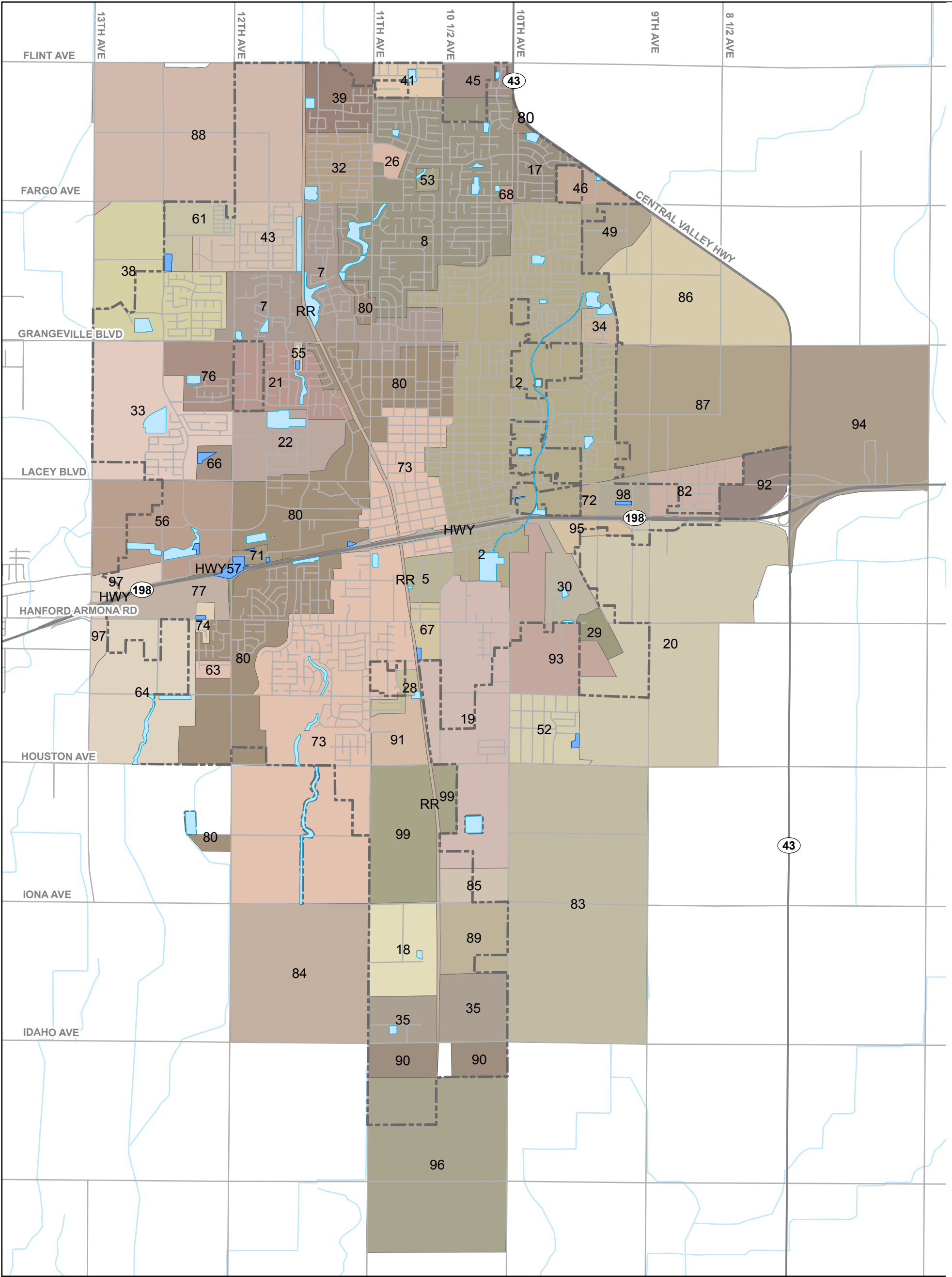
4.1.2 Drainage Basins

Drainage basins are typically defined by existing or natural conveyance systems within each watershed. As the City has a relatively flat topography, drainage basin boundaries are largely dictated by street drainage and existing facilities that convey stormwater to a set discharge, and may not coincide with the delineation of watershed boundaries. Drainage basins in the City may discharge to retention basins, pump stations, or direct outfalls to canals and sloughs located throughout the City.

Each drainage basin was assigned a uniquely coded identifier intended for cross referencing purposes. The coded identifier reflects the name of the receiving water body or storm drainage infrastructure that receives the stormwater. This project divided the City into approximately 60 drainage basins shown on [Figure 4.1](#).

4.1.3 Drainage Subbasins

Each basin shown on [Figure 4.1](#) was further divided into smaller subbasins for the purpose of routing hydrologic stormwater flows as the connectivity within each drainage basin is very critical for accurate analysis. These individual subbasins are documented on [Figure 4.2](#).



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

-  Drainage Systems
-  City Storm Basins
-  Private Storm Basins
-  City Limits
-  Streets
-  Waterways



Update: September 6, 2016

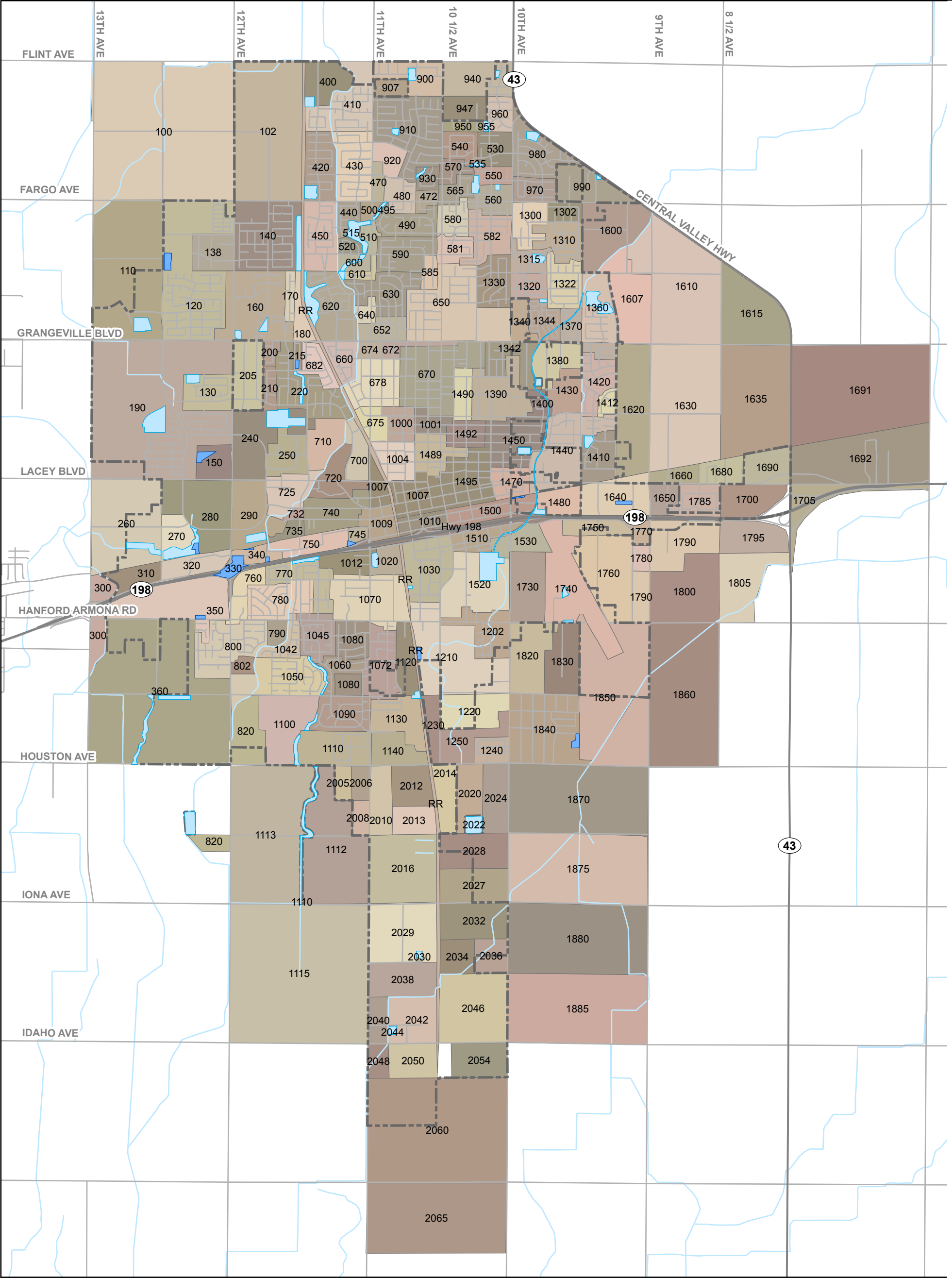
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Figure 4.1
Existing Storm
Drainage Systems
Storm Drainage System Master Plan
City of Hanford





Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Drainage Subbasins
- City Storm Basins
- Private Storm Basins
- City Limits
- Streets
- Waterways



Update: September 6, 2016

0 0.25 0.5 1 Mile

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Figure 4.2
Existing Storm
Drainage Subbasins
Storm Drainage System Master Plan
City of Hanford



Each individual subbasin included hydrologic and hydraulic modeling information to address Overland Flow Routing and Combined Pipe Street Conveyance.

- **Overland Flow Routing.** This element consists of routing rainfall runoff to the stormwater conveyance system. Overland flow routing is dependent on land use and physical barriers blocking the flow paths within the drainage basins. In this analysis, the Kinematic Wave Equation was used to calculate overland flow, and was built into the developed hydrology model.
- **Combined Pipe Street Conveyance.** During typical storm events, streets are used to convey rainfall runoff from house gutters to nearest catchments where it enters the storm collection system.

4.2 HYDRAULIC SYSTEM OVERVIEW

The City's storm drainage system includes conveyance facilities, outfalls, pump stations, and retention basins. This section discusses the components of the storm drainage system.

4.2.1 Conveyance System

The modeled storm drainage system includes approximately 65 miles of stormwater conveyance to local retention systems or ditches ([Table 4.1](#)). Pipe sizes range from 8-inches to 60-inches in diameter, and are shown on [Figure 4.3](#). The storm conveyance system is predominantly composed of 12-, 15-, and 18-inch pipelines.

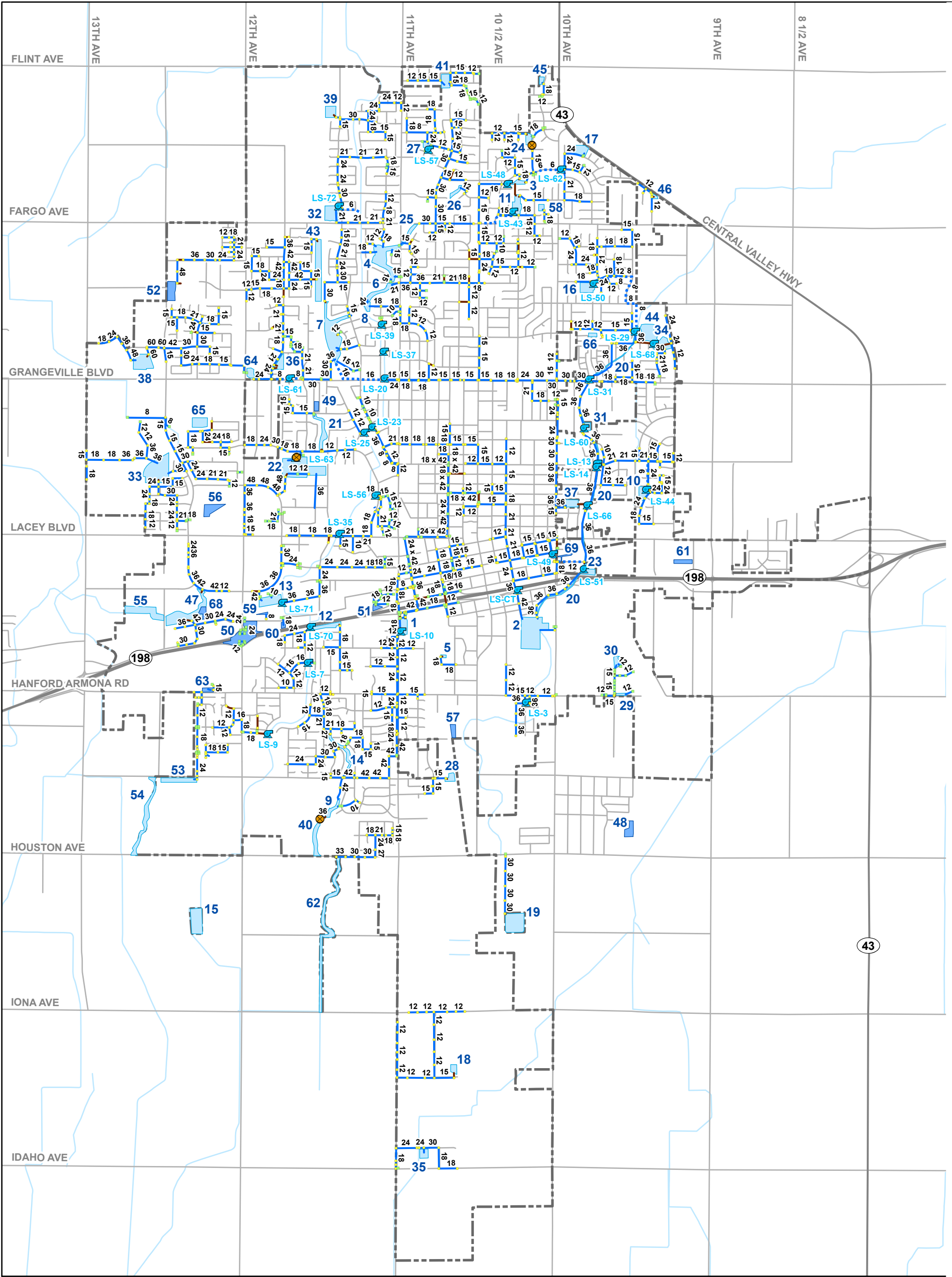
4.2.2 Detention and Retention Basins

The City currently operates approximately 60 detention and retention basins. These facilities include slough remnants, which are identified on [Figure 4.4](#). The other basins located within the existing service area are man-made detention and retention facilities, and serve as dedicated stormwater receiving facilities, or dual-purpose park facilities, that are allowed to fill with excess stormwater runoff during the wet season. The stormwater receiving facilities are documented on [Figure 4.5](#). These drainage basins range in size from approximately 3.5 acre-feet (AF) to 94 AF ([Table 4.2](#)).

4.2.3 Pump Stations

The City currently owns and operates 30 pump stations within the City limits ([Figure 4.3](#)). The pump stations vary in size and [Table 4.3](#) lists each individual pump station, including information regarding each pump station as provided by City staff.

The City's pump stations discharge to varying locations, which include canals, pipelines, and other conveyance facilities located throughout the City. [Figure 4.6](#) documents the existing storm drainage pump stations in the City's storm drainage system.



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

- Existing System

Force Mains

Gravity Pipes

Lift Stations

Valves

Catch Basins

Manholes

Unknown Pipe Size

City Storm Basins

Private Storm Basins

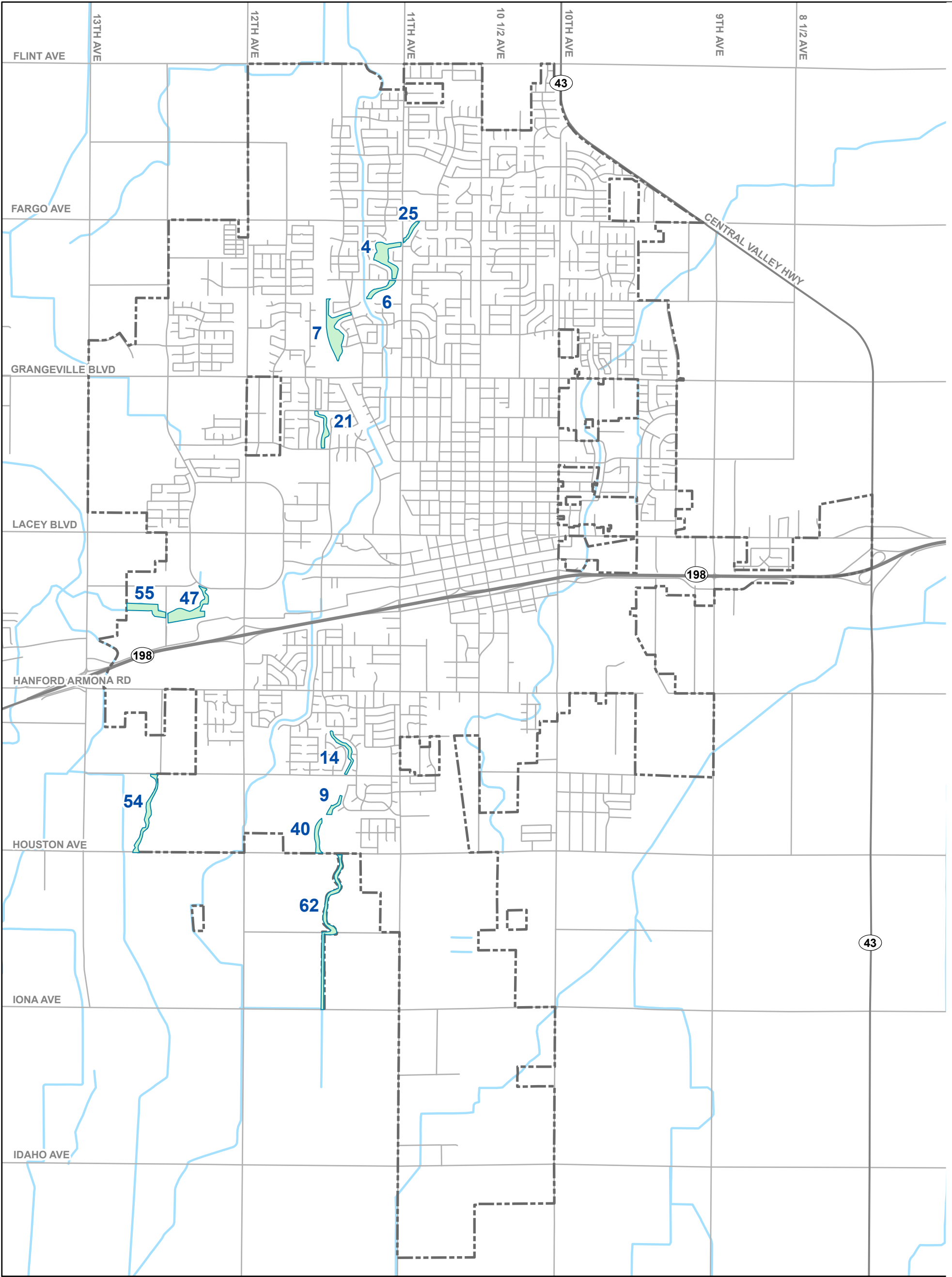
City Limits

Streets

Waterways

Figure 4.3
Existing Storm
Drainage System
Storm Drainage System Master Plan
City of Hanford





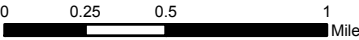
Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

-  Storm Sloughs
-  Waterways
-  Streets



Update: September 6, 2016

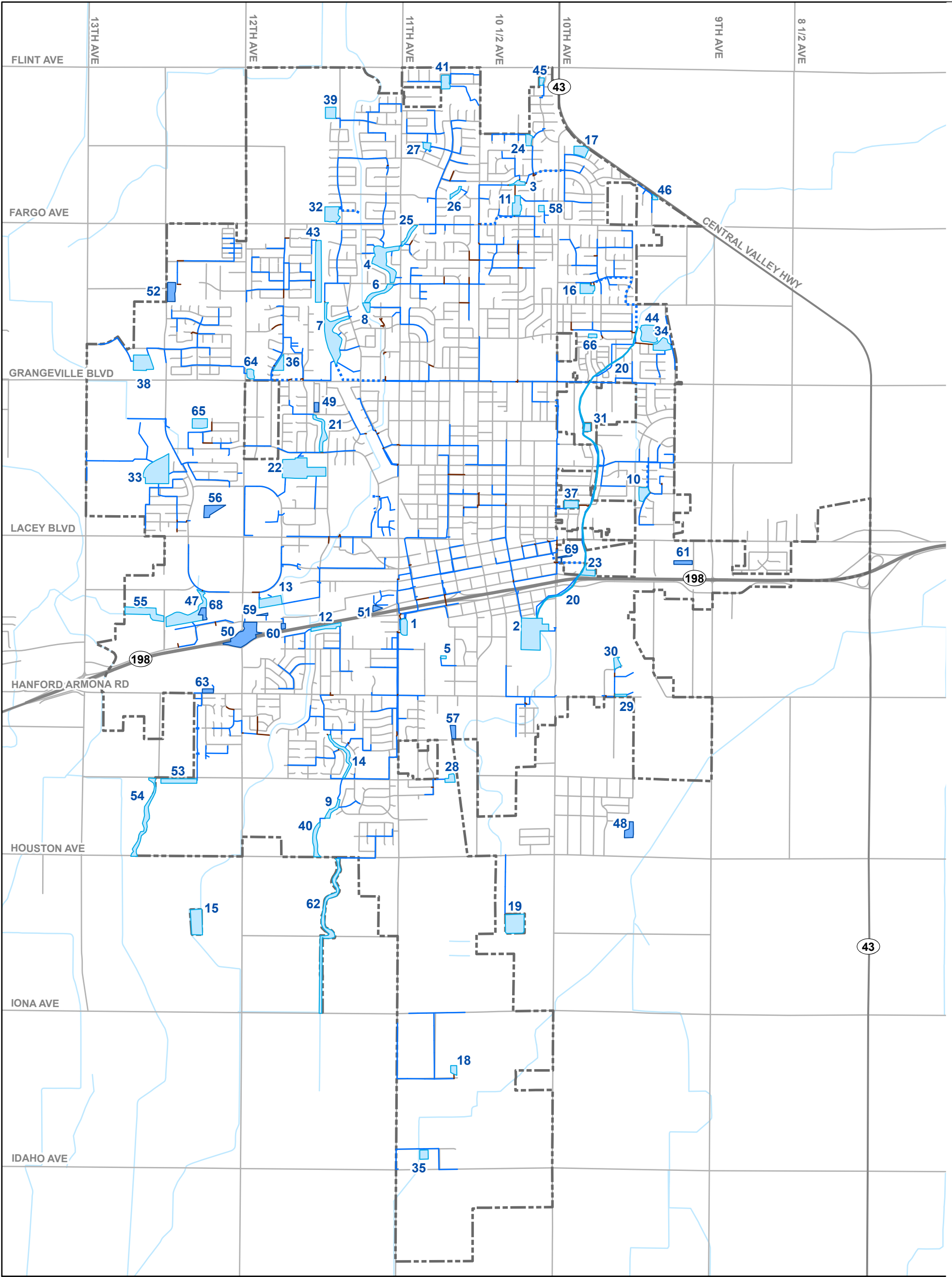


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Figure 4.4
Large Waterways

Storm Drainage System Master Plan
City of Hanford





Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

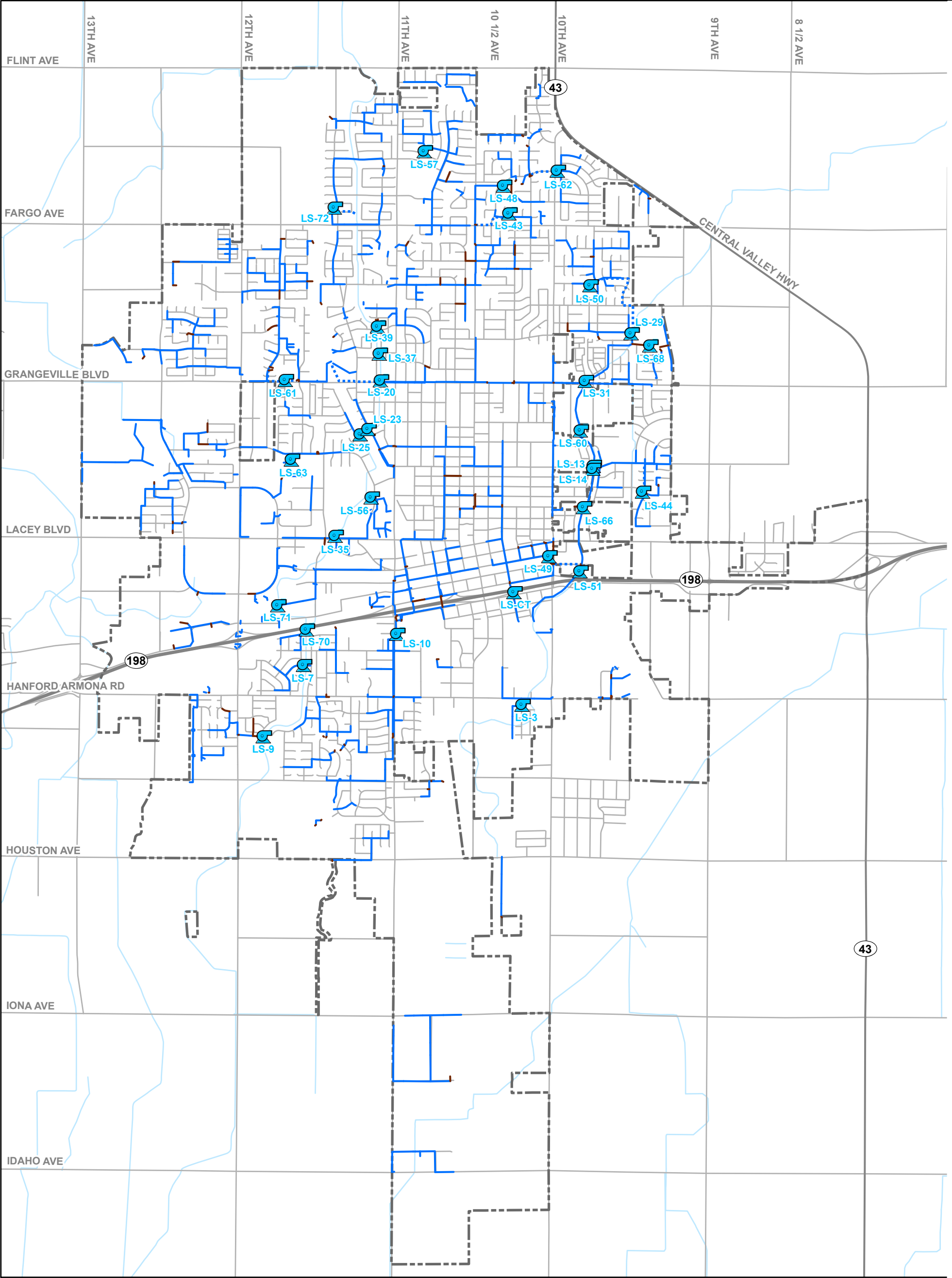
- Gravity Pipes
- Force Mains
- Unknown Pipe Size
- City Storm Basins
- Private Storm Basins
- City Limits
- Streets
- Waterways



Figure 4.5
Existing Storm Basins

Storm Drainage System Master Plan
City of Hanford





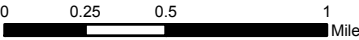
Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

-  Lift Stations
-  Gravity Pipes
-  Force Mains
-  Unknown Pipe Size
-  City Limits
-  Streets
-  Waterways



Update: September 6, 2016



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Figure 4.6
Existing Lift Stations

Storm Drainage System Master Plan
City of Hanford



Table 4.1 Existing Modeled Pipe Inventory
Storm Drainage System Master Plan
City of Hanford

Size (in)	Length (in)	(mi)
8	3,796	0.7
10	4,444	0.8
12	70,376	13.3
15	68,842	13.0
16	2,622	0.5
18	63,302	12.0
21	19,541	3.7
24	37,008	7.0
27	415	0.1
30	23,997	4.5
33	313	0.1
36	30,073	5.7
42	10,717	2.0
48	3,414	0.6
60	1,165	0.2
Unknown	7,099	1.3
Total	347,126	65.7

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3/30/2016

Table 4.2 Existing Drainage Basin Inventory
Storm Drainage System Master Plan
City of Hanford

Basin No.	Const. Date	Name	Location	Type	Capacity (AF)	Area (AC)	Comments
1	1967	Beacon Basin	Third St. and 11th Ave.	Excavated	21.1	3.7	Detention basin
2	1963/91	Brown St. Basin	First St. and Brown St.	Excavated	55.4	8.3	Retention basin
3	1961/90	Encore Basin	Encore Dr. and Caronette Ln.	Natural/Excavated	4.3	1.1	Detention basin
4	1968	Mussel Slough	Between Cortner St. and 11th Ave.	Natural	22.7	8.0	Detention slough (Weir structure required for storage indicated)
5 ³	1969	Scott St. Basin	West end of Scott St. and S.F.R.R.	Excavated	7.2	1.1	Retention basin
6		Hidden Valley Park Basin	Between Cortner St. and Laura Ln. Basin	Natural	18.6	3.2	Detention slough (Weir structure required for storage indicated)
7	1993	Mussel Slough Basin	West of Peoples Ditch - behind YMCA	Excavated	92.7	16.4	Peoples Ditch Co. reserves 35 AF - Retention basin
8	1960	Laura Lane Basin	Laura Ln. at People's Ditch - south of Hidden Valley	Excavated	5.1	0.9	Retention basin
9	1958	Bonney View Slough	West side of Fern Dr. north of Evergreen Dr.	Natural	6.7	2.0	Detention Slough (vol. per 1984 S.D. Master Plan)
10	1980	Hye Park Basin	Myrtle St. and Connie St.	Excavated	8.0	2.6	Detention basin
11	1981	Redwood basin	Redwood St. and Kensington St.	Excavated	14.9	3.7	Detention basin
12	1984/93	Caraway Village Basin	North end of Kimball at Hwy 198	Excavated	9.5	2.6	Retention slough
13	1992	Hanson Basin	Hanford Mall (Behind Sequoia Inn)	Excavated	41.7	5.6	Retention basin
14	1993	Sand Slough Basin	N. of Hume Ave. between Echo and Butternut	Excavated	27.7	5.0	Detention basin
15	1990	Sanchez Basin (New Deal)	Southwest of Houston and 12th Ave, along People's Ditch	Excavated	41.0	8.2	Retention basin
16	1980	Lakewood Basin	Lakewood and Neil Way	Excavated	19.5	4.5	Detention basin
17	1994	Sherwood Basin	Sherwood Dr. and Pinecastle Dr.	Excavated	13.6	3.0	Retention basin
18	1974	Kings Industrial Park	Industry Ave. and S.F.R.R.	Excavated	5.3	1.6	Retention basin
19	1998	Houston Basin	2,000' south of Houston Ave. between 10th & 10 1/2 Ave.	Excavated	72.3	9.5	Retention basin
20		East Branch Ditch	Between Leland Ave. and Houston Ave.	Natural	50.0	9.1	Piped and open channel ditch combined (4.01 +/- miles)
21	1977	South Mussel Slough	Greenfield and Campus	Natural	8.4	4.0	Retention Slough (vol. per 1984 S.D. Master Plan)
22	1977/99	County Complex/YAC Basin	Greenfield and Princeton Ave.	Excavated	94.0	22.3	Retention basin (East basin property owned by county)
23	1989	Fifth St. Basin	Fifth St. east of 10th Ave.	Excavated	13.3	2.0	Detention basin
24	1990/94	Lone Oak Basin	Fairmont Dr. north of Sherwood Dr.	Excavated	5.6	1.7	Retention basin
25	1983	Mussel Slough (Behind Oakbridge Condos)	Between Fargo and 11th Ave.	Natural	12.3	2.3	Retention basin (vol. per 1984 S.D. Master Plan)
26	1978	Solar Est. Basin (Mussel Slough) Private	Sun / Star Estates	Natural	5.0	1.7	Privately owned
27	1995	Quail Run Basin	Windsor St. and Fir St.	Excavated	4.6	1.3	Detention basin
28	1995	Topper Estates Basin	Hume Ave. east of Shepard Dr.	Excavated	7.0	1.4	Retention basin/County Basin (Shared) Not City maintained
29		Airport Basin No. 1 (South)	City Airport adjacent to Hanford Armona Rd.	Excavated	10.0	2.0	Retention basin
30	1984	Airport Basin No. 2 (North)	City Airport north of Hangers	Excavated	4.2	0.9	Retention basin
31	1997	Beulah Basin	Beulah and Cameron St.	Excavated	8.0	1.5	Detention basin
32	1999	Stonecrest Basin	Fargo Ave. and Glacier St.	Excavated	36.6	6.8	Retention basin
33	1999	Country Crossing Basin	Northwest of Country Crossing subdivision	Excavated	40.0	13.0	Retention basin (expanded to include Ashton Park)
34	2001	Crystal Springs (Part of Freedom Park Basin)	West side of 9 1/4 Ave. between Grangeville and Leland	Excavated	7.1	2.1	Retention basin
35	2002	Energy Basin	Energy St. east of 11th Ave.	Excavated	16.0	2.2	Retention basin
36	2002	Fitzgerald Basin	Fitzgerald Dr. north of Grangeville Blvd.	Excavated	9.6	1.8	Detention basin
37	2002	Whitney Basin	Whitney St. and Kruger St.	Excavated	19.0	2.6	Detention basin
38	2003	Silver Oaks Basin	North side of Grangeville Blvd. west of Centennial Dr.	Excavated	43.3	7.2	Retention basin

Table 4.2 Existing Drainage Basin Inventory
Storm Drainage System Master Plan
City of Hanford

Basin No.	Const. Date	Name	Location	Type	Capacity (AF)	Area (AC)	Comments
39	2003	Glacier Basin	Glacier Way south of Flint Ave.	Excavated	30.0	3.0	Retention basin
40	2004	Live Oak Basin	North side Houston Ave. between 11th and 12th Ave	Natural/Excavated	32.8	4.8	Piped to natural basin south side of Houston Ave.
41	2004	Pioneer Basin	Pioneer and Joshua St.	Excavated	14.8	2.7	Detention basin
43	2006	Vineyard Basin	West side of railroad tracks at Cortner St. south of Fargo Ave.	Excavated	46.5	9.2	Detention basin
44	2006	Freedom Park Basin	West side of 9 1/4 Ave. between Grangeville and Leland	Excavated	47.0	12.0	Detention basin volume includes the 7.1 acre ft at Crystal Springs
45	2006	Mission Park Basin	Mission Dr. and Adobe Ct. south of Flint Ave.	Excavated	3.8	1.0	Retention basin
46	2008	Meadow View	Meadow View Rd. 900 ft north of Fargo Ave.	Excavated	3.0	0.4	Retention basin
47	2008	Centennial Basin	Centennial Dr. at Mall Dr. (Behind Wal-Mart)	Natural/Excavated	46.5	6.0	Retention basin
48			East of Temple Dr.	Excavated	0.0	0.0	Private County
49		East Branch Ditch	300 ft northeast of Malone St. and University Ave.	Excavated	18.0	4.4	Private
50		State Highway	Glendale Ave. and 12th Ave.	Excavated	10.0	2.0	
51			Hwy 198 and 11th Ave.	Excavated	10.5	2.1	Private
52			500 ft of north Chateau Way	Excavated	7.0	2.4	Private
53	2013	Greenbrier Gardens	Hume Ave. east of 12th Ave.	Excavated	15.0	4.2	Temporary storage basin, per as-built 504.503 (Tract 876, Greenbrier Gardens) received from City staff 9/16/2015
54			East of Houston Ave. and 13th Ave.	Natural	0.0	0.0	Does not yet collect city runoff.
55			North of Aquifer Drive and Glendale Avenue	Excavated	6.0	1.2	
56			Northwest of Lacey Blvd and 12th Avenue	Excavated	50	9.4	Private
57			1,000 ft south of Harold St and Hanford Armona Rd	Excavated	40	8	Private
58			Intersection of Fairmont Dr. and Redwood St.	Excavated	3.5	0.5	Private
59			Glendale Ave. and South 12th Ave.	Excavated	2	0.5	Private
60			400 ft northwest of Gable Way and Lombard St	Excavated	0	0	Private
61			West of Lacey Blvd. and 9 1/8 Ave.	Excavated	22.5	4.5	Garlic Processing Facility
62			West of 11th Ave. and Iona Blvd.	Natural	33	6.6	Connected to 40 via possible 6-inch
63			North of Hanford Armona Rd. and Greenbrier Dr.	Excavated	6	1.2	Private
64			Intersection of 12th Ave. and Grangeville Blvd.	Excavated	35	7	
65			Northwest of Cerritos Ave. and Hayward St.	Excavated	5	1	
66			Intersection of Cedar St. and Poplar Rd.	Excavated	10	1.5	
68		Private Wal-Mart Basin	Between Centennial Dr. and Glendale Ave.	Excavated	4.5	0.9	Private Wal-Mart Basin
69			Intersection of 5th St. and 10th Ave.	Natural	4.5	0.2	County island

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4/26/2017

Notes:

1. Source: As-builts received from City of Hanford staff 9/16/2015.
2. Unless noted otherwise, information shown extracted from "Drainage Basin Facilities Record", City of Hanford Utility Division, received 04/22/2014
3. Per information provided by City Staff, received May 18, 2017.

Table 4.3 Existing Lift Station Inventory
Storm Drainage System Master Plan
City of Hanford

Pump No.	Inst. Date	Location	Pit Depth (ft)	Pump Make	Motor Make	Phase	Volts	Generator	Comments
3	1961	Kings Terrace-Jordan Wy & Hanford Armona Rd.	17.0	Prime 8" 2,100	Prime Axial Flow 15	3	230	No	Discharge at Houston Basin
7	1961/89	801 Holt Ave. & Ewell Wy.	17.3	Paco 6" 2,600	Reliance 50	3	480	No	Discharge to W. Branch Ditch
9	1962/89/14	Osprey at Peoples Ditch	21.5	HOMA AK 1058-330/19.7F/C (10")	HOMA 19.7	3	230	No	Discharge to W. Branch Ditch
10	1985	11th Ave. & Third St.	25.5	Peabody Barns	11.3	3	230	No	Discharge to Sand Slough via 24" in 11th.
13	1961	840 E. Florinda St. & Gladys Wy.	14.0	F.M. 6" 1100	F.M. 5	3	230	No	Discharge to E. Branch Ditch
14	1961/99	Florinda St. & Gladys Wy.	21.5, 17	F.M. 8" 2650	F.M. 15, 30	3	480	No	Discharge to E. Branch Ditch
20	1959/96	842 W. Grangeville Blvd.	19.5	Meyers 8VLX 3200	F.M. 50	3	480	Yes	Discharge to Mussel Slough Basin
23	1958/99	1248 Rodgers Rd.	18.1, 12	F.M. 8" 3300, Meyers 8VLX 2900	F.M. 25, 30	3	480	Yes	Discharge to W. Branch Ditch
25	1961	1229 Williams & Peoples Ditch	21.0	Meyers 8VLX 4", 1200	F.M. 15	3	230	No	Discharge to W. Branch Ditch
29	1962/14	1989 Harrison & E. Branch	18.8	HOMA AK 1058-330/19.7F/C (10")	HOMA 19.7	3	230	Yes	Discharge to E. Branch Ditch
31	1963	854 E. Grangeville Blvd. & Beulah St.	20.3	(2) Paco @ 5000 total	Reliance 20, 25	3	480	No	Discharge to E. Branch Ditch
35	1967	Lacey Blvd. east of Campus Dr. at the W. Branch Ditch	20.3	F.M. 8" - 2 @ 1800 ea.	U.S. 15, G.E. 15	3	480	Yes	Discharge to W. Branch Ditch
37	1973	Jana Wy. & Emma Lee Ln.	12.5	F.M. 150	G.E. 5	3	230	No	Discharge to W. Branch Ditch
39	1996	W. Mulberry & Peoples Ditch	9.1	Meyers	Reliance 5	3	230	No	Discharge to W. Branch Ditch
43	1981	Redwood St. in Douty Estates	14.6	Hydromatic 150	Hydromatic 1.5	Single	230	No	Discharge to Mussel Slough
44	1980	Myrtle St. & Connie Dr.	12.4	Hydromatic 4", 100	G.E. .75	Single	230	No	Discharge to E. Branch Ditch
48	1979/11	Encore Dr. & Fairmont Dr.	9.0	Gorman Rupp JS4F60-X18, (4")	18hp	3	230	No	Discharge to Mussel Slough
49	1989	Sixth St. West of 10th Ave.	14.4	(2) Paco #1=2300, #2=1200	Reliance 60, 30	3	480	Yes	(2) Discharge to E. Branch Ditch
50	1987/11	Lakewood Dr. & Neil Wy.	21.0	Gorman Rupp JS4F60-X13, (4")	15	3	480	No	Discharge to E. Branch Ditch
51	1988	Fifth St. East of 10th Ave.	14.5	Homa 335 (submersible)	5.5	3	230	No	Discharge to E. Branch Ditch
56	1995	Greenfield Ave. & Elm St.	13.3	(2) Meyers #1=2250, #2=4500	20, 40	3	480	No	Discharge to W. Branch Ditch
57	1997/14	Fir St. & Windsor Dr.	19.5	HOMA AMX434/1-193/6.7T/C (4")	HOMA 6.7	Single	230	No	Discharge to Mussel Slough via 30" in Aspen
60	1997	Beulah St. & Cameron St.	21.0	Paco 450	Reliance 10	3	230	No	Discharge to E. Branch Ditch
61	998	Grangeville Blvd. & Rosewood Ln.	20.0	Meyers (submersible) 215 g.p.m.	2, WGX20 - 3, 4RX	3	230	Yes	Discharge to Mussel Slough
62	1998	10th Ave. & Encore Dr.	16.5	Myers 4RX - 435 g.p.m.	10	3	230	No	Discharge to Encore Basin
63	1998	Greenfield Ave. & University Ave.	18'	Paco 450	10	3	230	No	Discharge sd in Greenfield (Malone Basin)
66	2003	875 E. Whitney Dr. & Jessie Ave.	24.4	Meyers - 900 g.p.m.	7.5	3	230	No	Discharge E. Branch Ditch
68	2006	Crystal Springs Basin	22.2	Meyers - 1550 g.p.m.	15.1	3	480	No	Discharge E. Branch Ditch
70	2007	Kimball & 198 Carraway Basin	22.6	Myers - 1250 g.p.m.	15.1	3	230	No	Discharge W. Brach Ditch
71	2007	Mall Dr. Mall Basin	22.4	(2) Myers - 1800 g.p.m.	2 - 7.5	3	230	No	Discharge W. Brach Ditch

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Notes:

1. Source: "Storm Drain Facilities Record", City of Hanford Utility Division, received 04/22/14

3/30/2016

Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water,

4.3 HYDROLOGIC MODEL

The hydrologic model was used for calculating stormwater runoff volumes from each identified drainage subbasin. This section discusses the hydrologic modeling software and the model development.

4.3.1 Modeling Software

The hydraulic modeling software used for evaluating the capacity adequacy of the City storm drainage system was based on the Hydrologic Engineering Center Flood Hydrograph Package (HEC-1). This software incorporates hydrologic routing tools for overland flow, precipitation, and Manning's Equation to simulate pipe flow.

The selected modeling software that was used for the hydrology analysis on this project was developed by the U.S. Army Corps of Engineers' Hydrologic Engineering Center. The software package is called the Flood Hydrograph Package (HEC-1), and is capable of evaluating a wide array of flood hydrology systems, including large river watersheds, and small urban drainage runoff. The model package was largely chosen for consistency with the previous master plan.

4.3.2 Model Development

A hydrologic model was developed for each identified drainage basin. The characteristics for each subbasin were populated to account for land use types, flood routing, conveyance, and routing methodology.

Land Use. Land use was used to define impervious area and the SCS Curve Number for pervious runoff. Residential areas included soil classifications to define non-effective runoff mostly confined in backyards.

Flood Routing. Flood routing consists of determining the flow path and connectivity to the storm drainage collection system.

Conveyance. Muskingum-Cunge conveyance methodology for pipe connections, channelized systems, and stream routing.

Routing Methodology. Kinematic wave routing methodology for transforming precipitation into runoff for overland flow routing, street flow, and pipe conveyance

CHAPTER 5 – EVALUATION AND PROPOSED IMPROVEMENTS

This chapter presents a summary of the storm drainage system evaluation and identifies improvements needed to mitigate existing deficiencies as well as improvements needed to expand the system and service future growth.

5.1 OVERVIEW

The hydrologic and hydraulic models were used for evaluating the storm drainage system to identify capacity deficiencies and to recommend improvements required to serve future growth. The criteria used for evaluating the capacity adequacy of the storm drainage system (pipelines, stormwater collection basins, and pump stations) and used for sizing recommended improvements were discussed and summarized in the System Performance and Design Criteria chapter.

The evaluation of the City's existing storm drainage system was conducted by Dr. Jack Humphrey of Hydmet Inc. The following sections summarize the evaluation of the existing system performed by Hydmet Inc. and the improvements recommended to mitigate exiting deficiencies and serve future growth.

5.2 PIPELINE CONVEYANCE

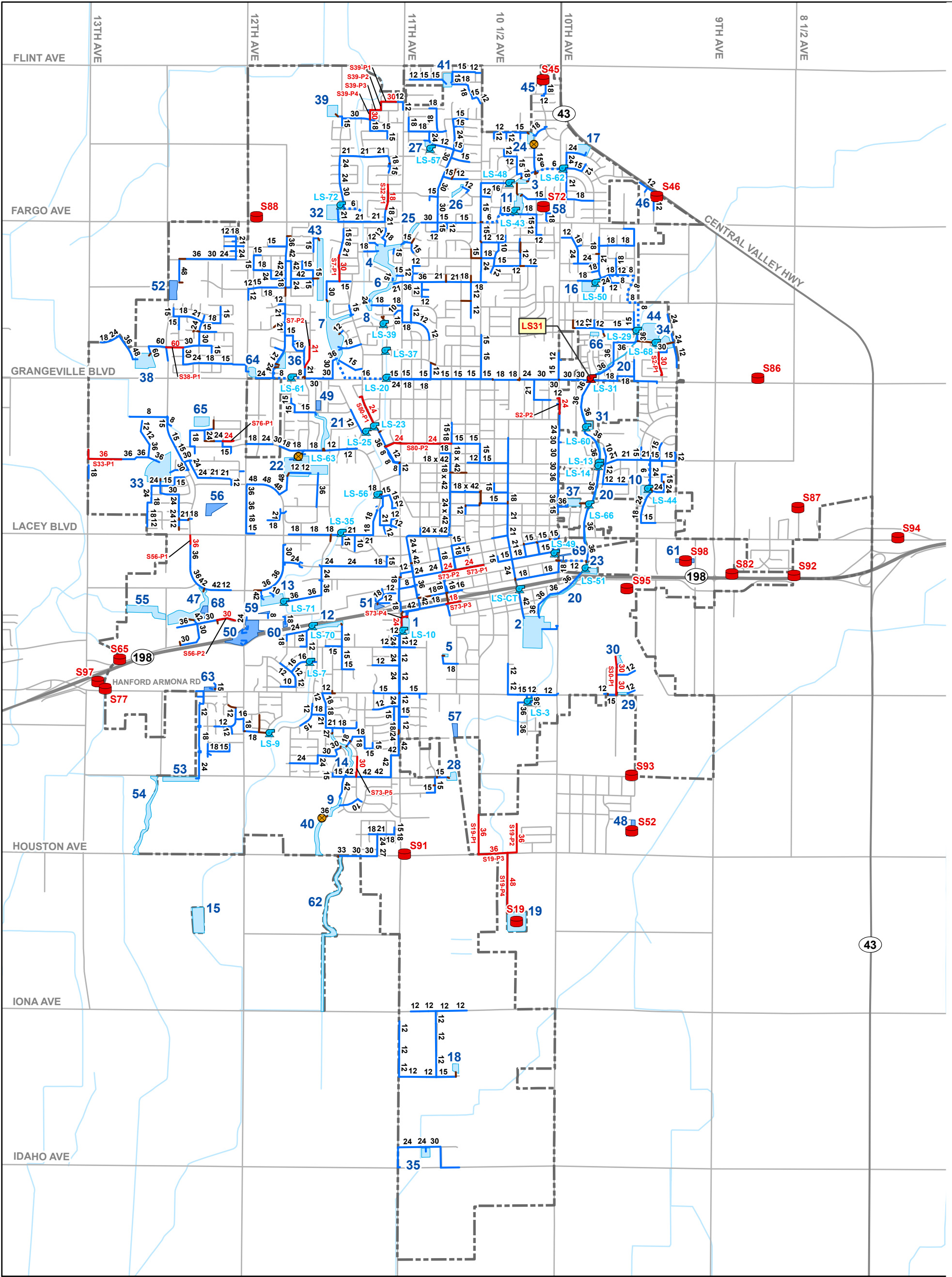
The 2-year 6-hour design storm was used for evaluating the capacity adequacy of conveyance facilities for existing residential runoff, and the 5-year 6-hour storm for existing non-residential runoff. The existing capacity analysis indicates that the conveyance facilities are mostly adequate to accommodate the design storms.

The capacity evaluation indicated some pipelines do not meet the City's design criteria for conveyance capacity. As such, improvements are recommended to mitigate these capacity deficiencies. The recommended pipe improvements are shown on [Figure 5.1](#), and tabulated and discussed in the following sections. Recommended improvements are also summarized on [Table 5.1](#).

Basin S2

This section documents improvements within the Basin S2 storm drainage collection system service area.

- Improvement **S2-P1**: Replace the 18-inch pipeline with a new 30-inch pipeline on Brookhollow Drive from Hoover Way to Waterview Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Future Improvements

- Basins
- Lift Stations
- Pipes

Existing System

- Lift Stations
- Valves
- Gravity Pipes
- Force Mains
- Unknown Pipe Size

- City Storm Basins
- Private Storm Basins
- City Limits
- Streets
- Waterways

Figure 5.1
Proposed Improvements
Storm Drainage System Master Plan
City of Hanford



Table 5.1 Schedule of Improvements
Storm Drainage System Master Plan
City of Hanford

Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Infrastructure Improvements	
						Diameter	Length
						(in)	(ft)
Existing System Improvements							
Existing Pipeline Improvements							
Basin S2							
S2-P1	Pipe	Brookhollow Dr	From Hoover Way to Waterview St	18	Replace	30	825
S2-P2	Pipe	10th Ave	From Bass St to approximately 190 ft n/o Malone St	15	Replace	24	600
Basin S7							
S7-P1	Pipe	Glacier Way	From approximately 100 ft n/o Muir Way to Cortner St	24	Replace	30	900
S7-P2	Pipe	Kings Rd	From Crescent Way to Claridge Ln	-	New	21	975
Basin S19							
S19-P1	Pipe	10 1/2 Ave	From 1,350 ft n/o Houston Ave to Houston Ave	-	New	36	1,350
S19-P2	Pipe	ROW	ROW between 10 1/2 Ave and 10 th Ave from 1,000 ft n/o Houston Ave to Houston Ave	-	New	36	1,275
S19-P3	Pipe	Houston Ave	From 10 1/2 Ave to 1,000 ft e/o 10 1/2 Ave	-	New	36	1,000
S19-P4	Pipe	ROW	ROW between 10 1/2 Ave and 10th Ave from Houston Ave to 2,000 ft s/o Houston Ave	30	Replace	48	2,025
Basin S30							
S30-P1	Pipe	9 1/4 Ave	From Hanford Armona Rd to 1,350 ft n/o Hanford Armona Rd	15	Replace	30	1,300
Basin S32							
S32-P1	Pipe	Fountain Plaza Dr	From West Pebble Dr to Willow St	12	Replace	18	850
Basin S33							
S33-P1	Pipe	Learning Center Main Access	From 13th Ave to School	18	Replace	36	1,425
Basin S38							
S38-P1	Pipe	Berkshire Ln	From Bordeaux St to Centennial Dr	42	Replace	60	575
Basin S39							
S39-P1	Pipe	Imperial Way	From Plum Ln to Cajun Way	24	Replace	30	500
S39-P2	Pipe	Cajun Way	From Imperial Way to Millbrook St	24	Replace	30	275
S39-P3	Pipe	Millbrook St	From Cajun Way to Zion Way	24	Replace	30	375
S39-P4	Pipe	Zion Way	From Millbrook St to Saffron St	24	Replace	30	325
Basin S56							
S56-P1	Pipe	Centennial Dr	From Lacey Blvd to 300 ft s/o Lacey Blvd	24	Replace	36	300
S56-P2	Pipe	Glendale Ave	From approximately 800 ft w/o 12th Ave to approximately 300 w/o 12th Ave	24	Replace	30	625
Basin S73							
S73-P1	Pipe	Sixth St	From Douty St to Redington St	15	Replace	24	875
S73-P2	Pipe	Sixth St	From Redington St to Phillips St	18	Replace	24	535
S73-P3	Pipe	Third St	From approximately 80 ft w/o Redington St to Phillips St	12	Replace	18	500
S73-P4	Pipe	11th Ave	From approximately 70 ft n/o Silverado St to approximately 150 ft s/o Third St	18	Replace	24	550
S73-P5	Pipe	Echo Ln	From 100 ft n/o Echo Ct to Hume Ave	12	Replace	30	675

Table 5.1 Schedule of Improvements
Storm Drainage System Master Plan
City of Hanford

Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Infrastructure Improvements	
						Diameter	Length
						(in)	(ft)
Basin S76							
S76-P1	Pipe	Hopkins Dr	From Cogswell Pl to Scripps Ct	18	Replace	24	375
Basin S80							
S80-P1	Pipe	Rodgers Rd	From Neville Ave to Lift Station 23	10	Replace	24	1,175
S80-P2	Pipe	Cameron St	From Redington St to Rodgers Rd	18	Replace	24	2,225
Existing Retention Basin Improvements				(AF)		(AF)	
S-19	Existing Retention Basin	-	Approximately 2,600 ft se/o 10 1/2 Ave and Houston Ave	72.3	Capacity Expansion	23.7	-
S-45	Existing Retention Basin	-	Approximately 500 ft n/o Capistrano St and Mission Rd	3.8	Capacity Expansion	6.2	-
S-46	Existing Retention Basin	-	Approximately 900 ft n/o Meadow View and Fargo Ave	3	Capacity Expansion	1	-
S-52	Existing Retention Basin	-	Approximately 2,700 feet ne/o Houston Ave and 10th Ave	7	Capacity Expansion	29	-
Lift Station Improvements						Firm Capacity	
Basin S2							
LS-31	Lift Station	-	Lift Station 31 : Approximately 250 ft w/o intersection of Grangeville Blvd and Arroyo Rd	1 @ 2,500	Replace	3 @ 1,200 gpm	-
Future System Improvements							
Pipelines Servicing Future Retention Basins							
S65-P1	Pipe	-	2,000 ft upstream of Retention Basin S65	-	New	42	2,000
S72-P1	Pipe	-	2,000 ft upstream of Retention Basin S72	-	New	24	2,000
S77-P1	Pipe	-	2,000 ft upstream of Retention Basin S77	-	New	48	2,000
S82-P1	Pipe	-	2,000 ft upstream of Retention Basin S82	-	New	60	2,000
S86-P1	Pipe	-	2,000 ft upstream of Retention Basin S86	-	New	96	2,000
S87-P1	Pipe	-	2,000 ft upstream of Retention Basin S87	-	New	60	2,000
S88-P1	Pipe	-	2,000 ft upstream of Retention Basin S88	-	New	48	2,000
S91-P1	Pipe	-	2,000 ft upstream of Retention Basin S91	-	New	36	2,000
S92-P1	Pipe	-	2,000 ft upstream of Retention Basin S92	-	New	60	2,000
S93-P1	Pipe	-	2,000 ft upstream of Retention Basin S93	-	New	66	2,000
S94-P1	Pipe	-	2,000 ft upstream of Retention Basin S94	-	New	60	2,000
S95-P1	Pipe	-	2,000 ft upstream of Retention Basin S95	-	New	30	2,000
S97-P1	Pipe	-	2,000 ft upstream of Retention Basin S97	-	New	48	2,000
S98-P1	Pipe	-	2,000 ft upstream of Retention Basin S98	-	New	36	2,000
Future Retention Basins						(AF)	
S-65	New Retention Basin	-	Approximately 1,500 ft w/o Aquifer Dr and Highway 198	-	Future	6.0	-
S-72	New Retention Basin	-	Approximately 600 ft ne/o Fargo Ave and Fairmont Ave	-	Future	6.0	-
S-77	New Retention Basin	-	Approximately 3,300 ft w/o Greenbrier Dr and Hanford Harmona Rd	-	Future	18.0	-
S-82	New Retention Basin	-	Approximately 600 ft ne/o Highway 198 and 9th Ave	-	Future	20.0	-
S-86	New Retention Basin	-	Approximately at intersection of 8 1/2 Ave and Grangeville Blvd	-	Future	64.0	-
S-87	New Retention Basin	-	Approximately 1,050 ft n/o intersection of Lacey Blvd and Vista Ave	-	Future	58.0	-
S-88	New Retention Basin	-	Approximately 300 ft ne/o 12th Ave and Fargo Ave	-	Future	20.0	-
S-91	New Retention Basin	-	Approximately at the intersection of Houston Ave and 11th Ave	-	Future	16.0	-

Table 5.1 Schedule of Improvements
Storm Drainage System Master Plan
City of Hanford

Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter (in)	New/Parallel/ Replace	Infrastructure Improvements	
						Diameter (in)	Length (ft)
S-92	New Retention Basin	-	Approximately 300 ft se/o Curtis St and David St	-	Future	42.0	-
S-93	New Retention Basin	-	Approximately 4,000 ft nw/o Houston Ave and 9th Ave	-	Future	100.0	-
S-94	New Retention Basin	-	Approximately 850 ft e/o of Lacey Blvd and 8th Ave	-	Future	146.0	-
S-95	New Retention Basin	-	Approximately 1,000 ft sw/of Third St and 9 1/2 Ave	-	Future	3.0	-
S-97	New Retention Basin	-	Approximately at the intersection of Highway 198 and Hanford Armona Rd	-	Future	4.0	-
S-98	New Retention Basin	-	Approximately 1,500 ft nw/o at intersection of 9 1/8 Ave and Highway 198	-	Future	10.0	-

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Note:

1. New retention basin depth assumed to be equal to 25 feet.

- Improvement **S2-P2**: Replace the existing 15-inch pipeline with a new 24-inch pipeline on 10th Avenue from Bass Street to approximately 190 feet north of Malone Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S7

This section documents improvements within the Basin S7 storm drainage collection system service area.

- Improvement **S7-P1**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Glacier Way from 100 feet north of Muir Way to Cortner Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S7-P2**: Construct a new 21-inch pipeline on Kings Road from Crescent Way to Claridge Lane. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S19

This section documents improvements within the Basin S19 storm drainage collection system service area.

- Improvement **S19-P1**: Construct a new 36-inch pipeline on 10 ½ Avenue from 1,350 feet north of Houston Avenue to Houston Avenue. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S19-P2**: Construct a new 36-inch pipeline on Right-of-Way between 10 1/2 Ave and 10th Ave from 1,000 feet north /of Houston Ave to Houston Ave. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S19-P3**: Construct a new 36-inch pipeline on Houston Avenue from 10 ½ Avenue to 1,000 feet east of Houston Avenue. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S19-P4**: Replace the existing 30-inch pipeline with a new 48-inch pipeline on Right-of-Way between 10 ½ Avenue and 10th Avenue from Houston Avenue to 2,000 feet south of Houston Avenue. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S30

This section documents improvements within the Basin S30 storm drainage collection system service area.

- Improvement **S30-P1**: Replace the existing 15-inch pipeline with a new 30-inch pipeline on 9³/₄ Avenue from Hanford Armona Road to 1,350 feet north of Hanford Armona Road. This improvement is intended to mitigate deficiencies in the existing system.

Basin S32

This section documents improvements within the Basin S32 storm drainage collection system service area.

- Improvement **S32-P1**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Fountain Plaza Drive from West Pebble Drive to Willow Street. This improvement is intended to mitigate deficiencies in the existing system.

Basin S33

This section documents improvements within the Basin S33 storm drainage collection system service area.

- Improvement **S33-P1**: Replace the existing 18-inch pipeline with a new 36-inch pipeline in the Learning Main Center Access drive from 13th Avenue to the School. This improvement is intended to mitigate deficiencies in the existing system.

Basin S38

This section documents improvements within the Basin S38 storm drainage collection system service area.

- Improvement **S38-P1**: Replace the existing 42-inch pipeline with a new 60-inch pipeline on Berkshire Lane from Bordeaux Street to Centennial Drive. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S39

This section documents improvements within the Basin S39 storm drainage collection system service area.

- Improvement **S39-P1**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Imperial Way from Plum Lane to Cajun Way. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S39-P2**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Cajun Way from Imperial Way to Millbrook Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

- Improvement **S39-P3**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Millbrook Street from Cajun Way to Zion Way. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S39-P4**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Zion Way from Millbrook Street to Saffron Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S56

This section documents improvements within the Basin S56 storm drainage collection system service area.

- Improvement **S56-P1**: Replace the existing 24-inch pipeline with a new 36-inch pipeline on Centennial Drive from Lacey Boulevard to 300 feet south of Lacey Boulevard. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S56-P2**: Replace the existing 24-inch pipeline with a new 30-inch pipeline on Glendale Avenue from approximately 800 feet west of 12th Avenue to approximately 300 feet west of 12th Avenue. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin 73

This section documents improvements within the Basin S73 storm drainage collection system service area.

- Improvement **S73-P1**: Replace the existing 15-inch pipeline with a new 24-inch pipeline on Sixth Street from Douty Street to Redington Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S73-P2**: Replace the existing 18-inch pipeline with a new 24-inch pipeline on Sixth Street from Redington Street to Philips Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S73-P3**: Replace the existing 12-inch pipeline with a new 18-inch pipeline on Third Street from approximately 80 feet west of Redington Street to Philips Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.
- Improvement **S73-P4**: Replace the existing 18-inch pipeline with a new 24-inch pipeline on 11th Avenue from approximately 70 feet north of Silverado Street to approximately 150 feet south of Third Street. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

- Improvement **S73-P5**: Replace the existing 12-inch pipeline with a new 30-inch pipeline on Echo Lane from 100 feet north of Echo Lane to Hume Avenue. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S76

This section documents improvements within the Basin S76 storm drainage collection system service area.

- Improvement **S76-P1**: Replace the existing 18-inch with a new 24-inch pipeline on Hopkins Drive from Kaplan Place to Cogswell Place. This improvement is intended to mitigate deficiencies of the storm drainage system at buildout.

Basin S80

This section documents improvements within the Basin S80 storm drainage collection system service area.

- Improvement **S80-P1**: Replace the 10-inch pipeline with a new 24-inch pipeline on Rodgers Road from Neville Avenue to Lift Station 23. This improvement is intended to mitigate deficiencies in the existing system.
- Improvement **S80-P2**: Replace the 18-inch pipeline with a new 24-inch pipeline on Cameron Street from Redington Street to Rodgers Road. This improvement is intended to mitigate deficiencies in the existing system.

5.3 DRAINAGE COLLECTION BASINS

Detention and retention basins were sized to meet the runoff requirements of the 100-year 2-day and 100-year 10-day design storms, respectively. Several existing basins required improvement to meet the design storm requirements. Basin improvements were attributed to existing deficiencies, anticipated future growth. To distinguish existing storm drainage basin deficiencies from future required storm drainage basins to meet design criteria, the following detention basins improvements categories were identified:

- **Basin Capacity Expansion (Existing Facility, Increase Capacity)**. These facilities are existing, and currently used as runoff collection facilities. Expansion improvements are required to accommodate the runoff requirements of the design storm.
- **New Drainage Basin (New Facility, New Capacity)**. New drainage basins for the buildout of the Planned Area Boundary were given an approximate site location based on existing topography, and where stormwater could not be economically routed to another existing drainage basin.

5.3.1 Recommended Basin Capacity Expansion

It should be noted that for planning purposes drainage basin capacity deficiencies in existing drainage basins are assumed to be mitigated with the construction of a new drainage basin. Based on site-specific conditions it may be feasible to expand an existing basin to create the additional required basin capacity. Drainage basin improvements are shown graphically on [Figure 5.1](#) highlighted in red, and documented on [Table 5.1](#).

The basin capacity expansions recommended as part of this 2017 Storm Drainage System Master Plan are the following:

- Basin **S-19**: Upgrade the storage capacity of retention basin S-19, located 2,600 feet south east of 10 ½ Avenue and Houston Avenue with a new retention basin of capacity equal to 23.7 AF.
- Basin **S-45**: Upgrade the storage capacity of retention basin S-45, located 500 feet north of Capistrano Street and Mission Road with a new retention basin of capacity equal to 6.2 AF
- Basin **S-46**: Upgrade the storage capacity of retention basin S-46, located 900 feet north of Meadow View and Fargo Avenue with a new retention basin of capacity equal to 1.0 AF.
- Basin **S-52**: Upgrade the storage capacity of retention basin S-52, located 2,700 feet north east of Houston Avenue and 10th Avenue with a new retention basin of capacity equal to 29 AF.

5.3.2 Recommended Future Storage Basins

The analysis of the existing storm drainage system also led to the recommendation of new drainage basins that will need to be constructed to ensure proper runoff collection at buildout of the Planned Area Boundary.

The new drainage basins recommended at buildout of the Planned Area Boundary are the following:

- Basin **S-65**: Construct a new retention basin S-65, located 1,500 feet west of Aquifer Drive and Highway 198 for a capacity equal to 6.0 AF.
- Basin **S-72**: Construct a new retention basin S-72, located 600 feet north-east of Fargo Avenue and Fairmont Avenue for a capacity equal to 6.0 AF.
- Basin **S-77**: Construct a new retention basin S-77, located 3,300 feet west of Greenbrier Drive and Hanford Armona Road for a capacity equal to 18.0 AF.
- Basin **S-82**: Construct a new retention basin S-82, located 600 feet north-east of Highway 198 and 9th Avenue for a capacity equal to 20.0 AF.

- Basin **S-86**: Construct a new retention basin S-86 located at the intersection of 8 ½ Avenue and Grangeville Boulevard for a capacity equal to 64.0 AF.
- Basin **S-87**: Construct a new retention basin S-87, located 1,050 feet north of intersection of Lacey Boulevard and Vista Avenue for a capacity equal to 58.0 AF.
- Basin **S-88**: Construct a new retention basin S-88, located 300 feet north-east of the intersection of 12th Avenue and Fargo Avenue for a capacity equal to 20.0 AF.
- Basin **S-91**: Construct a new retention basin S-89, located at the intersection of Houston Avenue and 11th Avenue for a capacity equal to 16.0 AF.
- Basin **S-92**: Construct a new retention basin S-92, located 300 feet south-east of the intersection of Curtis Street and David Street for a capacity equal to 42.0 AF.
- Basin **S-93**: Construct a new retention basin S-93, located 4,000 feet north-west of Houston Avenue and 9th Avenue for a capacity equal to 100.0 AF.
- Basin **S-94**: Construct a new retention basin S-94, located 850 feet east of Lacey Boulevard and 8th Avenue for a capacity equal to 146.0 AF.
- Basin **S-95**: Construct a new retention basin S-95, located 1,000 feet south-west of Third Street and 9 ½ Avenue for a capacity equal to 3.0 AF.
- Basin **S-97**: Construct a new retention basin S-97, located at the intersection of Highway 198 and Hanford Armona Road for a capacity equal to 4.0 AF.
- Basin **S-98**: Construct a new retention basin S-98, located at the intersection of 9 ½ Avenue and Highway 198 for a capacity equal to 10.0 AF.

5.4 PUMP STATIONS

Pump station improvements to meet existing runoff requirements are summarized on [Table 5.1](#) and shown graphically on [Figure 5.1](#). Areas of future development are assumed to be collected by gravity and conveyed to retention facilities, mitigating the need for additional pump stations.

- Improvement LS-31: Lift Station 31 is located approximately 250 west of intersection of Grangeville Boulevard and Arroyo Road and will need to be upgraded for a firm capacity of 3,600 gpm.

5.5 IMPROVEMENTS OUTSIDE THE EXISTING SERVICE AREA

Due to the uncertain timing and location of future developments outside of the existing service area, specific pipeline alignments and storage basin locations are not included in the master plan. However, placeholder capacities and pipe lengths are shown for cost estimating purposes. The

storage basin capacity represents the total required retention for the drainage basin. The pipeline sizing is based on the total requirements of runoff from the drainage basin. Storage basin and pipelines for specific developments should be evaluated as the development occurs, and are subject to City Engineer approval.

Table 5.1 shows on a specific section the total length of pipeline necessary and the pipeline size required to serve each future retention basin. For each proposed future basin, **Table 5.1** proposes an associated future pipeline length equal to 2,000 feet and a proposed pipeline size. Each line item in this section of **Table 5.1** is shown as a placeholder purpose.

5.6 INDUSTRIAL PARK IMPROVEMENTS

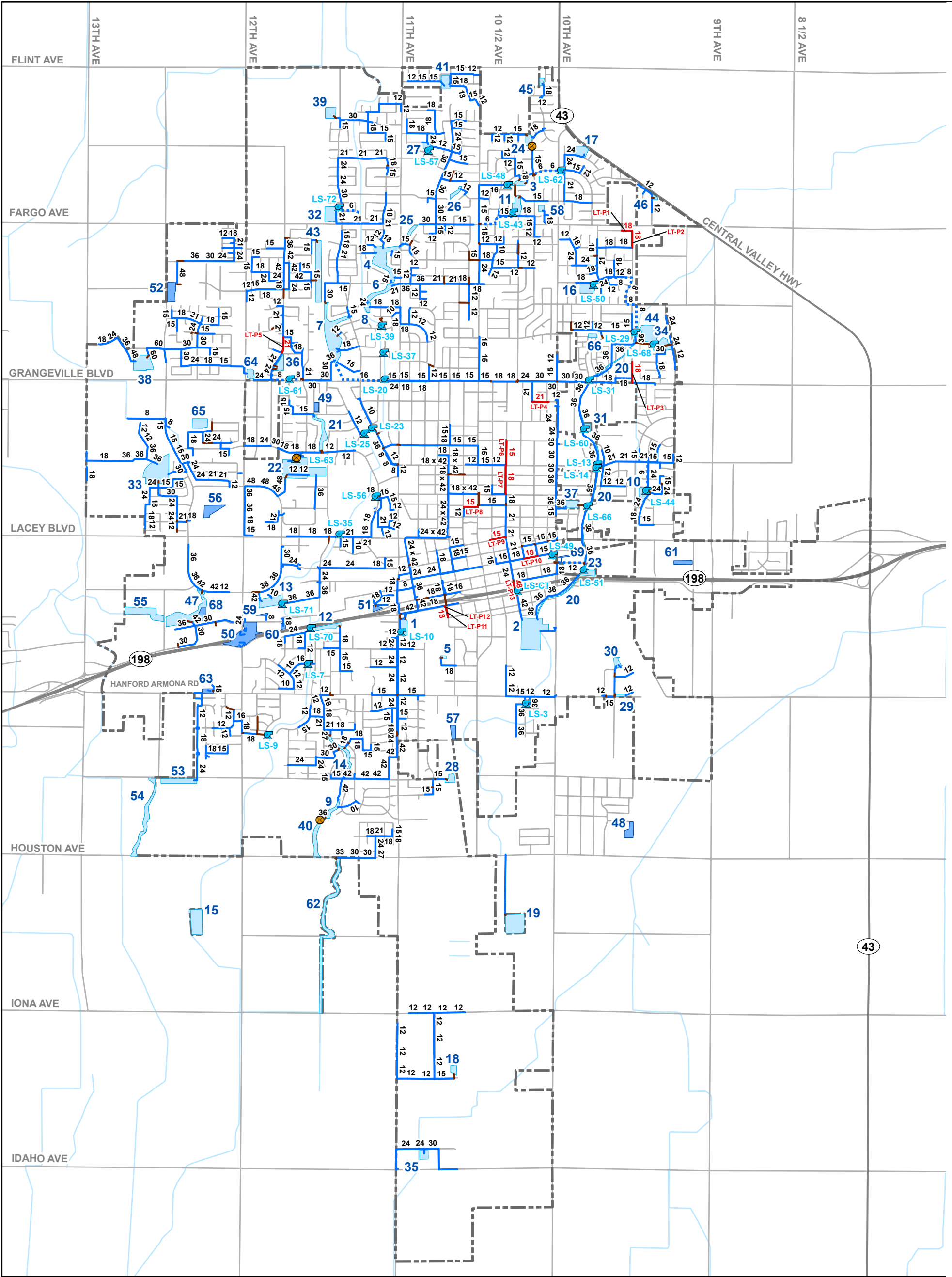
The City of Hanford requires new industrial users to provide on-site retention of all runoff from the individual development in an effort to reduce potential hazardous waste contamination. The City provides small retention storage to collect nuisance water from the streets. As such, the industrial area was not considered in this stormwater analysis. Runoff requirements will be specific to the size and nature of the developments that occur in the industrial park, and basins storage siting and requirements should be evaluated on a case-by-case basis, and subject the approval of the City Engineer.

5.7 LONG TERM REPLACEMENT RECOMMENDATIONS

The evaluation of the storm drainage system at buildout revealed pipelines with minor capacity deficiencies. As these pipelines near the end of their physical life, it is recommended that they be replaced with the sizing recommendations included in this section. As these improvements were minor capacity upgrades, City staff requested they not be shown in the capital improvement program. Therefore, these improvements are summarized separately below, and included on **Table 5.2** and shown on **Figure 5.2**.

The improvements recommended on the long term are listed below:

- Replacement **LT-P1**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Cedarwood Street from Fargo Place to Fernwood Drive.
- Replacement **LT-P2**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Fernwood Drive from Cedarwood Street to Burlwood Avenue.
- Replacement **LT-P3**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Harrison Avenue from Cleveland Way to Grangeville Boulevard.
- Replacement **LT-P4**: Replace the existing 18-inch pipeline with a new 21-inch pipeline on Bass Street from Normandie Street to East Street.



Attachment: Storm Drainage System Master Plan (PW: Approval of Infrastructure Master Plans for Water, Sewer and Storm Drainage Facilities)

Legend

Future Improvements

Pipes

Existing System

Lift Stations

Valves

Gravity Pipes

Force Mains

Unknown Pipe Size

City Storm Basins

Private Storm Basins

City Limits

Streets

Waterways



0 0.25 0.5 1 Mile

File Path: P:\GIS\GIS_P\Projects\Hanford2016\Storm\Final\HCHP_Fig5-2_LongTermReplace_051717.mxd

Figure 5.2
Long Term Replacement
Recommendations

Storm Drainage System Master Plan
City of Hanford



Table 5.2 Long Term Replacement Recommendation
Storm Drainage System Master Plan
City of Hanford

Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter (in)	New/Parallel/ Replace	Diameter (in)	Length (ft)
LT-P1	Pipe	Cedarwood St	From Fargo Pl to Fernwood Dr	15	Replace	18	350
LT-P2	Pipe	Fernwood Dr	From Cedarwood St to Burlwood Ave	15	Replace	18	575
LT-P3	Pipe	Harrison Ave	From Cleveland Way to Grangeville Blvd	15	Replace	18	725
LT-P4	Pipe	Bass St	From Normandie St to East St	18	Replace	21	575
LT-P5	Pipe	Fitzgerald Ln	From approximately 200 ft n/o Crescent Way to Berkshire Way	18	Replace	21	550
LT-P6	Pipe	Brown St	From Cameron St to Florinda St	12	Replace	15	825
LT-P7	Pipe	Brown St	From approximately 180 ft n/o Elm St to Ivy St	15	Replace	18	1,025
LT-P8	Pipe	Irwin Ct	From Irwin St to Douty St	12	Replace	15	475
LT-P9	Pipe	Eight St	From Harris St to Brown St	12	Replace	15	550
LT-P10	Pipe	Sixth St	From White St to Green St	15	Replace	18	450
LT-P11	Pipe	Phillips St	From Second St to 100 ft s/o Third St	12	Replace	18	325
LT-P12	Pipe	Phillips St	From 100 ft s/o Third St to Third St	15	Replace	18	100
LT-P13	Pipe	Brown Street	From Fourth St to Third St	36	Replace	48	475
LT-C13	Casing ¹	Brown Street	Highway 198		New	72	600

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5/18/2017

Note:

1. Casing length when crossing a highway equal to 600 feet.

- Replacement **LT-P5**: Replace the existing 18-inch pipeline with a new 21-inch pipeline on Fitzgerald Lane from approximately 200 feet north of Crescent Way to Berkshire Way.
- Replacement **LT-P6**: Replace the existing 12-inch pipeline with a new 15-inch pipeline on Brown Street from Cameron Street to Florinda Street.
- Replacement **LT-P7**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Brown Street from approximately 180 feet north of Elm Street to Ivy Street.
- Replacement **LT-P8**: Replace the existing 12-inch pipeline with a new 15-inch pipeline on Irwin Street to Douty Street.
- Replacement **LT-P9**: Replace the existing 12-inch pipeline with a new 15-inch pipeline on Eight Street from Harris Street to Brown Street.
- Replacement **LT-P10**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Sixth Street from White Street to Green Street.
- Replacement **LT-P11**: Replace the existing 12-inch pipeline with a new 18-inch pipeline on Phillips Street from Second Street to 100 feet south of Third Street.
- Replacement **LT-P12**: Replace the existing 15-inch pipeline with a new 18-inch pipeline on Phillips Street from 100 feet south of Third Street to Third Street.
- Replacement **LT-P13**: Replace the existing 36-inch pipeline with a new 48-inch pipeline on Brown Street from Fourth Street to Third Street.

CHAPTER 6 – CAPITAL IMPROVEMENT PROGRAM

This chapter provides a summary of the recommended storm drainage system improvements intended to mitigate existing capacity deficiencies and for accommodating anticipated future growth. The chapter also presents the cost criteria and methodologies for developing the Capital Improvement Program (CIP).

6.1 COST ESTIMATE ACCURACY

Cost estimates presented in the CIP were prepared for general master planning purposes and, where relevant, for further project evaluation. Final costs of a project will depend on several factors including the final project scope, costs of labor and material, and market conditions during construction.

The Association for the Advancement of Cost Engineering (AACE International), formerly known as the American Association of Cost Engineers has defined three classifications of assessing project costs. These classifications are presented in order of increasing accuracy: Order of Magnitude, Budget, and Definitive.

- **Order of Magnitude Estimate.** This classification is also known as an “original estimate”, “study estimate”, or “preliminary estimate”, and is generally intended for master plans and studies.

This estimate is not supported with detailed engineering data about the specific project, and its accuracy is dependent on historical data and cost indexes. It is generally expected that this estimate would be accurate within -30 percent to +50 percent.

- **Budget Estimate.** This classification is also known as an “official estimate” and generally intended for predesign studies. This estimate is prepared to include flow sheets and equipment layouts and details. It is generally expected that this estimate would be accurate within -15 percent to +30 percent.
- **Definitive Estimate.** This classification is also known as a “final estimate” and prepared during the time of contract bidding. The data includes complete plot plans and elevations, equipment data sheets, and complete specifications. It is generally expected that this estimate would be accurate within -5 percent to + 15 percent.

Costs developed in this study should be considered “Order of Magnitude” and have an expected accuracy range of **-30 percent** and **+50 percent**.

6.2 COST ESTIMATE METHODOLOGY

Cost estimates presented in this chapter are opinions of probable construction and other relevant costs developed from several sources including cost curves, Akel experience on other master planning projects, and input from City staff on the development of public and private cost sharing. Where appropriate, costs were escalated to reflect the more current Engineering News Record's (ENR) Construction Cost Index (CCI).

This section documents the unit costs used in developing the opinion of probable construction costs, the Construction Cost Index, the land acquisition costs, and markups to account for construction contingency and other project related costs.

6.2.1 Unit Costs

The unit cost estimates used in developing the Capital Improvement Program are summarized on [Table 6.1](#). The unit costs are intended for developing the Order of Magnitude estimate, and do not account for site specific conditions, labor of material costs during the time of construction, final project scope, implementation schedule, detailed utility and topography surveys for retention basin sites, investigation of alternative routings for pipes, and other various factors. These factors are assumed included in the contingencies applied to the final capital improvement cost.

The unit costs include:

- **Pipeline Unit Costs.** Unit costs were escalated from the 1995 SDMP and compared to bid tabulations provided by City Staff to validate the cost assumptions.
- **Drainage Basin Unit Costs.** These costs are based on the proposed new or expanded capacities and, for new facilities, generally assume an average depth of 25 feet for cost estimating purposes. This master plan recommends special studies and geotechnical investigations be conducted to determine the feasible maximum depth at each site.
- **Pump Station Costs.** These costs are based on a lift station project equation as shown on [Table 6.1](#).

6.2.2 Construction Cost Index

Costs estimated in this study are adjusted utilizing the Engineering News Record (ENR) Construction Cost Index (CCI), which is widely used in the engineering and construction industries.

The costs in this Storm Drainage System Master Plan were calculated using a 20-City national average ENR CCI of 10,532, reflecting a date of January 2017.

Table 6.1 Unit Costs

Storm Drainage System Master Plan
City of Hanford

Pipe Size (in)	(\$/Lineal Foot)
15	\$120
18	\$135
21	\$166
24	\$196
30	\$241
36	\$286
42	\$331
48	\$391
54	\$436
60	\$451
66	\$497
72	\$542
84	\$692
96	\$767
108	\$858
120	\$948
Detention Basin	Capacity Cost (acre/\$)
New Retention Basin	73,156
Retention Basin Expansion	36,578
Pipeline Casings	
\$22 per inch diameter per linear foot	
Lift Stations	
Estimated Lift Station Project Cost = $8,764 \cdot Q^2 + 244,811 \cdot Q + 331,618$, where Q is in mgd	

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Note:

4/6/2017

1. Costs based on ENR CCI of 10532 for January 2017.

6.2.3 Land Acquisition

Construction of pipelines is generally assumed to be within existing or future street right-of-ways. A land acquisition fee for the construction of retention basins was estimated and included to account for future land purchases.

Land acreages needed for drainage basins were calculated based on provisions for an assumed average depth of 25 feet.

6.2.4 Construction Contingency Allowance

Knowledge about site-specific conditions for each proposed project is limited at the master planning stage; therefore, construction contingencies were used. The estimated construction costs in this master plan include a **15 percent** contingency allowance to account for unforeseen events and unknown field conditions.

6.2.5 Project Related Costs

The capital improvement costs also account for project-related costs, comprised of engineering design, project administration (developer and City staff), construction management and inspection, and legal costs. The project related costs in this master plan were estimated by applying an additional **15 percent** to the estimated construction costs.

6.3 CAPITAL IMPROVEMENT PROGRAM

The Capital Improvement Program includes pipeline, retention basin, and pump stations projects recommended in this master plan, and phased for potential expenditure budgeting discussed in a later section. Each improvement was assigned a unique coded identifier associated with its associated drainage basin.

The estimated construction costs include the baseline costs plus **15 percent** contingency allowance to account for unforeseen events and unknown field conditions, as described in a previous section. Capital improvement costs include the estimated construction costs plus **15 percent** project-related costs (engineering design, project administration, construction management and inspection, and legal costs).

6.3.1 Pipelines

The recommended pipeline improvements are grouped by drainage basin and listed on **Table 6.2**. Each improvement includes a general description of the street alignment and limits, as well as existing pipe diameter and length. Improvements are shown on **Figure 6.1**.

The following pipeline improvements categories were identified:

- **New Pipeline.** A new pipeline is proposed where none exists.

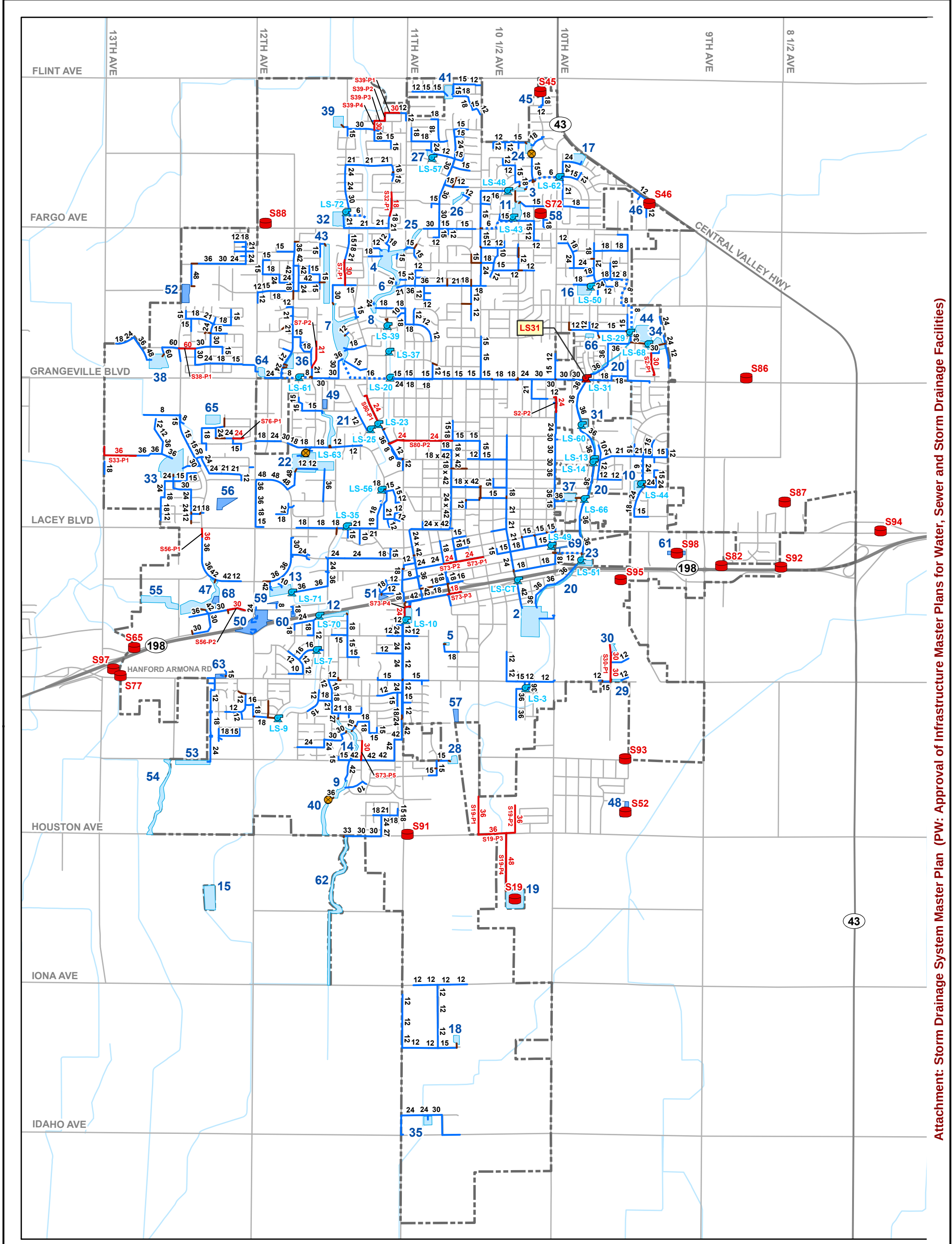


Figure 6.1

Proposed Improvements

Storm Drainage System Master Plan
City of Hanford



Packet Pg. 294



Legend

Future Improvements

-  Basins
 Lift Stations
 Pipes

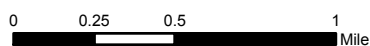
Existing System

-  Lift Stations
-  Valves
-  Gravity Pipes
-  Force Mains
-  Unknown Pipe Size

-  City Storm Basins Streets
 Private Storm Basins Waterways
 City Limits



Update: August 10, 2017



File Path: P:\GIS\GIS_Projects\Hanford\2016\Storm\Final\HC\HF_Fig6-1 ImpFutGrowth-Storm_081017.mxd

Table 6.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing	
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)		(\$/LF)	(\$)	(\$)	(\$)	(\$)	%	%	(\$)	(\$)
Existing System Improvements																	
Existing Pipeline Improvements																	
Basin S2																	
S2-P1	Pipe	Brookhollow Dr	From Hoover Way to Waterview St	18	Replace	30	825	-	241	198,603	198,603	228,394	262,653	100%	0%	262,653	0
S2-P2	Pipe	10th Ave	From Bass St to approximately 190 ft n/o Malone St	15	Replace	24	600	-	196	117,357	117,357	134,960	155,204	0%	100%	0	155,204
											Subtotal - S2		417,857			262,653	155,204
Basin S7																	
S7-P1	Pipe	Glacier Way	From approximately 100 ft n/o Muir Way to Cortner St	24	Replace	30	900	-	241	216,658	216,658	249,157	286,531	90%	10%	257,878	28,653
S7-P2	Pipe	Kings Rd	From Crescent Way to Claridge Ln	-	New	21	975	-	166	161,365	161,365	185,570	213,406	80%	20%	170,724	42,681
											Subtotal - S7		499,936			428,602	71,334
Basin S19																	
S19-P1	Pipe	10 1/2 Ave	From 1,350 ft n/o Houston Ave to Houston Ave	-	New	36	1,350	-	286	385,923	385,923	443,811	510,383	0%	100%	0	510,383
S19-P2	Pipe	ROW	ROW between 10 1/2 Ave and 10 th Ave from 1,000 ft n/o Houston Ave to Houston Ave	-	New	36	1,275	-	286	364,482	364,482	419,155	482,028	0%	100%	0	482,028
S19-P3	Pipe	Houston Ave	From 10 1/2 Ave to 1,000 ft e/o 10 1/2 Ave	-	New	36	1,000	-	286	285,869	285,869	328,749	378,061	0%	100%	0	378,061
S19-P4	Pipe	ROW	ROW between 10 1/2 Ave and 10th Ave from Houston Ave to 2,000 ft s/o Houston Ave	30	Replace	48	2,025	-	391	792,157	792,157	910,980	1,047,627	0%	100%	0	1,047,627
											Subtotal - S19		2,418,099			0	2,418,099
Basin S30																	
S30-P1	Pipe	9 1/4 Ave	From Hanford Armona Rd to 1,350 ft n/o Hanford Armona Rd	15	Replace	30	1,300	-	241	312,951	312,951	359,893	413,878	100%	0%	413,878	0
											Subtotal - S30		413,878			413,878	0
Basin S32																	
S32-P1	Pipe	Fountain Plaza Dr	From West Pebble Dr to Willow St	12	Replace	18	850	-	135	115,100	115,100	132,365	152,219	100%	0%	152,219	0
											Subtotal - S32		152,219			152,219	0
Basin S33																	
S33-P1	Pipe	Learning Center Main Access	From 13th Ave to School	18	Replace	36	1,425	-	286	407,363	407,363	468,467	538,737	100%	0%	538,737	0
											Subtotal - S33		538,737			538,737	0
Basin S38																	
S38-P1	Pipe	Berkshire Ln	From Bordeaux St to Centennial Dr	42	Replace	60	575	-	451	259,539	259,539	298,469	343,240	100%	0%	343,240	0
											Subtotal - S38		343,240			343,240	0
Basin S39																	
S39-P1	Pipe	Imperial Way	From Plum Ln to Cajun Way	24	Replace	30	500	-	241	120,366	120,366	138,421	159,184	80%	20%	127,347	31,837
S39-P2	Pipe	Cajun Way	From Imperial Way to Millbrook St	24	Replace	30	275	-	241	66,201	66,201	76,131	87,551	80%	20%	70,041	17,510
S39-P3	Pipe	Millbrook St	From Cajun Way to Zion Way	24	Replace	30	375	-	241	90,274	90,274	103,815	119,388	80%	20%	95,510	23,878
S39-P4	Pipe	Zion Way	From Millbrook St to Saffron St	24	Replace	30	325	-	241	78,238	78,238	89,973	103,469	80%	20%	82,776	20,694
											Subtotal - S39		469,592			375,673	93,918
Basin S56																	
S56-P1	Pipe	Centennial Dr	From Lacey Blvd to 300 ft s/o Lacey Blvd	24	Replace	36	300	-	286	85,761	85,761	98,625	113,418	0%	100%	0	113,418
S56-P2	Pipe	Glendale Ave	From approximately 800 ft w/o 12th Ave to approximately 300 w/o 12th Ave	24	Replace	30	625	-	241	150,457	150,457	173,026	198,980	0%	100%	0	198,980
											Subtotal - S56		312,398			0	312,398
Basin S73																	
S73-P1	Pipe	Sixth St	From Douty St to Redington St	15	Replace	24	875	-	196	171,145	171,145	196,817	226,339	0%	100%	0	226,339
S73-P2	Pipe	Sixth St	From Redington St to Phillips St	18	Replace	24	535		196	104,643	104,643	120,339	138,390	0%	100%	0	138,390
S73-P3	Pipe	Third St	From approximately 80 ft w/o Redington St to Phillips St	12	Replace	18	500	-	135	67,706	67,706	77,862	89,541	0%	100%	0	89,541
S73-P4	Pipe	11th Ave	From approximately 70 ft n/o Silverado St to approximately 150 ft s/o Third St	18	Replace	24	550	-	196	107,577	107,577	123,713	142,270	0%	100%	0	142,270
S73-P5	Pipe	Echo Ln	From 100 ft n/o Echo Ct to Hume Ave	12	Replace	30	675	-	241	162,494	162,494	186,868	214,898	50%	50%	107,449	107,449

Table 6.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing	
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)		(\$/LF)	(\$)	(\$)	(\$)	(\$)	%	%	(\$)	(\$)
Basin S76											Subtotal - S73		811,439			107,449	703,990
S76-P1	Pipe	Hopkins Dr	From Cogswell Pl to Scripps Ct	18	Replace	24	375	-	196	73,348	73,348	84,350	97,003	100%	0%	97,003	0
											Subtotal - S76		97,003			97,003	0
Basin S80																	
S80-P1	Pipe	Rodgers Rd	From Neville Ave to Lift Station 23	10	Replace	24	1,175	-	196	229,823	229,823	264,297	303,941	100%	0%	303,941	0
S80-P2	Pipe	Cameron St	From Redington St to Rodgers Rd	18	Replace	24	2,225	-	196	435,197	435,197	500,477	575,548	100%	0%	575,548	0
											Subtotal - S80		879,490			879,490	0
Existing Retention Basin Improvements				(AF)		(AF)											
S-19	Existing Retention Basin		Approximately 2,600 ft se/o 10 1/2 Ave and Houston Ave	72.3	Capacity Expansion	23.7					89,345	102,747	118,159	87%	13%	102,798	15,361
S-45	Existing Retention Basin		Approximately 500 ft n/o Capistrano St and Mission Rd	3.8	Capacity Expansion	6.2					49,899	57,383	65,991	62%	38%	40,914	25,077
S-46	Existing Retention Basin		Approximately 900 ft n/o Meadow View and Fargo Ave	3.0	Capacity Expansion	1.0					36,240	41,676	47,928	0%	100%	0	47,928
S-52	Existing Retention Basin		Approximately 2,700 feet ne/o Houston Ave and 10th Ave	7.0	Capacity Expansion	29.0					100,386	115,443	132,760	82%	18%	108,863	23,897
Existing Lift Station Improvements				Firm Capacity		Firm Capacity											
Basin S2																	
LS-31	Lift Station		Lift Station 31 : Approximately 250 ft w/o intersection of Grangeville Blvd and Arroyo Rd	1 @ 2,500	Replace	3 @ 1,200 gpm					1,836,241	2,111,677	2,428,428	100%	0%	2,428,428	0
						Subtotal - Existing Pipeline Improvements					5,560,595	6,394,684	7,353,887			3,598,944	3,754,943
						Subtotal - Retention Basin Improvements					275,869	317,250	364,837			252,575	112,262
						Subtotal - Lift Station Improvements					1,836,241	2,111,677	2,428,428			2,428,428	0
Future System Improvements																	
Pipelines Servicing Future Retention Basins ⁵																	
S65-P1	Pipe		2,000 ft upstream of Retention Basin S65	-	New	42	2,000	-	331	662,011	662,011	761,313	875,510	0%	100%	0	875,510
S72-P1	Pipe		2,000 ft upstream of Retention Basin S72	-	New	24	2,000	-	196	391,189	391,189	449,867	517,347	0%	100%	0	517,347
S77-P1	Pipe		2,000 ft upstream of Retention Basin S77	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694
S82-P1	Pipe		2,000 ft upstream of Retention Basin S82	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877
S86-P1	Pipe		2,000 ft upstream of Retention Basin S86	-	New	96	2,000	-	767	1,534,663	1,534,663	1,764,862	2,029,592	0%	100%	0	2,029,592
S87-P1	Pipe		2,000 ft upstream of Retention Basin S87	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877
S88-P1	Pipe		2,000 ft upstream of Retention Basin S88	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694
S91-P1	Pipe		2,000 ft upstream of Retention Basin S91	-	New	36	2,000	-	286	571,737	571,737	657,498	756,122	0%	100%	0	756,122
S92-P1	Pipe		2,000 ft upstream of Retention Basin S92	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877
S93-P1	Pipe		2,000 ft upstream of Retention Basin S93	-	New	66	2,000	-	497	993,017	993,017	1,141,970	1,313,265	0%	100%	0	1,313,265
S94-P1	Pipe		2,000 ft upstream of Retention Basin S94	-	New	60	2,000	-	451	902,743	902,743	1,038,154	1,193,877	0%	100%	0	1,193,877
S95-P1	Pipe		2,000 ft upstream of Retention Basin S95	-	New	30	2,000	-	241	481,463	481,463	553,682	636,735	0%	100%	0	636,735
S97-P1	Pipe		2,000 ft upstream of Retention Basin S97	-	New	48	2,000	-	391	782,377	782,377	899,734	1,034,694	0%	100%	0	1,034,694
S98-P1	Pipe		2,000 ft upstream of Retention Basin S98	-	New	36	2,000	-	286	571,737	571,737	657,498	756,122	0%	100%	0	756,122

Table 6.2 Capital Improvement Program
Storm Drainage System Master Plan
City of Hanford

Improvements						Pipelines and Appurtenances Costs					Capital Improvement Program			Suggested Cost Allocation		Cost Sharing	
Improv. No.	Type of Improv	Alignment	Limits	Existing Diameter	New/Parallel/ Replace	Diameter	Length	Number of Casings	Unit Cost ¹	Pipe Cost	Baseline Constr. Costs	Estimated Constr. Cost ²	Capital Improvement Costs ³	Existing Users	Future Users	Existing Users	Future Users
				(in)		(in)	(ft)		(\$/LF)	(\$)	(\$)	(\$)	(\$)	%	%	(\$)	(\$)
Future Retention Basins						(AF)											
S-65	New Retention Basin		Approximately 1,500 ft w/o Aquifer Dr and Highway 198		Future	6.0					98,803	113,623	130,667	0%	100%	0	130,667
S-72	New Retention Basin		Approximately 600 ft ne/o Fargo Ave and Fairmont Ave		Future	6.0					98,803	113,623	130,667	0%	100%	0	130,667
S-77	New Retention Basin		Approximately 3,300 ft w/o Greenbrier Dr and Hanford Harmona Rd		Future	18.0					154,239	177,374	203,981	0%	100%	0	203,981
S-82	New Retention Basin		Approximately 600 ft ne/o Highway 198 and 9th Ave		Future	20.0					162,915	187,352	215,455	0%	100%	0	215,455
S-86	New Retention Basin		Approximately at intersection of 8 1/2 Ave and Grangeville Blvd		Future	64.0					337,665	388,314	446,561	0%	100%	0	446,561
S-87	New Retention Basin		Approximately 1,050 ft n/o intersection of Lacey Blvd and Vista Ave		Future	58.0					314,954	362,197	416,527	0%	100%	0	416,527
S-88	New Retention Basin		Approximately 300 ft ne/o 12th Ave and Fargo Ave		Future	20.0					162,915	187,352	215,455	0%	100%	0	215,455
S-91	New Retention Basin		Approximately at the intersection of Houston Ave and 11th Ave		Future	16.0					145,440	167,256	192,345	0%	100%	0	192,345
S-92	New Retention Basin		Approximately 300 ft se/o Curtis St and David St		Future	42.0					253,061	291,021	334,674	0%	100%	0	334,674
S-93	New Retention Basin		Approximately 4,000 ft nw/o Houston Ave and 9th Ave		Future	100.0					470,108	540,624	621,718	0%	100%	0	621,718
S-94	New Retention Basin		Approximately 850 ft e/o of Lacey Blvd and 8th Ave		Future	146.0					633,259	728,248	837,485	0%	100%	0	837,485
S-95	New Retention Basin		Approximately 1,000 ft sw/of Third St and 9 1/2 Ave		Future	3.0					83,409	95,920	110,309	0%	100%	0	110,309
S-97	New Retention Basin		Approximately at the intersection of Highway 198 and Hanford Armona Rd		Future	4.0					88,652	101,950	117,242	0%	100%	0	117,242
S-98	New Retention Basin		Approximately 1,500 ft nw/o at intersection of 9 1/8 Ave and Highway 198		Future	10.0					118,115	135,832	156,207	0%	100%	0	156,207
						Subtotal - Future Pipeline Improvements					11,163,920	12,838,508	14,764,284			0	14,764,284
						Subtotal - Future Retention Basins					3,122,338	3,590,688	4,129,292			0	4,129,292
						Total											
						Pipeline Improvements					16,724,515	19,233,192	22,118,171			3,598,944	18,519,228
						Retention Basin Improvements					3,398,207	3,907,938	4,494,129			252,575	4,241,553
						Lift Station Improvements					1,836,241	2,111,677	2,428,428			2,428,428	0
						Total Capital Improvement Costs					21,958,963	25,252,807	29,040,728			6,279,947	22,760,781



Notes:

1. Costs are based on ENR Construction Cost Index from January 2017.

2. Baseline construction costs plus 15% to account for unforeseen events and unknown conditions.

3. Estimated construction costs plus 15% to cover other costs including: engineering design, project administration (developer and City staff), construction management and inspection, and legal costs.

4. New retention basin depth assumed to be equal to 25 feet.

5. Pipelines servicing future retention basins are placeholders for future trunk systems of this basin

6. Casing price is estimated at \$22/in/l-ft.

7/19/2017

- **Replacement Pipeline.** This improvement is intended as a replacement to an existing pipeline, and along the same alignment. The existing pipeline should be abandoned when the replacement pipeline has been constructed.

The opinion of probable construction costs, for the projects included in this master plan, are based on the pipe unit costs summarized on [Table 6.1](#).

6.3.2 Drainage Basins

Retention basin improvements included the following two categories:

- **Existing Retention Basin Capacity Expansion.** Existing retention basin improvements are shown on [Figure 6.1](#), and listed on [Table 6.2](#). Each retention basin includes the volume required to meet the design storm requirements in acre feet.

It should be noted that infill development requiring capacity increases to the retention basins should excavate the retention basin and provide appurtenances to connect to the storm drainage system.

- **New Future Retention Basins.** New retention basins are also shown on [Figure 6.1](#), listed on [Table 6.2](#).

The opinion of probable construction costs for new or upgraded retention basins are based on the costs summarized on [Table 6.1](#).

6.3.3 Pump Stations

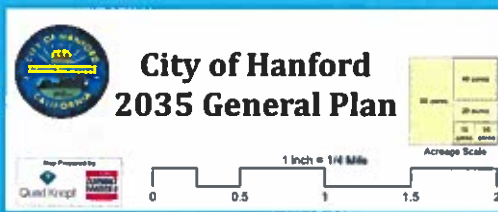
Several existing pump stations required capacity increases to meet the performance criteria listed in a previous chapter, as shown on [Figure 6.1](#). The pump station and the recommended firm capacity is listed on [Table 6.2](#).

6.3.4 Suggested Capacity Allocation Analysis

Capacity allocation analysis is needed to identify improvement funding sources, and to establish a nexus between development impact fees and improvements needed to service growth. In compliance with the provisions of Assembly Bill AB 1600, the analysis differentiates between the project needs of servicing existing users and for those required to service anticipated future developments. [Table 6.2](#) lists each improvement, and separates the cost by responsibility between existing and future users. The cost responsibility is based on model parameters for existing and future land use, and may change depending on the nature of development.

APPENDIX A

General Plan Land Use Map





AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: F
--------------------------------	--------------------------

SUBJECT:

Public Works: Purchase of one 2018 Peterbilt 520 automated refuse vehicle from Ruckstell California Sales Co., Inc., of Fresno, Ca., in the amount of \$307,169.34; authorize an appropriation of \$48,080.82 from Refuse Enterprise Funds; and declare one 2009 refuse vehicle as surplus.

RECOMMENDATION:

That the City Council, by motion:

1. Approve the purchase of one 2018 Peterbilt 520 automated refuse vehicle from Ruckstell California Sales Co., Inc., of Fresno, Ca., in the amount of \$ 307,169.34; and
2. Authorize an additional appropriation of \$48,080.82 from Refuse Enterprise Funds; and
3. Declare one existing 2009 automated refuse vehicle as surplus and authorize the sale of the vehicle.

BACKGROUND:

The Fleet Replacement Reserve Budget provides funds to replace one automated refuse vehicle that has outlived its useful life. The vehicle that is scheduled to be replaced has exceeded the City's established replacement lifecycle criteria of a minimum eight years of service and is showing signs of advanced wear as documented by fleet maintenance records. Maintenance costs have steadily increased over the years and the vehicle has become unreliable for everyday use.

The City received a quote through the National Joint Powers Alliance (NJPA), which allows participating municipal agencies to purchase equipment for a lower overall purchase price due to larger overall quantity and contract pricing (Contract code No. 112014-THC). The City of Hanford is a member of NJPA.

FISCAL IMPACT:

The FY 17/18 Fleet Replacement Reserve Budget provided an estimate of \$301,300.00 for the purchase of one automated refuse vehicle. To date, a total of \$259,380.00 has been collected through the City's fleet replacement program. The total purchase price for the new refuse vehicle is \$307,169.34, including tax and delivery. An additional appropriation of \$48,080.82 from Refuse Enterprise Fund Reserves is needed to complete the purchase and outfit the vehicle. There are sufficient Refuse Enterprise Reserves to fund the additional appropriation request without impacting refuse operations or budgeted purchases in FY 17/18. Attached for Council review are copies of budget pages 15 (schedule 3) and 151 (Fleet replacement reserve). Also included are bid quotes for Signworks and Ruckstell.

ATTACHMENTS:

Budget Page 15 (Schedule 3)

Budget Page 151 (Fleet Replacement Reserve)

Ruckstell Quote

Signworks Quote

SCHEDULE 3

SUMMARY OF FUND TRANSACTIONS

		FUNDS AVAILABLE			APPROPRIATIONS			Fund Balance 06/30/18
		Fund Balance 07/01/17	Receipts/ Transfers	Total Available	Operating	Capital	Debt Service	
001	General	1,327,430	26,739,350	28,066,780	26,391,737	-	-	1,674,983
002	Economic Uncertainty Reserve	4,988,000	48,000	5,036,000	-	-	-	5,036,000
004	Accumulated Capital Outlay	2,281,040	(77,880)	2,203,160	-	943,000	-	1,260,160
005	Downtown Re-Investment Fund	114,160	6,510	120,690	-	-	-	120,690
020	Parking	107,600	9,350	116,950	-	-	-	116,950
023	Special Aviation	-	639,000	639,000	-	639,000	-	-
025	Central Parking Improvement	130,210	104,550	234,760	81,090	10,000	-	143,670
042	Gas Tax (040-044)	2,066,790	1,157,560	3,224,350	-	1,750,000	-	1,474,350
050-054	Transportation Funds	2,023,720	1,132,050	3,155,770	-	722,000	-	2,433,770
055	CMAQ	-	420,000	420,000	-	420,000	-	-
056	Prop 1B-Transp Bonds	-	-	-	-	-	-	-
100-001	CDBG Entitlement	-	127,740	127,740	127,740	-	-	-
101	City Housing Loan	1,027,430	-	1,027,430	-	-	-	1,027,430
115-101	Cal HOME Program	-	-	-	-	-	-	-
120-001	HOME Grants	-	257,900	257,900	257,900	-	-	-
160	9th Ave Sewer Assessment District	100,850	13,750	114,600	-	-	-	114,600
161	12th Ave Sewer Assessment District	824,230	56,390	880,620	-	100,000	-	780,620
180	Park Impact Fees	4,525,170	842,020	5,368,190	-	150,000	-	5,218,190
181	Transportation Impact Fees	1,369,660	1,082,890	2,452,570	-	150,000	-	2,302,570
182	Fire Protection Impact Fees	1,051,450	151,530	1,212,990	-	-	-	1,212,990
183	Police Protection Impact Fees	713,960	89,190	803,150	-	-	-	803,150
184	Storm Water Impact Fees	685,240	66,720	751,960	-	50,000	-	701,960
185	Water System Impact Fees	2,645,330	574,980	3,220,310	-	50,000	-	3,170,310
186	Wastewater System Impact Fees	3,073,880	714,100	3,787,980	-	50,000	-	3,737,980
187	Refuse/Recycle Impact Fees	482,300	92,820	575,120	-	-	-	575,120
240-275	Landscape Assessment Districts	754,130	475,320	1,229,450	-	-	456,100	773,350
300	Airport	2,770	239,830	242,600	155,430	71,000	-	16,170
306	Refuse	1,429,480	6,779,970	8,209,450	7,548,790	25,000	-	635,661
310	City of Hanford Public Housing Authority	-	172,990	172,990	172,990	-	-	-
320	Intermodal Facility	-	47,580	47,580	47,580	-	-	-
330	Courthouse Square	-	187,990	187,990	187,990	-	-	-
358	Storm Drainage	4,200,850	1,375,410	5,576,260	790,330	223,500	-	4,562,430
361	Wastewater Maintenance and Operation	1,355,010	3,663,730	5,018,740	3,474,850	-	-	1,543,890
362	WWTP Expansion Reserve	2,000,000	-	2,000,000	-	-	-	2,000,000
363	Wastewater Capital Improvement	1,475,070	-	1,475,070	-	296,500	-	1,178,570
369	1996 Sewer Refund Bond Debt Service	-	-	-	-	-	-	-
374	CIEDB 2002 WW Dbt Svc	-	579,680	579,680	-	-	579,680	-
375	2011 BofA Lease/Pur	-	219,290	219,290	-	-	219,290	-
375-001	2012 Rfd Swr Rev Bond	-	940,360	940,360	-	-	940,360	-
375-002	2015 Rfd Swr Rev Bond	-	312,740	312,740	-	-	312,740	-
390	Water Maintenance and Operation	2,374,110	3,594,820	5,968,930	3,845,010	-	-	2,123,920
391	Water Capital Improvement	1,702,100	3,203,490	4,905,590	-	2,060,000	-	2,845,590
394-004	Gvmt Capital Wtr Lease/Pur Agrmt	-	296,510	296,510	-	-	296,510	-
394-005	2013 Water Refund Revenue Bond	-	1,139,800	1,139,800	-	-	1,139,800	-
394-006	2014 BofA Solar Lease/Purchase	-	583,550	583,550	-	-	583,550	-
395	Prop 84 Grant Funds	-	-	-	-	-	-	-
409	Insurance	1,500,000	-	1,500,000	-	-	-	1,500,000
410	Workers' Compensation	1,495,370	-	1,495,370	121,630	-	-	1,373,740
414	Computer Replacement Reserve	667,860	-	667,860	-	-	-	667,860
415	Computer Maintenance	90,700	-	90,700	9,300	-	-	81,400
416	Building Maintenance	206,450	(38,710)	167,740	(39,980)	-	-	207,720
417	Building Capital/Equip. Repl. Reserve	502,180	-	502,180	(80,990)	-	-	583,170
447	Fleet Maintenance	222,700	3,500	226,200	13,340	-	-	212,860
448	Fleet Reserve	10,255,520	140,400	10,395,920	(359,500)	-	-	10,755,420
450	Fire Cap/Equip Repl Reserve	438,340	-	438,340	44,230	-	-	394,110
452	Aquatics Cap/Equip Repl Reserve	272,000	-	272,000	-	-	-	272,000
506	RDA Successor Agency Admin Funds	240,000	188,860	428,860	188,860	-	-	240,000
514-002	Police Mini Grants	-	-	-	-	-	-	-
523	Joint Rec/Ed Facility Project	-	-	-	-	-	-	-
524-001	Grants	-	-	-	-	-	-	-
555-562	CFD 91-1 Bond	-	-	-	-	-	-	-
		60,724,140	58,365,630	119,089,770	42,976,387	7,710,000	4,528,030	63,873,353

Attachment: Budget Page 15 (Schedule 3) (PW: Purchase of One 2018 Replacement Automated Refuse Vehicle)

LINE ITEM SUMMARY

PUBLIC WORKS - FLEET REPLACEMENT RESERVE

Fund: 448 Division: 2050

		2014-15 ACTUAL	2015-16 ADOPTED	2015-16 PROJECTED	2016-17 PROPOSED	2017-18 PROPOSED
	<u>FIXED ASSETS</u>					
2050 888599	Prior Year Fixed Assets	1,384,075	976,060	1,500,330	-	-
2050 817049	MISC SMALL EQUIP (PARKS)	-	-	-	5,000	-
2050 817301	1-CONTAINER DELIVERY TRUCK	-	-	-	42,000	-
2050 817302	1-MOTORCYCLE (PD)	-	-	-	31,000	-
2050 817303	3-CARS, PATROL	-	-	-	135,000	-
2050 817304	4-PICKUP, 1/2 TON	-	-	-	78,400	-
2050 817305	7-PICKUP, 3/4 TON	-	-	-	210,000	-
2050 817306	1-PICKUP, FLATBED (STREETS)	-	-	-	37,000	-
2050 817307	1-PICKUP, 4 DOOR 4X4 (FIRE)	-	-	-	29,100	-
2050 817308	1-SERVICE TRUCK (SEWER)	-	-	-	65,400	-
2050 817309	1-CHIPPER BOX TRUCK (PARKS)	-	-	-	40,700	-
2050 817310	1-PICKUP, FLATBED DUMP TRUCK (STREETS)	-	-	-	64,500	-
2050 817311	1-TRACTOR (STREETS)	-	-	-	99,000	-
2050 817312	1-TRUCK, BOOM/LIFT (PARKS)	-	-	-	114,000	-
2050 817313	1-TRUCK, 30YD AUTOMATED	-	-	-	301,300	-
2050 817315	3-TILT TRAILERS (PARKS)	-	-	-	19,500	-
2050 817316	1-TRAILER MOUNTED PUMP (WWTP)	-	-	-	21,930	-
2050 817317	2-PORTABLE TRAILER MNTD GENSETS	-	-	-	211,000	-
2050 817318	1-RIDING DUMP MOWER	-	-	-	29,000	-
2050 818027	MISC SMALL EQUIP (PARKS)	-	-	-	-	5,000
2050 818300	3-CARS, PATROL	-	-	-	-	135,000
2050 818301	1-TRUCK, 30YD AUTOMATED	-	-	-	-	301,300
2050 818302	1-STREET SWEEPER	-	-	-	-	275,000
2050 818303	1-INTEGRATED TOOL LOADER (STREETS)	-	-	-	-	175,000
2050 818304	1-WOOD CHIPPER (PARKS)	-	-	-	-	38,300
2050 818305	1-HYDRO VAC (SEWER)	-	-	-	-	346,000
	TOTAL FIXED ASSETS	1,384,075	976,060	1,500,330	1,533,830	1,275,600
	<u>TRANSFERS/REIMBURSEMENTS</u>					
2050 9100	Interfund Charges	(1,435,190)	(1,426,880)	(1,426,880)	(1,637,450)	(1,635,100)
	TOTAL TRANSFERS/REIMB.	(1,435,190)	(1,426,880)	(1,426,880)	(1,637,450)	(1,635,100)
	NET EXPENDITURE	(51,115)	(450,820)	73,450	(103,620)	(359,500)

Attachment: Budget Page 151 (Fleet Replacement Reserve) (PW: Purchase of One 2018 Replacement Automated Refuse Vehicle)

RUCKSTELL

CALIFORNIA SALES CO., INC.

P.O. Box 12543

Fresno, CA 93778

Estimate

Date	Estimate #
10/18/2017	03088

Name / Address

City of Hanford
pubilc works
900 s. 10th ave
Hanford, CA 93230

Rep	Requested by:	FOB	P.O. No.
EI	Tommy		

Item	Description	Qty	Cost	Total
Retail	30 YARD HEIL RAPID RAIL MOUNTED ON RIGHT HAND DRIVE 320 PETERBILT W/ THE FOLLOWING FULL FACTORY MOUNT CHANGEABLE SPRING STEEL GRABBERS (60-90 GALLON CONTAINERS) OPERATE IN GEAR AT IDLE FRONT MOUNT TANDEM PUMP HOPPER & LIFT WORK LIGHTS PETERSON MULTI FUNCTION (SMART) LED STROBE/TURN LAMPS - INCLUDES LIGHT PACKAGE FOR ENTIRE UNIT AMBER STROBE LIGHT/ IN CAB SWITCH,PUMP ON, AND REVERSE ACTIVATED (MOUNTED MID-TAILGATE) LIFT CYCLE COUNTER JOYSTICK CONTROL W/ ROCKER SWITCH FOR LIFT ONLY IN-CAB REMOTE ROCKER SWITCH CONTROL FOR LIFT ONLY OBSERVATION LADDER (MOUNTED TO STREET SIDE OF HOPPER) HEAVY DUTY OVERLAY PACKAGE (HOPPER FLOOR AND SIDE's 48" INTO BODY) PNEUMATIC HOPPER COVER SOLID HOPPER UPPER EXTENSION REAR FENDERS FOR TANDEM REAR TIRES CONTINUOUSLY WELDED BODY INTERIOR	1	139,878.72	139,878.72T
Thank you for your business.		Subtotal		
		Sales Tax (7.25%)		
		Total		

Signature

Phone #	559-233-3277	Fax #	559-233-9844	E-mail	info@ruckstell.com
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RUCKSTELL

CALIFORNIA SALES CO., INC.

P.O. Box 12543

Fresno, CA 93778

Estimate

Date	Estimate #
10/18/2017	03088

Name / Address

City of Hanford
public works
900 s. 10th ave
Hanford, CA 93230

Rep	Requested by:	FOB	P.O. No.
EI	Tommy		

Item	Description	Qty	Cost	Total
Equipment	20 LB. FIRE EXTINGUISHER W/ MOUNTING BRACKET 36" TOOL BOX (2) SPILL KITS - ONE SNAKE TYPE & ONE 5 GALLON BUCKET W/ SPREAD ABSORBENT CUSTOMIZED LIFT PAINTED TO MATCH BODY PRO-VISION 3 CAMERA SYSTEM W/ 7" QUAD MONITOR. (1 HOPPER, 1 REAR VIEW, 1 WEDGE MOUNTED ON LEFT SIDE OF CAB TO ELIMINATE BLIND SPOT) 5 YEAR WARRANTY ON SYSTEM CONVEX MIRROR MOUNTED FOR VIEW INTO HOPPER BROOM AND SHOVEL HOLDER CAB MOUNTED AMBER LED SAFETY LIGHTS (2 FRONT FACING / 2 SIDE FACING) 2018 320 PETERBILT R/H DRIVE WITH CITY OF HANFORD SPECIFICATIONS	1	140,640.48	140,640.48T
Equipment	TIRE RECYCLING FEE	1	17.50	17.50
Equipment	DOCUMENTARY FEE	1	45.00	45.00
Equipment	ADMINISTRATION FEE	1	250.00	250.00
Freight	PER UNIT	1	6,000.00	6,000.00
THIS IS YOUR NJPA APPROVED COSTING BY HEIL ENVIRONMENTAL NJPA MEMBER CODE 112014-THC				
Thank you for your business.			Subtotal	\$286,831.70

Valid for 20 days from date of estimate. This estimate is not a contract or a bill. It is what we would expect the total price to complete the work stated above, based upon our initial inspection. If additional parts and/or labor are required, we will inform you prior to proceeding with the work. A signed estimate is required prior to beginning work stated above.

Sales Tax (7.25%) \$20,337.64

Total **\$307,169.34**

Signature _____

Phone #	559-233-3277	Fax #	559-233-9844	E-mail	info@ruckstell.com
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Estimate



SignWorks

109 E. 5th Street
Hanford, CA 93230
ph. (559) 583-1175
fax (559) 583-1824
email: info@signworksworld.com

Prepared For: Tommy Bettencourt
City Of Hanford
900 S. 10th Avenue
Hanford, CA 93230

ph: (559) 585-2554

fax:

Estimate: No:	27751
Date:	10/30/2017 11:08:53AM
Terms:	Net 75
Due Date:	1 day(s) from order
Salesperson:	Brianna Garcia

Description: Caution Decal for Garbage Truck

Dear Tommy:

Thank you for considering SignWorks for your sign needs.
If you have any questions, please don't hesitate to call me at 583-1175

>>> PLEASE CONTACT US SO WE CAN PROCEED WITH THIS ORDER, THANK YOU. <<<

Sincerely,

Brianna Garcia
Sales Rep.

Qty	Product	Sides	Size	Unit Cost	Install	Item Total
1	Digital Pnt Reflective	1	14 x 70.5	\$288.00	\$0.00	\$288.00
Description	Full color Outdoor Digital Printed on Reflective Vinyl.. Include installation					
Text:	CAUTION - STAY BACK					
	FREQUENT STOPS AND BACKING					

Notes:

Line Item Total:	\$288.00
Tax Exempt Amt:	\$240.00
Subtotal:	\$288.00
Taxes:	\$3.48
Total:	\$291.48

Accepted By (signature required)

Date

Fax Confirmation to (559) 583-1824

Garbage Truck Decal



Quantity: x1
Faces: Single
Size: 14x70.5
1st Surface X 2nd Surface
Substraight Material:
Copy Material: Digital print
Reflective
Colors: Red Black White
Clear Coat:
Laminate: X
Lighted ☐ Type:
Non Lighted ☐
Mounting:
Installation:
Permit Needed:
NOTES:

Drawn By: Buanna Gaudin

NOTE:
THIS JOB IS ON HOLD
UNTIL WE RECEIVE NOTICE
FROM YOU. PLEASE CONTACT
US AS SOON AS POSSIBLE
TO AVOID ANY DELAY.
Copyright © 2015

PLEASE SIGN BELOW FOR APPROVAL OR MODIFICATIONS AND FOR BACK

Company Name:	City of Hanford
Invoice: #Estimate	
Revision: #1	
Date: 10/30/17	

SignWorks
CONCEPT DRAWING
PAGE 1 of 1

X YOUR SIGNATURE DESIGNATES FINAL APPROVAL OF DESIGN / LAYOUT.
Date:

Signatures and initials are required. All signatures are subject to approval and approval.



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017

AGENDA SECTION: G

SUBJECT:

Parks & Recreation: Approve contract with Westscapes in the amount of and not to exceed \$34,520.72 for Landscape Assessment District Enhancement Projects

RECOMMENDATION:

That the City Council, by motion, approve the contract between, Erin Bell of Hanford, CA DBA Westscapes Inc. And the City of Hanford, in the amount of and not to exceed \$34,520.72 for the removal of the existing dead or dying plant material, grading, new plant material, walk on bark and replacement of missing trees.

BACKGROUND:

The Parks and Recreation Department manages the maintenance for the thirty two (32) landscape districts throughout the City. When there is a maintenance or enhancement need and funding is available in a district, an enhancement project is developed to improve the landscape. There are five (5) districts that are in need of an enhancement and have an ample amount of funding to perform the enhancement project, which will replace the plant material which has been lost due to drought and landscape age with new more drought tolerant shrubs and trees. This project will replace the landscape at the following districts Mission Park, Pacific Grove, Sidonia, Le Parc and Cambridge Homes 770 while retaining the existing trees, which are in good health and replenish the landscape with new walk on bark to help with weed control and moisture retention to conserve water.

FISCAL IMPACT:

There would be no fiscal impact to City budgets, with all funding for the project being provided by the Landscape Assessment District's reserve funds. Attached is a cost break down for each of the Districts being enhanced.

ATTACHMENTS:

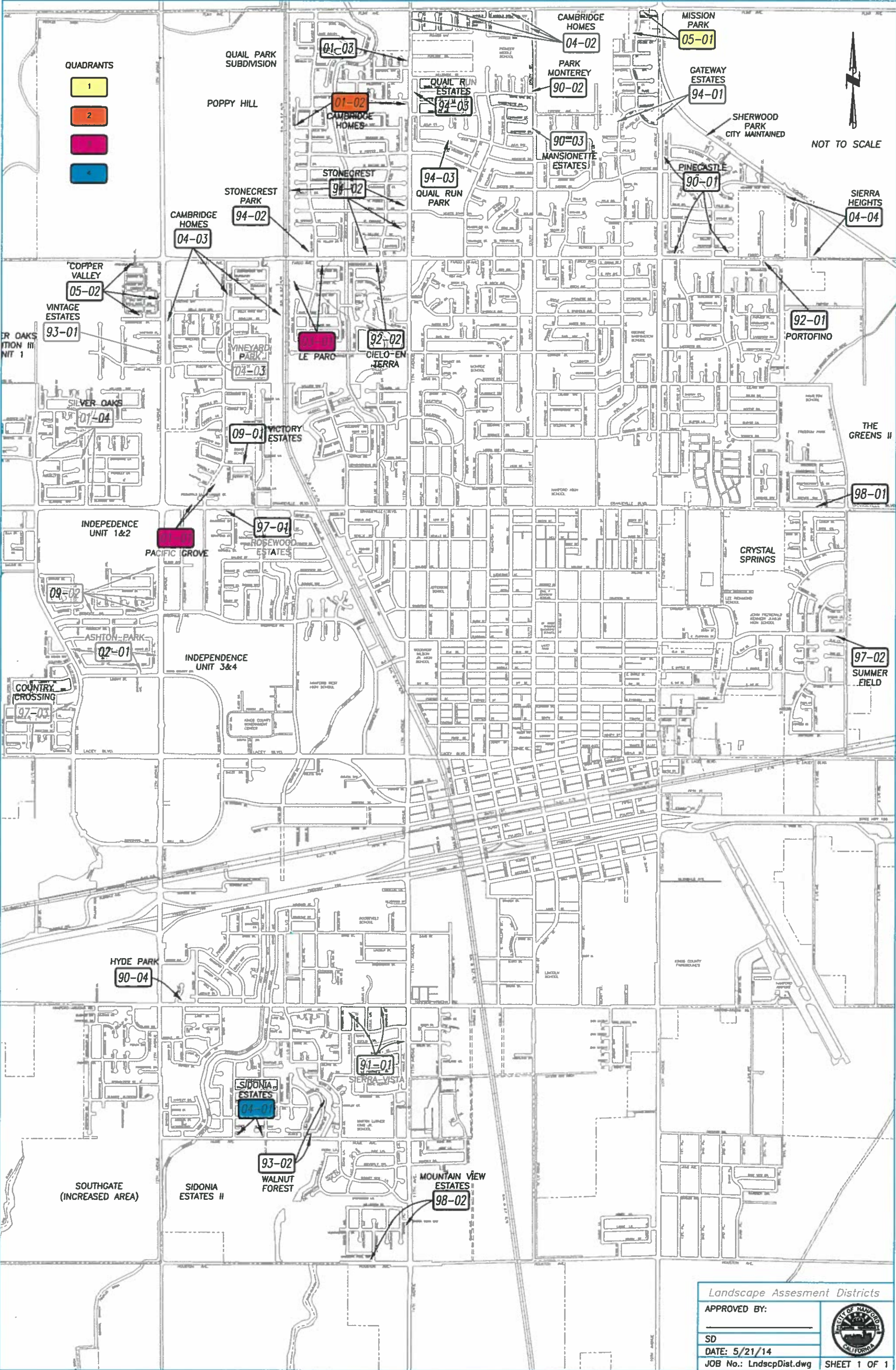
Enhancement Bid Calculations 2017

Highlighted District Map

Landscape Assessment Districts - Enhancement Project Contract Bid
Tabulation

District Enhancement Project - Lump Sums

CONTRACTOR	Mission Park	Pacific Grove	Sidonia	Le Parc	Cambridge 770	Bid Totals:
Westscapes Inc.	\$2,994.46	\$9,457.97	\$10,026.00	\$6,945.87	\$5,096.42	\$34,520.72
Clean Cut Landscape	\$8,233.00	\$12,775.00	\$19,520.00	\$11,344.00	\$10,128.00	\$62,000.00



Attachment: Highlighted District Map (Landscape Districts Enhancement Projects '17)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017

AGENDA SECTION: H

SUBJECT:

Utilities and Engineering: Approve a Notice of Completion for the Youth Athletic Complex - Storm Drain Outfall Structure, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

RECOMMENDATION:

That the City Council, by motion, approve a Notice of Completion for the Youth Athletic Complex - Storm Drain Outfall Structure, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

BACKGROUND:

On August 29, 2017, the Council awarded the Youth Athletic Complex - Storm Drain Outfall Structure to Haydon Construction, Inc., of Fresno, CA. This project consists of replacing an existing storm drainage outfall structure located within the Youth Athletic Complex drainage basin with a new facility to improve storm drainage capacity.

There were no contract change orders on this project.

FISCAL IMPACT:

The FY 16/17 Capital Improvement Program Budget provides \$22,000 for construction, including contingencies, for this project. An additional appropriation of \$10,255.00 from the Storm Drainage Capital Fund was previously approved by council to fully fund this project.

The total cost to complete the project construction was \$29,355.00. Attached is a Final Project Construction and Finance History Report for Council review.

ATTACHMENTS:

Final Project Construction and Finance History Report
NOC - Recording Original

FINAL PROJECT CONSTRUCTION AND FINANCE HISTORY

PROJECT: Youth Athletic Complex - Storm Drain Outfall Structure
 CONTRACTOR: Haydon Construction, Inc.
 2350 N. Chestnut Ave #103
 Fresno, CA 93703

CONTRACT DATES:	Bid Date	July 24, 2017
	Council Award	August 29, 2017
	Contractor Started Work	September 15, 2017
	Contract Time of Completion	October 15, 2017
	Contractor Completed Work	October 15, 2017

CONTRACT CHANGE ORDERS:

There were no contract change orders on this project.

FINANCIAL HISTORY:

<u>SOURCE OF BUDGET FUNDING</u>	<u>AMOUNT</u>
FY 16/17 Capital Improvement Program Budget	\$ 22,000.00
Storm Drainage Capital Fund	\$ 10,255.00
Total Budget Funding	\$ <u>32,255.00</u>

CONSTRUCTION COSTS

Contract – Total Bid Award	\$ 29,355.00
Total Construction Cost	\$ <u>29,355.00</u>
Fund Balance	\$ <u>2,900.00</u>

RECORDING REQUESTED BY:
CITY OF HANFORD

When recorded return to:

City Clerk
City of Hanford
315 North Douty Street
Hanford, California 93230-3951

G.C. 27361.3 - Fee NIL

NOTICE OF COMPLETION

TO WHOM IT MAY CONCERN:

YOU ARE HEREBY NOTIFIED AS FOLLOWS:

1. The work of Improvement is located on: Youth Athletic Complex APN: 010310004000
2. The Improvement is particularly described as: Youth Athletic Complex - Storm Drain Outfall Structure
3. The date of completion of the work of Improvement: October 15, 2017
4. The Owner of the work of Improvement: City of Hanford.
5. The nature of the owner's interest or estate: Fee Simple Title.
6. The name of the original contractor for the work of Improvement: Haydon Construction, Inc.
7. The surety for the work of Improvement: None Required
8. All work for this project has been completed.
9. Accepted by minute action of the City Council of the City of Hanford on: November 7, 2017

I certify under penalty of perjury that the foregoing is true and correct.
Dated this 7th day of November, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Attachment: NOC - Recording Original (UE: NOC for YAC Storm Drain Outfall Structure)

I, the undersigned, say:

I am the person who signed the foregoing notice. I have read the above notice and know its contents, and the facts stated therein are true of my own knowledge.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Hanford, California, this ____ day of _____, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Authority: Section 1181 Civil Code

Attachment: NOC - Recording Original (UE: NOC for YAC Storm Drain Outfall Structure)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017

AGENDA SECTION: I

SUBJECT:

Utilities and Engineering: Approve a Notice of Completion for the Sixth Street at Douty Street Parking Lot Improvements Project and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

RECOMMENDATION:

That the city council, by motion, approve a Notice of Completion and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

BACKGROUND:

On March 7, 2017, the Council awarded the Sixth Street at Douty Street Parking Lot Improvements Project to Agee Construction Corporation of Clovis, CA. This project consisted of the reconstruction of Parking Lot No. 2 located at the southwest corner of Sixth Street and Douty Street. Improvements included the construction of landscape planter islands, decorative lights, landscaping, pavement reconstruction, and restriping.

There were three change orders on this project.

FISCAL IMPACT:

The FY14/15 Downtown Capital Improvement Program Budget provided \$339,664.00 for construction, including contingency, for this project.

The total cost to complete the project was \$324,486.12. Attached are the Final Project Construction and Finance History for Council review.

ATTACHMENTS:

NOC Finance History
NOC - Recording Original

FINAL PROJECT CONSTRUCTION AND FINANCE HISTORY

PROJECT: Sixth Street at Douty Street Parking Lot Project

CONTRACTOR: Agee Construction Corporation
P.O. Box 629
Clovis, CA 93613

CONTRACT DATES:	Bid Date	February 21, 2017
	Council Award	March 7, 2017
	Contractor Started Work	May 22, 2017
	Contract Time of Completion	November 11, 2017
	Contractor Completed Work	October 26, 2017

CONTRACT CHANGE ORDERS:

- Contract Change Order No.1: Conflict with existing electrical utility and installation of storm drain; re-grade parking lot; remove excess dirt for fence; and remove 15 LF of curb and gutter.; Install fire hydrant (T&M); pothole for water main; . Delay in project due to SCE electrical not energized.
For a fee increase of \$11,863.86.
- Contract Change Order No. 2: Delay in project due to SCE meter set; Landscapers work put on hold 7/11/17 due to no power. Subcontractor demobilized project due to delay. Additional cost incurred to remobilize landscapers and equipment from Fresno.
For a fee increase of \$2,500.00.
- Contract Change Order No. 3: Additional time to finalize fire hydrant installation (T&M); repair AC due to SCE guy wire placement; building permit fee; balance of quantities.

FINANCIAL HISTORY:

<u>SOURCE OF BUDGET FUNDING</u>	AMOUNT
FY14/15 Downtown Capital Improvement Program Budget	\$ 339,664.00
Total Budget Funding	\$ <u>339,664.00</u>

CONSTRUCTION COSTS

Contract – Total Bid Award	\$ 308,785.00
CCO # 1	\$ 11,863.86
CCO # 2	\$ 2,500.00
CCO # 3	\$ 1,337.26
Total Construction Cost	\$ <u>324,486.12</u>
Fund Balance	\$ <u>15,177.88</u>

RECORDING REQUESTED BY:
CITY OF HANFORD

When recorded return to:

City Clerk
City of Hanford
315 North Douty Street
Hanford, California 93230-3951

G.C. 27361.3 - Fee NIL

NOTICE OF COMPLETION

TO WHOM IT MAY CONCERN:

YOU ARE HEREBY NOTIFIED AS FOLLOWS:

1. The work of Improvement is located at: APN 012-091-005, located at the southwest corner of Sixth Street and Douty Street, in Hanford, CA.
2. The Improvement is particularly described as: Sixth at Douty Parking Lot Improvements.
3. The date of completion of the work of Improvement: October 26, 2017.
4. The Owner of the work of Improvement: City of Hanford.
5. The nature of the owner's interest or estate: Fee Simple Title.
6. The name of the original contractor for the work of Improvement: Agee Construction Corporation of Clovis, CA.
7. The surety for the work of Improvement: Liberty Mutual Insurance Company
8. All work for this project has been completed.
9. Accepted by minute action of the City Council of the City of Hanford on: November 7, 2017.

I certify under penalty of perjury that the foregoing is true and correct.
Dated this 7th day of November, 2017.

BY: _____

David Ayers, Mayor
City of Hanford, County of Kings, State of California

Attachment: NOC - Recording Original (UE: NOC for Sixth at Douty Parking Lot Improvements)

I, the undersigned, say:

I am the person who signed the foregoing notice. I have read the above notice and know its contents, and the facts stated therein are true of my own knowledge.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Hanford, California, this ____ day of _____, 2017.

BY: _____
David Ayers, Mayor
City of Hanford, County of Kings, State of California

Authority: Section 1181 Civil Code



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: J
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SUBJECT:

Utilities and Engineering: Approve a Notice of Completion for the FY 16-17 Manhole Repair Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

RECOMMENDATION:

That the City Council, by motion, approve a Notice of Completion for the FY 16-17 Manhole Repair Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

BACKGROUND:

On July 18, 2017, the Council awarded the FY 16-17 Manhole Repair Project to SoCal Pacific Construction Corp., of Murrieta, CA. The Manhole Repair Project provided repair for damaged sanitary sewer manholes where corrosion affects the concrete surfaces.

There was one contract change order on this project.

FISCAL IMPACT:

The FY 16/17 Capital Improvement Program Budget provided \$88,000.00 for construction, including contingencies, for this project.

The total cost to complete the project construction was \$44,065.00. Attached is a Final Project Construction and Finance History Report for Council review.

ATTACHMENTS:

Final Project Construction and Finance History Report
NOC - Recording Original

FINAL PROJECT CONSTRUCTION AND FINANCE HISTORY

PROJECT: FY 16-17 Manhole Repair Project
 CONTRACTOR: SoCal Pacific Construction Corp.
 26713 Madison Ave
 Murrieta, CA 92562

CONTRACT DATES:	Bid Date	June 10, 2017
	Council Award	July 18, 2017
	Contractor Started Work	September 25, 2017
	Contract Time of Completion	October 25, 2017
	Contractor Completed Work	October 25, 2017

CONTRACT CHANGE ORDERS:

Contract Change Order No.1: Eliminate Bid Item 3, manhole # 3 to be repaired and coated on Irwin between Sixth & Seventh Street, from the contract.
 For a total Decrease of \$3,894.00

FINANCIAL HISTORY:

<u>SOURCE OF BUDGET FUNDING</u>	AMOUNT
FY 16/17 Capital Improvement Program Budget	\$ 88,000.00
Total Budget Funding	\$ <u>88,000.00</u>

CONSTRUCTION COSTS

Original Contract – Total Bid Award	\$ 47,959.00
Contract Change Order No. 1	\$ -3,894.00
Total Construction Cost	\$ <u>44,065.00</u>
Fund Balance	\$ <u>43,935.00</u>

RECORDING REQUESTED BY:
CITY OF HANFORD

When recorded return to:

City Clerk
City of Hanford
315 North Douty Street
Hanford, California 93230-3951

G.C. 27361.3 - Fee NIL

NOTICE OF COMPLETION

TO WHOM IT MAY CONCERN:

YOU ARE HEREBY NOTIFIED AS FOLLOWS:

1. The work of Improvement is located in: Various Manholes within the City of Hanford
2. The Improvement is particularly described as: FY 16-17 Manhole Repair Project
3. The date of completion of the work of Improvement: October 25, 2017
4. The Owner of the work of Improvement: City of Hanford.
5. The nature of the owner's interest or estate: Fee Simple Title.
6. The name of the original contractor for the work of Improvement:
SoCal Pacific Construction Corp.
7. The surety for the work of Improvement: US Specialty Insurance Company
8. All work for this project has been completed.
9. Accepted by minute action of the City Council of the City of Hanford on:
November 7, 2017

I certify under penalty of perjury that the foregoing is true and correct.
Dated this 7th day of November, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Attachment: NOC - Recording Original (UE: NOC for FY 16-17 Manhole Repair Project)

I, the undersigned, say:

I am the person who signed the foregoing notice. I have read the above notice and know its contents, and the facts stated therein are true of my own knowledge.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Hanford, California, this ____ day of _____, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Authority: Section 1181 Civil Code

Attachment: NOC - Recording Original (UE: NOC for FY 16-17 Manhole Repair Project)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: K
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SUBJECT:

Utilities and Engineering: Approve a Notice of Completion for the FY 16/17 Cape Seal Treatment Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

RECOMMENDATION:

That the City Council, by motion, approve a Notice of Completion for the FY 16/17 Cape Seal Treatment Project, and authorize the Mayor to execute and the City Clerk to attest and file said Notice with the Kings County Recorder's Office.

BACKGROUND:

On May 16th, 2017, the Council awarded the FY 16/17 Cape Seal Treatment Project to VSS International, Inc., of Sacramento, CA. Cape seal coating is a surface protection and pavement preservation treatment for city streets. The treatment process is used to extend the useful life of road surface thereby reducing maintenance costs.

There were two contract change orders on this project.

FISCAL IMPACT:

The FY 16/17 Capital Improvement Program Budget provides \$440,000 for construction, including contingencies, for this project.

The total cost to complete the project construction was \$434,638.75. Attached is a Final Project Construction and Finance History Report for Council review.

ATTACHMENTS:

NOC - Recording Original
Final Project Construction and Finance History Report

RECORDING REQUESTED BY:
CITY OF HANFORD

When recorded return to:

City Clerk
City of Hanford
315 North Douty Street
Hanford, California 93230-3951

G.C. 27361.3 - Fee NIL

NOTICE OF COMPLETION

TO WHOM IT MAY CONCERN:

YOU ARE HEREBY NOTIFIED AS FOLLOWS:

1. The work of Improvement is located on: Various Streets in the City of Hanford
2. The Improvement is particularly described as: FY 16/17 Cape Seal Treatment Project
3. The date of completion of the work of Improvement: October 10, 2017
4. The Owner of the work of Improvement: City of Hanford.
5. The nature of the owner's interest or estate: Fee Simple Title.
6. The name of the original contractor for the work of Improvement: VSS International, Inc.
7. The surety for the work of Improvement: Western Surety Company
8. All work for this project has been completed.
9. Accepted by minute action of the City Council of the City of Hanford on: November 7, 2017

I certify under penalty of perjury that the foregoing is true and correct.
Dated this 7th day of November, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Attachment: NOC - Recording Original (UE: NOC for FY 16/17 Cape Seal Treatment Project)

I, the undersigned, say:

I am the person who signed the foregoing notice. I have read the above notice and know its contents, and the facts stated therein are true of my own knowledge.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Hanford, California, this ____ day of _____, 2017.

BY: _____
David G. Ayers, Mayor
City of Hanford, County of Kings, State of California

Authority: Section 1181 Civil Code

Attachment: NOC - Recording Original (UE: NOC for FY 16/17 Cape Seal Treatment Project)

FINAL PROJECT CONSTRUCTION AND FINANCE HISTORY

PROJECT: FY 16/17 Cape Seal Treatment Project
 CONTRACTOR: VSS International, Inc.
 PO Box 981330
 West Sacramento, CA 95798

CONTRACT DATES:	Bid Date	March 11, 2017
	Council Award	May 16, 2017
	Contractor Started Work	June 19, 2017
	Contract Time of Completion	October 10, 2017
	Contractor Completed Work	October 10, 2017

CONTRACT CHANGE ORDERS:

Contract Change Order No.1: Increase scope to include an additional 37,607 SY of scrub seal, increase scope to include an additional 37,607 SY of Type III micro surfacing, additional cost for installing striping and pavement markers in additional scope areas, and additional traffic control for the increased scope areas.
 For a total Increase of \$189,872.20.

Contract Change Order No.2: Extra work to remove markers and extra striping from streets added in change order 1. Extra contact time given due to delays in Fiberized Seal Project preventing striping within this project to be completed.
 For a total Increase of \$34,766.55.

FINANCIAL HISTORY:

<u>SOURCE OF BUDGET FUNDING</u>	<u>AMOUNT</u>
FY 16/17 Capital Improvement Program Budget	\$ 440,000.00
Total Budget Funding	\$ <u>440,000.00</u>

CONSTRUCTION COSTS

Contract – Total Bid Award	\$ 210,000.00
CCO # 1	\$ 189,872.20
CCO # 2	\$ 34,766.55
Total Construction Cost	\$ <u>434,638.75</u>
Fund Balance	\$ <u>5,361.25</u>



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: L
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SUBJECT:

Utilities and Engineering: Approve the Final Map and Subdivision Agreement for Tract No. 887, Unit 2, and accept all easements and dedications offered for public use. (Centennial Dr. and Berkshire Lane)

RECOMMENDATION:

That the City Council, by motion, approve the Final Map and Subdivision Agreement for Tract No. 887, Unit 2, and accept all easements and dedications offered for public use.

BACKGROUND:

The final subdivision map for Tract No. 887, Silver Oaks Subdivision No. III, Unit 2, a 62-lot subdivision as shown on the attached map, has been checked and approved by staff. The developer of Tract No. 887, Silver Oaks Subdivision No. III, Unit 2, is Lennar Communities, Inc., a California Corporation.

All required fees have been paid, and proper improvement security for all required subdivision improvements has been posted in accordance with the attached Subdivision Agreement, which has been reviewed and approved by the Utilities and Engineering Department and signed by the developer.

FISCAL IMPACT:

The right of way dedications and easements are offered at no cost to the city, and all subdivision improvements will be constructed at the developer's expense.

ATTACHMENTS:

Tract # 887 Unit 2 -Location Map
Tract # 887 Unit 2 -Subdivision Agreement

ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF



**CITY OF HANFORD
SUBDIVISION AGREEMENT**

TRACT NO. 887 UNIT 2, Silver Oaks Addition III

THIS SUBDIVISION AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2017, by and between Lennar Homes of California, Inc. ("SUBDIVIDER"), and the City of Hanford, a Municipal Corporation ("CITY").

RECITALS

A. The SUBDIVIDER has presented to the CITY a final map of the proposed Subdivision of certain real property located within the city limits of the City and more particularly described in Exhibit "A" which has been filed with the City Engineer and is made a part hereof by reference ("Final Map") and identified as Tract No. 887 Unit 2, Silver Oaks Addition III Development ("SUBDIVISION"). The real property is to be developed in accordance with subdivision improvement plans, which have been filed with the City Engineer and are made a part hereof by reference and identified as Exhibit "B" ("Improvement Plans"). SUBDIVIDER has requested that the CITY accept and approve the Final Map and the dedications delineated and shown on the Final Map for the use and purposes specified thereon, and otherwise approve the Final Map in order that the same may be recorded as required by law.

B. The CITY requires as a condition precedent to the acceptance and approval of the Final Map, the dedication of such streets and easements as are delineated and shown on the Final Map, and deems the same as necessary for the public use, and requires that any and all streets and easements delineated and shown thereon shall be improved by the construction thereon and the installation therein of the improvements specified herein.

C. Certain public improvements are required to be made by SUBDIVIDER in accordance with the approved tentative map of the SUBDIVISION. Section 66462 of the California Government Code provides, as a condition precedent to the approval of the Final Map, that the City Council shall require the SUBDIVIDER to enter into an agreement to complete said public improvements.

Attachment: Tract # 887 Unit 2 -Subdivision Agreement (UE: Tract 887- Silver Oaks Addition No. III- Unit II)

D. Chapter 16.24.070 of the Hanford Municipal Code requires the SUBDIVIDER to enter into an agreement with the CITY to perform and complete the work and matters as hereinafter described in this Agreement, in conformance with Sections 16.24.010 through 16.24.120, inclusive of the Hanford Municipal Code, which Sections by reference are incorporated into this Agreement and made a part hereof.

NOW THEREFORE, it is hereby agreed as follows:

1. Improvements.

SUBDIVIDER shall complete all required public improvements in the Subdivision as identified in Exhibit "B" of this Agreement (collectively "IMPROVEMENTS") and in accordance with all of the requirements and standards as set forth in the approval or conditional approval of the Tentative Map of the SUBDIVISION, the Hanford Municipal Code, all applicable laws, codes and regulations and the terms and conditions of this Agreement. In accordance with Section 16.24.110 of the Hanford Municipal Code, all of the Improvements shall be completed no later than two (2) years from the date of approval of this Agreement by the City of Hanford. A request to extend the time for completion of the Improvements must be in written form and received by the CITY not less than thirty (30) days prior to expiration of this Agreement and shall include facts in support of the request for such extension of time. Only the City shall have the authority to extend such time period. The extension period shall not exceed twelve (12) months.

Within thirty (30) days after the SUBDIVIDER notifies the City Engineer that the required work has been completed, the City Engineer shall inspect such work, and if such work has been performed in the required manner and in accordance with this Agreement, the Final Map, the Hanford Municipal Code and all other applicable laws, codes and regulations, the City Engineer shall advise the City Council that the public improvements are ready for acceptance by the CITY.

2. **Inspection.**

The CITY shall inspect all work in accordance with Section 16.24.100 of the Hanford Municipal Code including the SUBDIVIDER'S conformance with CITY Standards and Specifications and any and all conditions, standards or requirements identified at the preconstruction conference held prior to commencing construction.

CITY shall schedule a preliminary final inspection and a deficiency list shall be compiled and submitted to the SUBDIVIDER for correction. Upon completion of all corrections or additional work as outlined by the deficiency list, the SUBDIVIDER shall certify in writing that all corrections have been completed and request a final inspection. Upon finding that all items have been corrected and upon receipt of as-built improvement plans, the Improvements may be provisionally accepted by the CITY pending approval of the final map and subdivision agreement for Tract No. 887 Unit 2, by the City Council.

The completion of corrections indicated by the deficiency list shall not relieve the SUBDIVIDER from the responsibility of correcting any deficiency not shown on the list that may be subsequently discovered. Should the CITY require payment of additional engineering and inspection fees and costs for improvements constructed after the stated date of completion, the SUBDIVIDER must pay said additional fees and costs prior to acceptance by the City Council of the IMPROVEMENTS.

3. **Costs and Fees.**

The SUBDIVIDER shall be responsible for the work, including without limitation, the costs identified in the IMPROVEMENT COST ESTIMATE attached hereto and made a part hereof and identified as Exhibit "C" to this Agreement. SUBDIVIDER agrees to the amount thereof and agrees to pay, when due, all amounts identified therein, including without limitation, all CITY engineering and inspection fees.

4. **Security.**

SUBDIVIDER agrees to furnish security, which complies with Section 66499 et. seq. of the California Government Code, in such amounts as are fixed by the CITY, to guarantee

the faithful performance of this Agreement, including without limitation, the construction of the IMPROVEMENTS and to guarantee payment to contractors, subcontractors, laborers, material men and other persons employed in the performance of the work under this Agreement. In the sole discretion of the CITY and with the written authorization of the CITY, the sureties provided by the SUBDIVIDER may be released in whole or in part in the following manner:

(a) Faithful performance sureties, not in excess of ninety percent (90%) of the estimated costs of the individual items of public improvements, may be released or the required surety amounts may be reduced as work is satisfactorily completed and tentatively accepted by the CITY.

(b) Forty-five (45) days after recordation of the Notice of Completion for the Subdivision, the sureties securing the payment to contractors and subcontractors and to persons furnishing labor, materials, or equipment may be released if claims, including without limitation, stop notices have not been filed.

(c) Ten percent (10%) of the total faithful performance surety, retained as the public improvement warranty, may be released one year after the Notice of Completion has been recorded. In the alternative, SUBDIVIDER shall provide CITY with new warranty security of not less than ten percent (10%) of the Improvement Cost Estimate identified in Exhibit "C" hereto, which security shall have a term of one (1) year from the date of recordation of the Notice of Completion.

In accordance with Section 16.24.080 of the Hanford Municipal Code, the SUBDIVIDER shall furnish, in writing, proof of adequate security deposit to all utility companies for the installation of electricity, gas, telephone, cable television and any other utility which charges are not part of the Improvement Cost Estimate set forth in Exhibit "C."

No final map shall be signed by the City Engineer or recorded until all improvement securities required by Section 16.24.080 of the Hanford Municipal Code and under this Agreement have been received and approved. The form of securities shall be one or the combination of forms as approved by the CITY.

5. **Liability.**

As a condition precedent and prior to commencement of the work to be performed pursuant to this Agreement, SUBDIVIDER shall furnish the CITY with a certificate of insurance with a separate endorsement evidencing the following insurance coverages:

- (1) **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 0001, including products and completed operations, with limits of no less than FIVE MILLION AND NO/100 DOLLARS (\$5,000,000) per occurrence for bodily injury, personal injury, and property damage. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be TEN MILLION AND NO/100 DOLLARS (\$10,000,000), twice the required occurrence limit.
- (2) **Automobile Liability:** ISO Form Number CA 0001 covering any auto (Code 1), with a limit no less than FIVE MILLION AND NO/100 DOLLARS (\$5,000,000) per accident for bodily injury and property damage.
- (3) **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with a limit of no less than ONE MILLION AND NO/100 DOLLARS (\$1,000,000) per accident for bodily injury or disease.

If SUBDIVIDER maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher limits maintained by SUBDIVIDER. SUBDIVIDER's insurance policies shall be "occurrence" policies and not "claims-made" coverage.

SUBDIVIDER may maintain an Umbrella policy in conjunction with the insurance policies referenced above. In such case, SUBDIVIDER shall be deemed to have satisfied the insurance requirements of this contract as long as: (i) the coverage limits of the Umbrella policy and of the underlying liability policy(ies), when combined, satisfy each of the per occurrence and aggregate requirements identified in this subsection a.; and (ii) coverage under the Umbrella policy is as broad as and includes all incidents and events covered by the underlying insurance that it supplements.

a. Any deductibles or self-insured retentions must be declared to and approved by the City. The City may require SUBDIVIDER to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. Alternatively, the City may require SUBDIVIDER to provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses within the retention.

b. The policies are to contain, or be endorsed to contain, the following provisions:

(1) The City and its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL and automobile liability policies with respect to liability arising out of work or operations performed by or on behalf of SUBDIVIDER including materials, parts, or equipment furnished in connection with such work or operations; products used by SUBDIVIDER; or automobiles owned, leased, hired or borrowed by SUBDIVIDER. General

liability coverage can be provided in the form of an endorsement to SUBDIVIDER's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers.

(2) For any claims related to this contract, SUBDIVIDER's insurance coverage shall be primary insurance as respects the City and its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City and/or its officers, officials, employees, or volunteers shall be in excess of SUBDIVIDER's insurance and shall be non-contributory.

(3) Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.

c. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII.

d. SUBDIVIDER shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the SUBDIVIDER's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

e. SUBDIVIDER hereby grants to City and its officers, officials, employees, and volunteers a waiver of any right to subrogation which any insurer of SUBDIVIDER may acquire against the City and/or its officers, officials, employees, and volunteers by virtue of the payment of

any loss under such insurance. SUBDIVIDER agrees to obtain endorsements necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

f. The City reserves the right to modify the insurance requirements contained in this contract, including, without limitation, coverage limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

6. Indemnification.

SUBDIVIDER hereby agrees to and shall protect, indemnify and hold harmless the CITY and all officials, officers, agents, representatives and employees thereof from and against any and all liability, loss, claims or damages of whatsoever kind or character, including attorneys' fees and costs of all types, to the extent arising out of, or related, directly or indirectly, to the work to be performed pursuant to this Agreement or the acts or omissions of the SUBDIVIDER, SUBDIVIDER's independent contractors, employees, representatives, agents and invitees. These indemnification and hold-harmless provisions shall be in full force and effect regardless of whether or not there shall be insurance policies covering such damages, claims, or liability. This indemnification shall be binding upon the SUBDIVIDER whether or not there are any allegations of fault, negligence or liability of the parties indemnified hereunder and shall survive the completion of construction of the IMPROVEMENTS.

SUBDIVIDER agrees that the use of any and all public streets and improvements, which are part of the Subdivision, shall be at all times, prior to the final acceptance by the CITY, the sole and exclusive risk of the SUBDIVIDER.

7. Permits and Compliance.

Should SUBDIVIDER be required to perform any work within any public rights-of-way or easements located beyond the Subdivision limits, SUBDIVIDER shall satisfy any

and all requirements, other than the payment of fees, as necessary to obtain an encroachment permit for said work.

SUBDIVIDER shall make arrangements for the relocation of all overhead and underground public utility facilities that interfere with the construction of the IMPROVEMENTS. The SUBDIVIDER shall be responsible for the full cost of relocating such facilities.

The SUBDIVIDER shall repair any damage to public streets or other public property or improvements resulting from or incidental to, the construction of the Improvements, or in lieu of making such repairs, the SUBDIVIDER shall pay to the CITY the full cost of such repairs.

Building permits for individual lots of the Subdivision will not be issued until all underground utilities are installed within the public right-of-way, the trenches have been backfilled, and an approved all-weather road is constructed for street frontage and access.

No occupancy permit for any dwelling to be constructed within the Subdivision shall be issued until all Improvements are completed and accepted by the City Council.

In accordance with Section 16.24.090 of the Hanford Municipal Code, construction methods and materials for all Improvements shall conform to the Standards and Specifications of the CITY. Construction shall not commence until required Improvement Plans have been approved by the City Engineer and payment of all fees have been received by the CITY.

The IMPROVMENTS shall be constructed in accordance with all applicable street, plumbing, building, electrical and zoning codes and any other codes, rules or regulations of the CITY and the State of California.

The SUBDIVIDER shall require contractors and subcontractors to provide and maintain barricades and warning signs to protect and warn the public of construction hazards. Traffic control shall conform to a traffic control plan approved by the City Engineer. If, in the opinion of the City Engineer, proper barricades and warning signs are not being provided,

the Contractor will be required to immediately stop work until proper traffic control is provided and approved by the City Engineer.

The SUBDIVIDER shall require all contractors and subcontractors to conform to the applicable provisions of the California Occupational Safety and Health Act (“OSHA”). Onsite inspection of the work will be requested of OSHA officials, and all work subject to this Agreement shall immediately stop if, in the opinion of the City Engineer, any such work is being performed in violation of OSHA or when appropriate safety measures are not being utilized for said work.

The SUBDIVIDER and its contractors and subcontractors shall pay for any materials, provisions and other supplies used in, upon, for, or about the performance of the work to be performed hereunder and for any and all work or labor associated therewith and for all amounts due under the Workers’ Compensation and the unemployment insurance acts and all other applicable laws or regulations of the State of California or the United States with respect to such work or labor, including without limitation, as required by Section 3200 of the California Labor Code and Section 4200 of the California Government Code.

8. Scheduling.

It shall be the responsibility of the SUBDIVIDER to coordinate all work performed by its contractors and subcontractors, such as scheduling the sequence of operations and the determination of liability if one operation delays another. In no case shall representatives of the CITY be placed in the position of making decisions that are the responsibility of the SUBDIVIDER. It shall further be the responsibility of the SUBDIVIDER to give the City Engineer written notice not less than two (2) working days in advance of the actual date on which work is to be started. Failure on the part of the SUBDIVIDER to notify the City Engineer may cause delay for which the SUBDIVIDER shall be solely responsible.

9. Soil and Dust Control Provisions.

The SUBDIVIDER is responsible for arrangement for and payment of all CITY-required soil tests at locations as determined by the City Engineer. Payment for said tests

shall be made directly by the SUBDIVIDER to the certified testing firm of the SUBDIVIDER's choice. Adequate dust control shall be maintained by the SUBDIVIDER on all streets within and outside of the Subdivision on which work is required to be performed under this Agreement, from the time work is first commenced until all work is completed. "Adequate dust control" as used herein shall mean the sprinkling of the streets with water or approved dust palliative with sufficient frequency to prevent the scattering of dust by wind or the activity of vehicles and equipment onto any street area or private property adjacent to the Subdivision. Whenever, in the opinion of the City Engineer, adequate dust control is not being maintained on any street or streets or other areas of the Subdivision, the City Engineer shall give notice to the SUBDIVIDER to comply with the provisions herein, or, at the election of the City Engineer, notice may be mailed to the SUBDIVIDER at his address on file with the City Engineer. If, within twenty-four (24) hours after personal service or within forty-eight (48) hours after mailing of notice, the SUBDIVIDER has not commenced to maintain adequate dust control or at any time thereafter fails to maintain adequate dust control, the City Engineer may, without further notice of any kind, cause any street or streets to be sprinkled with water or an approved dust palliative as may be deemed necessary by the City Engineer to eliminate the scattering of dust. Such dust control shall be performed by equipment and personnel of the CITY or by contract as the City Engineer shall determine, and the SUBDIVIDER agrees to pay to CITY, upon receipt of the billing, therefore, the entire cost to the CITY of such dust control.

When the surfacing on any existing street is disturbed, the surfacing shall be immediately replaced with temporary surfacing and permanently paved within fourteen (14) calendar days thereafter. The streets shall be maintained in a safe and passable condition at all times between the commencement of construction of IMPROVEMENTS and final completion thereof.

10. Reimbursement.

If the City Municipal Code provides SUBDIVIDER with the right to receive cash reimbursement or impact fee credit because of the construction of certain improvements or

the oversizing thereof, SUBDIVIDER must request payment of the cash reimbursement or preparation of a reimbursement agreement, whichever is applicable, or the impact fee credit prior to the date of final acceptance of all subdivision improvements by the City Council. Such request must be made in writing and received by the City Engineer prior to the date of final acceptance of the IMPROVMENTS by City Council. SUBDIVIDER agrees that should it fail to make such written request by the date identified herein, SUBDIVIDER forever waives its right to request and receive any cash reimbursement, reimbursement agreement or impact fee credit.

11. Prevailing Wage Laws, Rules and Regulations.

SUBDIVIDER shall comply with and shall require all contractors to comply with all prevailing wage laws, rules and regulations applicable to the SUBDIVISION. Unless otherwise advised in writing by the City, SUBDIVIDER shall be solely responsible for making any and all decisions regarding any portion or aspect of the SUBDIVISION including, without limitation, any form of reimbursement by the City to the SUBDIVIDER or any contractor, that will require the payment of prevailing wages. Further, SUBDIVIDER will be solely responsible for the payment of any claims, fines, penalties, reimbursements, payments or any other actions that may be initiated against applicant or any contractor as a result of failure to pay prevailing wages.

SUBDIVIDER shall defend, indemnify and hold harmless the City of Hanford, its officials, officers, employees, representatives, agents and attorneys from and against any and all claims, damages, losses, judgments, liabilities, expenses and other costs, including, without limitation, litigation costs and attorney's fees arising out of, to the extent resulting from any violation or claim of violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the SUBDIVISION. SUBDIVIDERS's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or administrative action against the City which claims a violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the SUBDIVISION.

SUBDIVIDERS's obligations to defend, indemnify and hold the City, its officials, officers, employees, representatives, agents and attorneys harmless as set forth herein, shall include, but shall not be limited to, staff time, copying costs, court costs, the costs of any judgments or awards against the City for damages, losses, litigation costs or attorney fees arising out of any violation or claim of violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the SUBDIVISION and costs of any settlement representing damages, litigation costs and attorney's fees to be paid to other parties arising out of any such proceeding or suit.

The City may, at any time, require the SUBDIVIDER to reimburse the City for costs that have been, or which the City reasonably anticipates will be, incurred by the City during the course of any action. SUBDIVIDER shall reimburse the City within thirty (30) days of receipt of an itemized written invoice from the City for costs actually incurred. Failure of the SUBDIVIDER to timely reimburse the City shall be considered a material violation of the conditions of approval of the SUBDIVISION.

12. Sole and Only Agreement.

This Agreement supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the matters set forth herein and contains all of the covenants and agreements between the parties regarding such matters. Each party to this Agreement acknowledges that no representations, inducements, promises or agreements, orally or in writing, have been made by any party or anyone acting on behalf of any party which are not embodied in this Agreement, and no other agreement, statement or promises shall be valid or binding.

13. Severability.

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions shall nevertheless continue in full force and effect without being impaired or invalidated in any way.

14. Attorneys' Fees.

If an action at law or inequity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other reasonable relief to which he may be entitled. With respect to any suit, action or proceeding arising out of or related to this Agreement or the documentation related hereto, the parties hereby submit to the jurisdiction and venue of the Superior or Municipal Court, whichever is applicable, in the County of Kings, State of California for any proceeding arising hereunder.

15. Successors and Assigns.

The covenants and agreements contained in this Agreement shall be binding upon and shall inure to the benefit of the heirs, successors and assigns of the parties hereto. This Agreement shall not be assignable by SUBDIVIDER without the express prior written consent of CITY.

16. Governing Law.

This Agreement shall be construed and governed pursuant to the laws of the State of California.

17. Time of the Essence.

Time is of the essence of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on the

_____ day of _____, 2017.

SUBDIVIDER:

**Lennar Homes of California, Inc.,
A California Corporation**

By: _____
Mike Miller, Vice-President

CITY OF HANFORD APPROVAL:

By: _____
Johnathan L. Doyel, P.E., P.L.S.
City Engineer, City of Hanford

ATTEST:

By: _____
City Clerk, City of Hanford

Attachment: Tract # 887 Unit 2 -Subdivision Agreement (UE: Tract 887- Silver Oaks Addition No. III- Unit II)

EXHIBIT "C"**SUBDIVISION IMPROVEMENT COST ESTIMATE**

In accordance with Section 16.24.080 of the Hanford Municipal Code, estimated construction costs used in this Agreement are increased for projected inflation computed to the estimated mid-point of construction.

	<u>ESTIMATED CONSTRUCTION COST</u>
<u>Sanitary Sewers</u>	
Construction of sanitary sewer mains, manholes and appurtenances as shown on the approved improvement plans in accordance with City Standards and Specifications.	<u>\$236,584.92</u>
<u>Storm Sewers</u>	
Construction of storm drain mains, manholes, catch basins and disposal facilities as shown on the approved improvement plan in accordance with City Standards.	<u>\$154,156.20</u>
<u>Water System</u>	
Construction of water mains, hydrants, services and appurtenances as shown on the approved Improvement Plans in accordance with City Standards and Specifications.	<u>\$276,751.20</u>
<u>Curb and Gutter and Other Concrete Construction</u>	
Construction of curb and gutter, sidewalk, wheelchair ramps, drive approaches, valley gutter and other concrete improvements as shown on the approved Improvement Plans in accordance with City Standards and Specifications.	<u>\$244,174.92</u>
<u>Street Surfacing</u>	
Construct Type "B" asphalt concrete surfacing over Class II aggregate base as shown on the approved Improvement Plans in accordance with City Standards and Specifications.	<u>\$614,598.60</u>

Street Lighting

Install street lighting as shown on the approved Improvement Plans in accordance with City Standards and Specifications. **\$ 98,101.08**

Street Baracades

Installation of street barricades as shown on the approved Improvement Plans in accordance with City Standards and Specifications. **\$ 3,168.00**

Fencing, Landscaping, and Irrigation System

Construct fencing and install landscape and irrigation system improvements, Misc. as shown on the approved Improvement Plans in accordance with City Standards and Specifications. **\$437,812.32**

Monuments and Lot Markers

Install permanent monuments and lot markers in accordance with City Standards and Specifications. **\$ 9,504.00**

Engineering Services

Engineering, surveying, & geotechnical services associated with completion of the Subdivision Improvements. **\$129,360.00**

Earthwork Improvements

- Excavation & Compaction (Completed under separate permit.) **\$ 79,021.80**
- Subgrade Compaction & Fine Grade **\$ 87,731.16**
- Final Lot Grading **\$ 95,296.08**
- Utility Trenching **\$ 76,111.20**

Total Improvements subject to Plan Review & Insp. Fees **\$2,542,371.48**

Private Utilities

- Applicant Install Utilities (Onsite Construction) **\$ 282,757.20**

Total Estimated Improvement Cost (To be bonded with Final Map) **\$2,825,128.68**

SECURITY REQUIREMENTS

Performance	<u>\$ 2,825,128.68</u>
Labor and Materials	<u>\$ 1,412,564.34</u>
Warranty (Minimum 12-mo. from N.O.C.)	<u>\$ 282,512.87</u>

City Engineering Plan Review and Inspection Fee Schedule

City Engineering and Inspection Fees are established by Council Resolution No.1902, and are set forth below:

(1) 6% of first	\$ 5,000.00	\$ 300.00
(2) 5% of next	\$ 20,000.00	\$ 1,000.00
(3) 4.5% of next	\$ 75,000.00	\$ 3,375.00
(4) 3.5% of next	\$150,000.00	\$ 5,250.00
(5) 2% over	\$250,000.00	\$ 51,502.57
Total City Engineering Review and Inspection Fee obligation		\$ 61,427.57
Fee balance payable with this Agreement Acct. #001-2010-4937		<u>\$ 61,427.57</u>

NOTE:

- Engineering Plan Review & Inspection Fees are based on estimated cost of Improvements, including all items constructed both prior to & following posting of security.

Note: Additional fees and charges will be payable prior to approval of Final Map and Final Subdivision Agreement by the City Council, including:

12 th Ave. Sewer Benefit District, Acct. #161----5494 (10.9Ac @ \$621.92/Ac) (Determined at completion of final map review.)	<u>\$ 28,511.89</u>
Street Sign Fee, Acct. #0010-2010-4937 (8 @ \$200.00 Ea.) (Per intersection cost for sign blades furnished by City.)	<u>\$ 2,800.00</u>
Final Map Review Fee, Acct. #001-2010-4937 (Determined at completion of final map review.)	<u>\$ 1,080.00</u>
Engineering Plan Review & Inspection Fees, Acct. #001-2010-4937	<u>\$ 61,427.57</u>
Storm Drainage Impact Fees, Acct. #184----5504 (N/A) (Drainage basin constructed by developer.)	<u>\$ 0.00</u>
Building Dept. block wall plan review fees paid from Acct. #001-2010-4937	<u>\$ 1,279.31</u>
SUBTOTAL	<u>\$ 95,098.77</u>
Less Fee Deposit 11/01/17	<u>\$ 94,018.77</u>
BALANCE DUE	<u>\$ 1,080.00</u>



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017

AGENDA SECTION: M

SUBJECT:

Utilities and Engineering: Award a contract Bush Engineering, Inc. of Hanford, CA in the amount of \$881,373.00 for the 11th Avenue at Houston Avenue Traffic Signal Installation Project, and establish a construction contingency of \$88,137.00.

RECOMMENDATION:

That the City Council by motion:

1. Award a contract to Bush Engineering, Inc. of Hanford, CA in the amount of \$881,373.00 for the 11th Avenue at Houston Avenue Traffic Signal Installation Project; and
2. Establish a construction contingency of \$88,137.00.

BACKGROUND:

In accordance with Council Action, bids were solicited and opened on August 22, 2017 for the 11th Avenue at Houston Avenue Traffic Signal Installation Project. The project consists in installing a traffic signal at the intersection along with the placement of storm drain pipeline, raised center median curbing, pavement transitioning, slurry seal pavement treatment, and pavement striping.

A total of six (6) bids were received, ranging from a low bid of \$881,373.00 from Bush Engineering, Inc. of Hanford CA, to a high bid of \$1,062,555.00. A copy of the Bid Tabulation is attached for Council Review.

The contract stipulates that the Project be completed within ninety (90) calendar days from the date of the Notice to Proceed. For each day of delay beyond the approved time, the Contractor shall be assessed \$1,000 per day of liquidated damages. It is anticipated that this project, if started in November, would run into rain season and the paving would not result in a good product. Staff recommends that the project be awarded and put on hold until change of weather. If approved, work on this project is expected to begin in March 2018.

FISCAL IMPACT:

The FY 15/16 Capital Improvement Budget provides \$450,000.00 for construction, including contingency, for this project, which included \$398,000 from the Congestion Mitigation Air Quality program (CMAQ). The additional funds necessary for this project were obtained through CMAQ and Local Toll Credits making the local contribution to the project \$7,300.00. A copy of the budget page is attached for Council review.

ATTACHMENTS:

Vicinity Map 11th at Houston

Budget Page 223

Bid Tabulation (11th an Houston TS)

Federal Funding Page



815626
816617**Traffic Signal at 11th Avenue and Houston Avenue****Project Background:**

This project includes the installation of a traffic signal system at this intersection. Additional improvements will include pavement transitioning to facilitate the installation of additional travel lanes.

Existing Conditions:

The current traffic control at this intersection is a four way stop. This intersection meets current traffic signal warrants and is included in the City's Traffic Signal Priority List.

Project Justification:

This project will increase traffic flow efficiency and reduce intersection congestion by allowing more free flow traffic movements through the intersection. The project will also provide air quality benefits by reducing vehicle idling times.

Fiscal Implications:

Funding for this project will be allocated from CMAQ funding and gas tax reserves.

Project Budget Summary:

		6-Year Funding Allocation					
		2015	2016	2017	2018	2019	2020
Expenditure	Program or Project	Design	Construction				
	Engineering / Inspection	60,000					
	Right-of-Way	50,000					
	Construction		410,000				
	Contingency		40,000				
	Department Overhead	15,000					
Total Expenditure		\$125,000	\$450,000	\$0	\$0	\$0	\$0
Revenue	Funding						
	044 Gas Tax (2103)	81,000	52,000				
	055 Congest. Mitigation/Air Qual. (CMAQ)	44,000	398,000				
Total Funding		\$125,000	\$450,000	\$0	\$0	\$0	\$0

11th Avenue at Houston Avenue Traffic Signal Installation
055-2672-815626

888139		396428		282929		767055		181430		624970	
Bush Engineering, Inc.		Don Berry Construction, Inc.		Lee's Paving, Inc.		Papich Construction, Inc.		American Paving CO.		D.O.D. Construction, LTD	
Unit Cost	Subtotal	Unit Cost	Subtotal	Unit Cost	Subtotal	Unit Cost	Subtotal	Unit Cost	Subtotal	Unit Cost	Subtotal
115,000.00	\$115,000.00	\$87,000.00	\$87,000.00	\$230,000.00	\$230,000.00	\$195,000.00	\$195,000.00	\$240,000.00	\$240,000.00	\$50,000.00	\$50,000.00
65,000.00	\$65,000.00	\$15,000.00	\$15,000.00	\$28,000.00	\$28,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$60,000.00	\$30,000.00	\$30,000.00
3,000.00	\$3,000.00	\$8,000.00	\$8,000.00	\$10,000.00	\$10,000.00	\$15,000.00	\$15,000.00	\$2,500.00	\$2,500.00	\$5,000.00	\$5,000.00
1.60	\$5,952.00	\$1.00	\$3,720.00	\$2.00	\$7,440.00	\$1.50	\$5,580.00	\$1.00	\$3,720.00	\$3.00	\$11,160.00
0.70	\$29,837.50	\$1.00	\$42,625.00	\$1.40	\$59,675.00	\$0.60	\$25,575.00	\$0.90	\$38,362.50	\$1.00	\$42,625.00
90.00	\$132,300.00	\$90.00	\$132,300.00	\$85.50	\$125,685.00	\$105.00	\$154,350.00	\$106.00	\$155,820.00	\$130.00	\$191,100.00
43.00	\$56,760.00	\$75.00	\$99,000.00	\$70.85	\$93,522.00	\$65.00	\$85,800.00	\$55.00	\$72,600.00	\$80.00	\$105,600.00
200.00	\$13,000.00	\$90.00	\$5,850.00	\$343.00	\$22,295.00	\$125.00	\$8,125.00	\$106.00	\$6,890.00	\$250.00	\$16,250.00
3,600.00	\$14,400.00	\$6,000.00	\$24,000.00	\$3,340.00	\$13,360.00	\$4,200.00	\$16,800.00	\$2,000.00	\$8,000.00	\$7,500.00	\$30,000.00
31.00	\$28,520.00	\$35.00	\$32,200.00	\$28.00	\$25,760.00	\$34.00	\$31,280.00	\$29.00	\$26,680.00	\$30.00	\$27,600.00
23.00	\$16,146.00	\$30.00	\$21,060.00	\$24.00	\$16,848.00	\$26.50	\$18,603.00	\$32.00	\$22,464.00	\$25.00	\$17,550.00
10.00	\$10,290.00	\$15.00	\$15,435.00	\$9.00	\$9,261.00	\$9.00	\$9,261.00	\$10.00	\$10,290.00	\$20.00	\$20,580.00
5,100.00	\$15,300.00	\$5,500.00	\$16,500.00	\$7,000.00	\$21,000.00	\$3,800.00	\$11,400.00	\$5,100.00	\$15,300.00	\$6,000.00	\$18,000.00
4,200.00	\$8,400.00	\$5,000.00	\$10,000.00	\$7,000.00	\$14,000.00	\$13,000.00	\$26,000.00	\$4,300.00	\$8,600.00	\$6,000.00	\$12,000.00
115.00	\$38,295.00	\$83.00	\$27,639.00	\$85.00	\$28,305.00	\$89.00	\$29,637.00	\$77.00	\$25,641.00	\$150.00	\$49,950.00
22,000.00	\$22,000.00	\$30,000.00	\$30,000.00	\$22,044.00	\$22,044.00	\$30,000.00	\$30,000.00	\$28,000.00	\$28,000.00	\$29,500.00	\$29,500.00
3.50	\$43,872.50	\$4.00	\$50,140.00	\$4.12	\$51,644.20	\$8.00	\$100,280.00	\$5.00	\$62,675.00	\$4.00	\$50,140.00
1,200.00	\$2,400.00	\$600.00	\$1,200.00	\$1,500.00	\$3,000.00	\$2,200.00	\$4,400.00	\$1,000.00	\$2,000.00	\$1,500.00	\$3,000.00
900.00	\$900.00	\$500.00	\$500.00	\$1,500.00	\$1,500.00	\$1,600.00	\$1,600.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
4,000.00	\$12,000.00	\$7,750.00	\$23,250.00	\$3,313.00	\$9,939.00	\$5,700.00	\$17,100.00	\$6,500.00	\$19,500.00	\$5,000.00	\$15,000.00
244,000.00	\$244,000.00	#####	\$291,000.00	\$244,400.00	\$244,400.00	\$300,000.00	\$300,000.00	\$244,400.00	\$244,400.00	\$330,000.00	\$330,000.00
4,000.00	\$4,000.00	\$5,000.00	\$5,000.00	\$6,000.00	\$6,000.00	\$4,500.00	\$4,500.00	\$4,100.00	\$4,100.00	\$6,500.00	\$6,500.00
	\$881,373.00		\$941,419.00		\$1,043,678.20		\$1,150,291.00		\$1,058,542.50		\$1,062,555.00

AMENDMENT MODIFICATION SUMMARY - (E-76)

CALIFORNIA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROGRAM

DLA LOCATOR: 06-KIN-0-HAN
 PREFIX: CML
 PROJECT NO: 5091(060)
 SEQ NO: 2
 STATE PROJ NO: 0616000144L-N
 AGENCY: HANFORD
 ROUTE:

DISASTER NO:

TIP DATA

MPO: KCAG
 FSTIP YR: 15/16
 STIP REF: 216-0000-0170
 FSTIP ID NO: CM5091016

PROJECT LOCATION:

AT THE INTERSECTION OF 11TH AVE AND HOUSTON AVE

TYPE OF WORK:

INSTALL NEW TRAFFIC SIGNAL (TC)

FED RR NO'S:

PUC CODES:

PROJ OVERSIGHT: ASSUMED/LOCAL ADMIN

ENV STATUS / DT: DELEG TO STATE USC 326/SEC 6004 05/26/2016

RW STATUS / DT: 2 08/16/2016

INV RTE:

BEG MP:

END MP:

PREV AUTH / AGREE DATES:

PE:

R/W:

CON:

SPR:

MCS:

OTH:

BRIDGE NO:

PROG CODE	LINE NO	IMPV TYPE	FUNC SYS	URBAN AREA	URB/RURAL	DEMO ID
M40E	30	01				
M40E	31	17				
Z400	30	01				
Z400	31	17				

FUNDING SUMMARY

PHASE		PROJECT COST	FEDERAL COST	AC COST
PE	PREV. OBLIGATION	\$0.00	\$0.00	\$0.00
	THIS REQUEST	\$0.00	\$0.00	\$0.00
	SUBTOTAL	\$0.00	\$0.00	\$0.00
R/W	PREV. OBLIGATION	\$0.00	\$0.00	\$0.00
	THIS REQUEST	\$0.00	\$0.00	\$0.00
	SUBTOTAL	\$0.00	\$0.00	\$0.00
CON	PREV. OBLIGATION	\$601,375.00	\$600,000.00	\$0.00
	THIS REQUEST	\$418,085.00	\$412,160.00	\$0.00
	SUBTOTAL	\$1,019,460.00	\$1,012,160.00	\$0.00
OTH	PREV. OBLIGATION	\$0.00	\$0.00	\$0.00
	THIS REQUEST	\$0.00	\$0.00	\$0.00
	SUBTOTAL	\$0.00	\$0.00	\$0.00
TOTAL:		\$1,019,460.00	\$1,012,160.00	\$0.00

STATE REMARKS

08/10/2016 The purpose of this request is to authorize CMAQ funding for the CON/CE phase for the City of Hanford. The project proposes to install a new traffic signal at 11th Ave and Houston Ave. Toll credits will be used in lieu of local match.

09/01/2016 SEQ#1: Request to obligate \$600,000 of Federal M40E funds for CON and CE. Toll Credits are being used in lieu of local funds. - CPJ

10/12/2017 The purpose of this request is to add additional funding to CON and CE phase through post programming. Letter from TCAG has been attached. Additional funding is needed because bids came out higher than original estimate. Toll credits will be used in lieu of local match.

10/13/2017 SEQ#2: Request post-programming to obligate an additional \$412,160 of Federal Z400 funds for CON and CE prior to Award. Toll Credits are being used in lieu of local funds. - CPJ

FEDERAL REMARKS

AUTHORIZATION

AUTHORIZATION TO PROCEED WITH REQUEST: CON
FOR: COST ADJUST < AWARD
DOCUMENT TYPE: AMOD

PREPARED IN FADS BY: KAWATE, SUSAN
REVIEWED IN FADS BY: ZINKE, WESLEY
SUBMITTED IN FADS BY: JENSEN, CHRIS
PROCESSED IN FADS BY: FOGLE, JERILYNN
E-76 AUTHORIZED DATE IN FMIS BY: VENESHIA SMITH

ON 2017-10-13 445-5914
ON 2017-10-13 651-6873
ON 2017-10-17 FOR CALTRANS
ON 2017-10-19 FOR FHWA
ON 2017-10-20 16:22:08.0

13.M.d

SIGNATURE HISTORY FOR PROJECT NUMBER 5091(060) AS OF 10/23/2017

FHWA FMIS SIGNATURE HISTORY

MOD #	SIGNED BY	SIGNED ON
1	JERILYNN FOGLE	10/20/2017
	DOMINIC HOANG	10/20/2017
	VENESHIA SMITH	10/20/2017
0	JERILYNN FOGLE	09/19/2016
	DOMINIC HOANG	09/19/2016
	MARY CUNNINGHAM	09/20/2016

FHWA FMIS 3.0 SIGNATURE HISTORY

CALTRANS SIGNATURE HISTORY

DOCUMENT TYPE	SIGNED BY	SIGNED ON
AMEND/MOD	JENSEN, CHRIS	10/17/2017



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017

AGENDA SECTION: N

SUBJECT:

Utilities and Engineering: Authorize the City Attorney to prepare and the City Manager to execute a Purchase and Sale Agreement with Kuldeep S. Sidhu and Sukhminder Kaur for the remnant parcel north of the Fire Station No. 3 on 12th Avenue and Hanford Armona Road

RECOMMENDATION:

That the City Council, by motion, authorize the City Attorney to prepare and the City Manager to execute a Purchase and Sale Agreement with Kuldeep S. Sidhu and Sukhminder Kaur for the remnant parcel north of the Fire Station No. 3 on 12th Avenue and Hanford Armona Road.
(shown as Lot B on the attached map)

BACKGROUND:

The City of Hanford purchased the 2.02 acre parcel for the future Fire Station No. 3 location in 2007 for \$350,000. This property was purchased after schematic plans were prepared for a fire station at this location. Council has previously approved an design build agreement with Carvalho Construction for Fire Station No. 3 and after the design has been completed, there is a remnant piece of property on the north and west side of the new station.

The remnant piece on the north side of the station is not of adequate size or shape for a stand alone commercial development. As such, the highest value is to the adjacent property owner. Staff contacted the adjacent property owner and they were interested in purchasing this parcel and making it part of a larger development on the corner of 12th Avenue and Hanford Armona Road. The adjacent property owner agreed to pay the same price the City paid for the property. Staff consulted with a local appraiser to determine if the land values today are at or below 2007 values and it was determined they are approximately the same.

Staff negotiated the following terms of sale:

Purchase Price: \$115,000

Escrow: 30 days

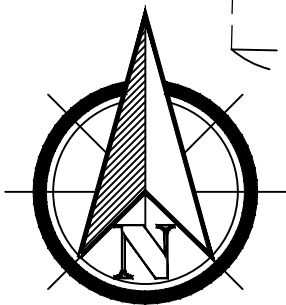
This sale also needs to be determined by the Planning Commission to be consistent with the General Plan as required by Government Code Section 65402.

FISCAL IMPACT:

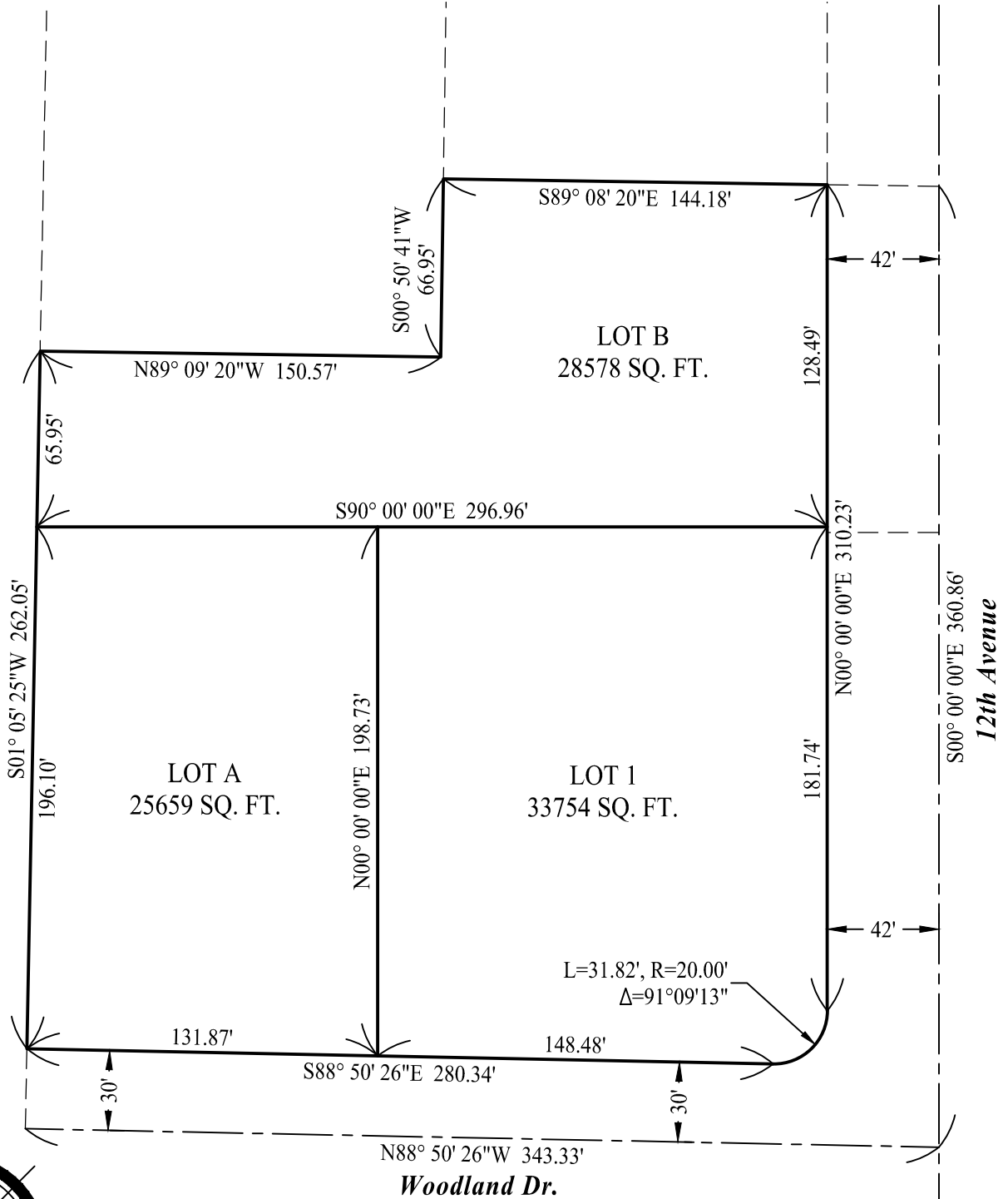
The funds from the sale of this property will go back into the Fire Impact Fee account to offset the construction and equipping of Fire Station No. 3.

ATTACHMENTS:

Property Exhibit



SCALE: 1"=60'



Attachment: Property Exhibit (UE: Sale of Real Property for Fire Station #3 Remnant Parcel)

CML ENGINEERS
ZUMWALT
HANSEN &
LAND SURVEYORS

609 N. Irwin St.
 Hanford, CA 93230
 Office: (559) 582-1056
 Fax: (559) 584-4143

Boundary Exhibit
for
City of Hanford
Fire Station No. 3

Job No. 0764811
 Drawn By: JB
 Checked By: AD
 Indexed By:
 Date: 10/19/2017

Sheet No.

1 of 1



**AGENDA
STAFF REPORT**

MEETING DATE: 11/7/2017

AGENDA SECTION: O

SUBJECT:

Finance: Warrant Register

RECOMMENDATION:

Approve warrant register for \$1,527,314.14

BACKGROUND:

FISCAL IMPACT:

ATTACHMENTS:

WARRANT REGISTER-11-01-17

Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
001 GENERAL FUND	1005 IC-FINANCE CHANGE FUND	10/18/17	124289	CITY OF HANFORD HANFORD, CITY OF	50.00		INCR FIN CASH DRWR	
	2020-001 USE TAXES PAYABLE	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	666.97		FY18 QTR1 USE TAX	
	1005 IC-FINANCE CHANGE FUND	11/1/17	124414	CITY OF HANFORD HANFORD, CITY OF	100.00		FIN ACCT/ADD NEW DRWR	
	1480 REVOLVING POSTAGE	11/1/17	124533	U S POSTAL SERVICE (HASLER) UNITED STATES POSTAL SERVICE	3,000.00	68775-09181	2017-09 CMRS-METER	
Division Total 001 GENERAL FUND					3,816.97			
1100 CITY COUNCIL	7770 TRAINING/TRAVEL/MEETING	10/13/17	124262	SMART & FINAL CORP SMART & FINAL CORP	91.44	014180	BLANKET PURCHASE ORDER	
	7902 CONTRIB-KINGS ECON DEVEL	11/1/17	124437	KINGS CO ECON DEVELOPMENT CORP KINGS CO ECON DEVELOPMENT CORP	6,559.83	1943	2017-10 CONTRIBUTION	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124447	LEAGUE OF CALIF CITIES LEAGUE OF CALIF CITIES	25.00	7628	LCC MTG/AYERS	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124447	LEAGUE OF CALIF CITIES LEAGUE OF CALIF CITIES	25.00	7628	LCC MTG/SORENSEN	
	7495 PROF AND SPEC SERVICES	11/1/17	124496	SAMPSON, SAMPSON & PATTERSON, LLP SAMPSON, SAMPSON & PATTERSON, LLP	2,453.00		FY17 AUDIT 2017/7-9	
Division Total 1100 CITY COUNCIL					9,154.27			
1110 CITY MANAGER-CITY CLERK	7450 PUBLICATIONS AND DUES	11/1/17	124423	INTERNATIONAL INSTITUTE MUNI CLERKS INTERNATIONAL INSTITUTE MUNI CLERKS	200.00	22886-2018	CY18 GOMEZ DUES	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124447	LEAGUE OF CALIF CITIES LEAGUE OF CALIF CITIES	25.00	7628	LCC MTG/GOMEZ	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124447	LEAGUE OF CALIF CITIES LEAGUE OF CALIF CITIES	25.00	7628	LCC MTG/PYLE	

Attachment: WARRANT REGISTER-11-01-17 (FIN: WARRANT REGISTER)

Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1110 CITY MANAGER-CITY CLERK	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	56.44	96401893-0	2017-10	
Division Total 1110 CITY MANAGER-CITY CLERK					306.44			
1111 PERSONNEL	7496 GRP INSUR ADM EXPENSE	10/18/17	124285	BENISTAR / HARTFORD-6795 BENISTAR / HARTFORD-6795	119.00		RETIREE INSUR/B BROWN	
	7496 GRP INSUR ADM EXPENSE	10/18/17	124285	BENISTAR / HARTFORD-6795 BENISTAR / HARTFORD-6795	119.00		RETIREE INSUR/B GARCIA	
	7496 GRP INSUR ADM EXPENSE	10/18/17	124285	BENISTAR / HARTFORD-6795 BENISTAR / HARTFORD-6795	119.00		RETIREE INSUR/R MATTOS	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	37.86	10347757	2017-09	
	7496 GRP INSUR ADM EXPENSE	11/1/17	124329	ADMINISTRATIVE SOLUTIONS INC ADMINISTRATIVE SOLUTIONS INC	4,675.00	116413	2017-10 ADMIN FEE	
	7495 PROF AND SPEC SERVICES	11/1/17	124351	CALIF DEPT OF JUSTICE CALIF DEPT OF JUSTICE	32.00	263352	LIVESCAN- K CORREIA	
	7495 PROF AND SPEC SERVICES	11/1/17	124351	CALIF DEPT OF JUSTICE CALIF DEPT OF JUSTICE	32.00	263352	LIVESCAN-B JACKSON	
	7560 ADVERTISING & PUBLIC REL	11/1/17	124390	FRESNO BEE FRESNO BEE	300.00	103263834	REFUSE SUPERINTENDENT	
	7560 ADVERTISING & PUBLIC REL	11/1/17	124390	FRESNO BEE FRESNO BEE	676.93	103259465	SUPERINTENDENT AD	
	7460 DUPLICATING EXPENSE	11/1/17	124412	HANFORD SENTINEL CLASSIFIED HANFORD SENTINEL CLASSIFIED	512.50	75031	AD/REFUSE SUPER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124419	HOLIDAY SIGNS, LLC HOLIDAY SIGNS, LLC	22.27	12803	DOOR SIGNS 2017	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124419	HOLIDAY SIGNS, LLC HOLIDAY SIGNS, LLC	5.91	12803	ESTIMATED SHIPPING/HANDLI	
	7450 PUBLICATIONS AND DUES	11/1/17	124451	LIEBERT CASSIDY WHITMORE LIEBERT CASSIDY WHITMORE	3,360.00	1447723	2017-09 LEGAL SERVICE	

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1111 PERSONNEL	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	47.20	96401893-0	2017-10	
Division Total 1111 PERSONNEL					10,058.67			
1201 FINANCE-ACCOUNTING	4100 BUSINESS LICENSE TAX	10/24/17	124306	PLANET SOLAR INC PLANET SOLAR INC VASQUEZ, MICHAEL	15.00		RFD/BUS LIC OVERPMT	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	9.29	10347744	2017-09 582-1152 FAX	
	4100 BUSINESS LICENSE TAX	11/1/17	124407	HANFORD MOTORS, LLC DBA HANFORD CHRYSLER DODGE JEEP RAM	75.84	2475	OVRPMT 7-9/17 BUS LIC	
	7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA PRESORT CENTER OF FRESNO, LLC	635.56	410040343	PSTG GR 10-12/17	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124482	REBECCA KOZLOWSKI DBA PRESORT CENTER OF FRESNO, LLC	161.24	410040343	PRNT GR 10/12-17	
	7495 PROF AND SPEC SERVICES	11/1/17	124505	SHRED-IT US JV LLC DBA SHRED-IT USA LLC	61.07	8123222110	SHREDDING 09/30	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	56.64	96401893-0	2017-10	
	7999 CAL CARD CLEARING	11/1/17	124530	U S BANK CORPORATE PAYMENT SYSTEM U S BANK CORP - CAL CARD	22,878.98		CAL CARD 2017-10	
	7460 DUPLICATING EXPENSE	11/1/17	124550	XEROX CORP XEROX CORP	211.15	090942991	LEASE/COPIES	
Division Total 1201 FINANCE-ACCOUNTING					24,104.77			
1210 FINANCE-UTILITY BILLING	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	35.20	5183848 9/1	2017-09 UNIFORMS	
	7495 PROF AND SPEC SERVICES	11/1/17	124396	GARDA CL WEST INC GARDA CL WEST INC	565.22	10341487	2017-11	

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1210 FINANCE-UTILITY BILLING	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124419	HOLIDAY SIGNS, LLC	11.48	12803	DOOR SIGNS 2017	
				HOLIDAY SIGNS, LLC				
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124419	HOLIDAY SIGNS, LLC	3.04	12803	ESTIMATED SHIPPING/HANDLI	
				HOLIDAY SIGNS, LLC				
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA	38.57	1093	EMBROIDERY HATS	
				J H TACKETT MARKETING				
	7495 PROF AND SPEC SERVICES	11/1/17	124441	KINGS CREDIT SERVICES	643.62	09-195800	2017-09 COLL FIN-UB	
				KINGS CREDIT SERVICES				
	7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	7.21	410040106	09/18-09/22/18	
				PRESORT CENTER OF FRESNO, LLC				
	7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	6.98	410040399	09/25-09/29/17	
				PRESORT CENTER OF FRESNO, LLC				
	7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	7.47	410040612	10/02-10/06/17	
				PRESORT CENTER OF FRESNO, LLC				
	7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	6.95	410040852	10/09-10/13/17	
				PRESORT CENTER OF FRESNO, LLC				
7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	1,088.81	410040767	2017-09 FLAT		
			PRESORT CENTER OF FRESNO, LLC					
7455 POSTAGE AND FREIGHT	11/1/17	124482	REBECCA KOZLOWSKI DBA	6,162.26	410040767	2017-09 METER		
			PRESORT CENTER OF FRESNO, LLC					
7470 PRINTING	11/1/17	124482	REBECCA KOZLOWSKI DBA	1,694.88	410040767	2017-09 PRINTING		
			PRESORT CENTER OF FRESNO, LLC					
7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA	56.64	96401893-0	2017-10		
			T P X COMMUNICATIONS					
Division Total 1210 FINANCE-UTILITY BILLING					10,328.33			
1309 LIABILITY INSURANCE	7330 LIABILITY INSURANCE	10/24/17	124311	YORK RISK SERVICES GROUP, INC	1,266.90	500016266	ADMIN FEE 7/17-6/18	
				YORK RISK SERVICES GROUP, INC-LIAB				
Division Total 1309 LIABILITY INSURANCE					1,266.90			

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Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1310 WORKERS' COMPENSATION	7169 WORKERS' COMP INSURANCE	11/1/17	124360	CENTRAL SAN JOAQUIN VALLEY RMA	32,467.86	RMA201801	FY18 QTR1 WKRS COMP	
				CENTRAL SAN JOAQUIN VALLEY RMA				
Division Total 1310 WORKERS' COMPENSATION					32,467.86			
1314 COMPUTER REPL RESERVE	818657 OPEN GOV/BUDGET SYSTEM	10/13/17	124264	RAMUNDSEN SUPERIOR HOLDINGS LLC DBA SUPERION LLC	45,387.00	144902	OPENG0V/ANNL SUBSCRIP	
	818657 OPEN GOV/BUDGET SYSTEM	10/13/17	124264	RAMUNDSEN SUPERIOR HOLDINGS LLC DBA SUPERION LLC	2,730.00	144784	OPENG0V/GOVT TRANSPRN	
	818657 OPEN GOV/BUDGET SYSTEM	10/13/17	124264	RAMUNDSEN SUPERIOR HOLDINGS LLC DBA SUPERION LLC	3,650.00	144908	OPENG0V/IMPL 3RD PART	
Division Total 1314 COMPUTER REPL RESERVE					51,767.00			
1315 COMPUTER MAINTENANCE	7320 COMMUNICATIONS	10/13/17	124273	VERIZON WIRELESS VERIZON WIRELESS	38.01	9793729341	771937214 AIR CARD	
	7495 PROF AND SPEC SERVICES	10/18/17	124288	COMCAST CABLE COMMUNICATIONS, INC COMCAST CABLE COMMUNICATIONS, INC	240.93	028756810/1	8155500390287568 INTERNET	
	7430 COMPUTER MAINTENANCE	11/1/17	124346	C D W GOVERNMENT LLC C D W GOVERNMENT LLC	386.10	KKT6332	BARCODE SCANNER-WASP WCS3	
	7495 PROF AND SPEC SERVICES	11/1/17	124346	C D W GOVERNMENT LLC C D W GOVERNMENT LLC	1,159.20	KDG3883	FY18 SUPPORT-QUEST DESKTO	
	7495 PROF AND SPEC SERVICES	11/1/17	124398	GLOBAL C T I GROUP INC GLOBAL C T I GROUP INC	420.00	124695	NETWORK SUPPORT	
	7495 PROF AND SPEC SERVICES	11/1/17	124511	SOLARWINDS INC SOLARWINDS INC	132.00	IN347357	ANNL LIC-DAMEWARE REMOTE	
	7495 PROF AND SPEC SERVICES	11/1/17	124519	SWAGIT PRODUCTIONS, LLC SWAGIT PRODUCTIONS, LLC	50.00	9647	2017-09 AUDIO STREAM	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	37.76	96401893-0	2017-10	

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Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
Division Total 1315 COMPUTER MAINTENANCE					2,464.00			
1411 PLANNING	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	7.98	10347747	2017-09 583-1633	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	36.11	221885	TASKALFA 10/10-11/09	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	27.52	221884	TASKALFA 9/10-10/09	
	7450 PUBLICATIONS AND DUES	11/1/17	124470	NATIONAL NOTARY ASSOC NATIONAL NOTARY ASSOC	33.00	016131883	INSUR BOND/D BLACK	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	37.76	96401893-0	2017-10	
Division Total 1411 PLANNING					142.37			
1412 BUILDING INSPECTION	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	7.98	10347747	2017-09 583-1633	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	87.45	5183808 9/1	2017-09 UNIFORMS	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	36.11	221885	TASKALFA 10/10-11/09	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	27.51	221884	TASKALFA 9/10-10/09	
	7455 POSTAGE AND FREIGHT	11/1/17	124399	GOLDEN STATE OVERNIGHT GOLDEN STATE OVERNIGHT	17.80	3470517	INTERWEST SHIPPING	
	7495 PROF AND SPEC SERVICES	11/1/17	124424	INTERWEST CONSULTING GROUP INC INTERWEST CONSULTING GROUP INC	2,155.36	36662	FY18-0435	
	7495 PROF AND SPEC SERVICES	11/1/17	124424	INTERWEST CONSULTING GROUP INC INTERWEST CONSULTING GROUP INC	1,169.65	36662	MP18-0001	
	7495 PROF AND SPEC SERVICES	11/1/17	124424	INTERWEST CONSULTING GROUP INC INTERWEST CONSULTING GROUP INC	1,467.14	36662	MP18-0002	

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Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1412 BUILDING INSPECTION	7495 PROF AND SPEC SERVICES	11/1/17	124424	INTERWEST CONSULTING GROUP INC INTERWEST CONSULTING GROUP INC	1,287.51	36662	MP18-0003	
	7495 PROF AND SPEC SERVICES	11/1/17	124424	INTERWEST CONSULTING GROUP INC INTERWEST CONSULTING GROUP INC	1,507.42	36662	MP18-0004	
	7495 PROF AND SPEC SERVICES	11/1/17	124426	JASON ADISON SMITH CONSULTING DBA J A S PACIFIC	8,910.00	BI12701	2017-09 WILLIAM NIX	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	51.44	1093	EMBROIDERY HATS	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	103.84	96401893-0	2017-10	
	7320 COMMUNICATIONS	11/1/17	124541	VERIZON WIRELESS VERIZON WIRELESS	214.71	9794123553	2017-09 542008968	
Division Total 1412 BUILDING INSPECTION					17,043.92			
1413 CITY HFD PUBLIC HSG AUTH	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	7.98	10347747	2017-09 583-1633	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	36.10	221885	TASKALFA 10/10-11/09	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	27.51	221884	TASKALFA 9/10-10/09	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	28.32	96401893-0	2017-10	
Division Total 1413 CITY HFD PUBLIC HSG AUTH					99.91			
1414 CD-CANNABIS	7495 PROF AND SPEC SERVICES	11/1/17	124418	HINDERLITER, DE LLAMAS & ASSOCIATES HINDERLITER, DE LLAMAS & ASSOCIATES	66,000.00	27952	CANNABIS MGMT EXP	
Division Total 1414 CD-CANNABIS					66,000.00			

Attachment: WARRANT REGISTER-11-01-17 (FIN: WARRANT REGISTER)

Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1450-001 CDBG ENTITLEMENT REUSE FD	7495 PROF AND SPEC SERVICES	11/1/17	124439	KINGS CO RECORDER KINGS CO RECORDER	57.00	15530	LIEN RELEASES	
Division Total 1450-001 CDBG ENTITLEMENT REUSE FD 57.00								
1450-016 CDBG ENTITLEMENT 2016/17	817662 HOUSING REHAB-17 ENT	11/1/17	124384	TALX CORPORATION DBA EQUIFAX WORKFORCE SOLUTIONS	29.90	BI-699669	2017-09 INCOME VERIFY	
	817662 HOUSING REHAB-17 ENT	11/1/17	124402	JUAN HIGAREDA DBA H C CUSTOM PAINTING	6,950.00	25597	PAINT 1210 RODGERS RD	
	817662 HOUSING REHAB-17 ENT	11/1/17	124436	KENNIES INDOOR COMFORT SPECIALIST KENNIES INDOOR COMFORT SPECIALIST	7,500.00	58699	HVAC 330 SAN MADINA	
	817662 HOUSING REHAB-17 ENT	11/1/17	124436	KENNIES INDOOR COMFORT SPECIALIST KENNIES INDOOR COMFORT SPECIALIST	7,380.00	58446	HVAC 905 WHITNEY DR	
	817662 HOUSING REHAB-17 ENT	11/1/17	124528	CONSTANTINO PADILLA DBA TINO'S FENCE	2,338.45	1359	FENCE 905 WHITNEY DR	
Division Total 1450-016 CDBG ENTITLEMENT 2016/17 24,198.35								
1450-017 CDBG ENTITLEMENT 2017/18	7531 ADMINISTRATIVE EXPENSES	11/1/17	124442	KINGS TULARE CONTINUUM OF CARE KINGS TULARE CONTINUUM OF CARE	125.00	1180	FY18 MEMBERSHIP	
	818660 CONTINUUM OF CARE-18	11/1/17	124442	KINGS TULARE CONTINUUM OF CARE KINGS TULARE CONTINUUM OF CARE	936.87	1201	2017-07 PROG DELIVERY	
	818660 CONTINUUM OF CARE-18	11/1/17	124442	KINGS TULARE CONTINUUM OF CARE KINGS TULARE CONTINUUM OF CARE	648.93	1205	2017-08 PROG DELIVERY	
Division Total 1450-017 CDBG ENTITLEMENT 2017/18 1,710.80								
1484 RDA SUCCR AGENCY ADMIN FD	7495 PROF AND SPEC SERVICES	11/1/17	124444	LAKESIDE IRRIGATION WATER DISTRICT LAKESIDE IRRIGATION WATER DISTRICT	125.90		STANDBY CHARGES	
Division Total 1484 RDA SUCCR AGENCY ADMIN FD 125.90								

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Warrant Register

Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1511 POLICE-SUPPORT SERVICE	7495 PROF AND SPEC SERVICES	10/13/17	124230	CALIF DEPT OF JUSTICE CALIF DEPT OF JUSTICE	339.00	260144	LIVE SCAN/FINGERPRINTS	
	7495 PROF AND SPEC SERVICES	10/13/17	124234	COMCAST CABLE COMMUNICATIONS, INC COMCAST CABLE COMMUNICATIONS, INC	12.73	014669910/1	8155500390146699	
	7320 COMMUNICATIONS	10/13/17	124271	VERIZON WIRELESS VERIZON WIRELESS	1,081.31	9793638186	381-0944 INVESTIGATIONS C	
	7320 COMMUNICATIONS	10/13/17	124272	VERIZON WIRELESS VERIZON WIRELESS	131.21	9793729340	771937214 AIR CARD	
	7320 COMMUNICATIONS	10/13/17	124274	VERIZON WIRELESS VERIZON WIRELESS	20.04	9793747800	872315009 TRACKER	
	7770 TRAINING/TRAVEL/MEETING	10/18/17	124287	CALIF NARCOTIC OFFICERS' ASSN CALIF NARCOTIC OFFICERS' ASSN	45.00	TR CARRILL	REG/FRESNO/10/18	
	7770 TRAINING/TRAVEL/MEETING	10/18/17	124287	CALIF NARCOTIC OFFICERS' ASSN CALIF NARCOTIC OFFICERS' ASSN	45.00	TR PONTEC	REG/FRESNO/10/18	
	7785 UTILITIES-GAS	10/24/17	124309	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	40.78		2017-10 1505173000	
	7320 COMMUNICATIONS	11/1/17	124327	A T & T A T & T (11349)	374.44	0602220949	80008961114 CA DEPT OF JU	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	483.25	10347757	2017-09	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	875.84	10347679	2343419274620 CELL TOWER	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	20.35	10347755	585-0665 INV FAX	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	20.34	10347888	585-1010 DOJ BREATHALYZER	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	143.81	10347758	585-4700 CAL/LONG DISTANC	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	28.02	10347759	585-4977	

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1511 POLICE-SUPPORT SERVICE	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	38.77	10347760	585-8176 MOTOROLA MTCE LI	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	81.99	10347939	924-5333 LEMOORE LINE	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	352.00	TR CHAVEZ	ADV/BEAUMNT/11/05-10	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	160.00	TR CHAVEZ	ADV/BEAUMNT/11-19-21	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	352.00	TR CHAVEZ	ADV/DEAUMNT/11/12-17	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	522.50	TR CHAVEZ	LDG/BEAUMNT/11/05-10	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	522.50	TR CHAVEZ	LDG/BEAUMNT/11/12-17	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124363	CHAVEZ, JOSHUA ROBERT CHAVEZ, JOSHUA ROBERT	209.00	TR CHAVEZ	LDG/BEAUMNT/11/19-21	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124366	COLLEGE OF THE SEQUOIAS COLLEGE OF THE SEQUOIAS	118.00	TR AVALOS	REG/HANFORD/12/06-08	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124366	COLLEGE OF THE SEQUOIAS COLLEGE OF THE SEQUOIAS	118.00	TR SITTER	REG/HANFORD/12/6-8	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124369	COTTA, JARRED COTTA, JARRED	37.65	EXP 10/06-0	EXP/SAN MIGUEL/10/9-8	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124392	FRESNO POLICE REGIONAL TRNG CTR FRESNO POLICE REGIONAL TRNG CTR	802.00	TR MEDERI	REG/FRESNO/10/6-10	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124429	GABRIEL JIMENEZ JIMENEZ, GABRIEL	15.00	EXP 10/06	EXP/VISALIA/10/06	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124450	LEVIN, JOSHUA W. LEVIN, JOSHUA W.	93.00	EXP 9/26-28	EXP/FRESNO/9/26-28	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124494	DINORA ROLDAN ACEVEDO ROLDAN ACEVEDO, DINORA	352.00	TR ACEVED	ADV/SAN DIEG/11/12-17	

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1511 POLICE-SUPPORT SERVICE	7770 TRAINING/TRAVEL/MEETING	11/1/17	124494	DINORA ROLDAN ACEVEDO ROLDAN ACEVEDO, DINORA	1,502.96	TR ACEVED	LDG/SAN DIEG/11/12-17	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124502	JOSHUA SHEARER SHEARER, JOSHUA	15.00	EXP 10/06	EXP/VISALIA/10/06	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	490.26	96401893-0	2017-10	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124529	TODD, DANIEL TODD, DANIEL	15.00	EXP 10/06	EXP/VISALIA/10/06	
	7320 COMMUNICATIONS	11/1/17	124539	MCI NETWORK SERV, INC DBA VERIZON BUSINESS SERVICES	612.61	70589371	CLETS SYSTEM SV100362	
	7320 COMMUNICATIONS	11/1/17	124542	VERIZON WIRELESS VERIZON WIRELESS	1,679.12	9794176407	BLANKET PURCHASE ORDER	
Division Total 1511 POLICE-SUPPORT SERVICE					11,750.48			
1512-1 POLICE-RECORDS	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	34.04	222278	M2535 IDN COPIER SERVICE	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	70.31	222280	TASKALFA 2551CI COPIER SE	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	90.16	222279	TASKALFA 5551CI COPIER SE	
	7460 DUPLICATING EXPENSE	11/1/17	124374	DATAFLOW BUSINESS SYSTEMS, INC DATAFLOW BUSINESS SYSTEMS, INC	50.96	222281	TASKALFA 6501I COPIER SER	
	7460 DUPLICATING EXPENSE	11/1/17	124454	MARLIN LEASING CORP DBA MARLIN BUSINESS BANK	690.70	15407727	LEASE-KYOCERA 401-1217419	
	7455 POSTAGE AND FREIGHT	11/1/17	124480	PITNEY BOWES / PURCHASE POWER PITNEY BOWES / PURCHASE POWER	472.17		2017-10 POSTAGE	
	7495 PROF AND SPEC SERVICES	11/1/17	124505	SHRED-IT US JV LLC DBA SHRED-IT USA LLC	136.70	8123305941	DOC SHREDDING	
Division Total 1512-1 POLICE-RECORDS					1,545.04			

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1512-2 POLICE-COMMUNICATIONS	7770 TRAINING/TRAVEL/MEETING	11/1/17	124337	TONI BARNES BARNES, TONI	48.00	EXP 9/19-21	EXP/FRESNO/09/19-21	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124337	TONI BARNES BARNES, TONI	76.35	EXP 09/28	EXP/KERMAN/09/28	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124458	LILIANA MC FARLAND MC FARLAND, LILIANA	67.31	EXP 10/11-1	EXP/FRESNO/10/11-12	
	Division Total 1512-2 POLICE-COMMUNICATIONS				191.66			
1513 POLICE-OPERATIONS	7533 GRAFFITI CONTROL	10/13/17	124240	SHERWIN WILLIAMS COMPANY DBA FRAZEE INDUSTRIES	4.67	18161	PAINT & SUPPLIES	
	7533 GRAFFITI CONTROL	10/13/17	124240	SHERWIN WILLIAMS COMPANY DBA FRAZEE INDUSTRIES	7.18	20142	PAINT & SUPPLIES	
	7600 SPECIAL DEPARTMENTAL EXP	10/13/17	124254	LOWE'S LOWE'S	162.62	901067	BENCHES LOCKER RM	
	7600-022 PAL PROGRAM EXPENSE	10/13/17	124254	LOWE'S LOWE'S	25.44	901039 09/1	MATERIALS-SPRNKLR	
	7600-022 PAL PROGRAM EXPENSE	10/13/17	124254	LOWE'S LOWE'S	4.95	902181	MATERIALS-SPRNKLR	
	7600-022 PAL PROGRAM EXPENSE	10/13/17	124254	LOWE'S LOWE'S	(11.60)	917581	MATERIALS-SPRNKLR	
	7600-022 PAL PROGRAM EXPENSE	10/13/17	124254	LOWE'S LOWE'S	8.22	917584	MATERIALS-SPRNKLR	
	7600-022 PAL PROGRAM EXPENSE	10/13/17	124254	LOWE'S LOWE'S	7.22	917595	MATERIALS-SPRNKLR	
	7540 PARKING CITATN ADMIN COS	10/24/17	124310	TURBO DATA SYS INC TURBO DATA SYS INC	374.98	26814	2017-09	
	7540 PARKING CITATN ADMIN COS	10/24/17	124310	TURBO DATA SYS INC TURBO DATA SYS INC	203.78	26814	TICKET PRO MONTHLY	
	7600-022 PAL PROGRAM EXPENSE	11/1/17	124356	CALIF MILITARY DEPT ACCOUNTING CALIF MILITARY DEPT ACCOUNTING	800.00		2017-11 RENT 902N11TH	

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1513 POLICE-OPERATIONS	7470 PRINTING	11/1/17	124438	KINGS CO INFO TECHNOLOGY DEPT	64.69		PRNTSUSPENSION NOTICE	
				KINGS CO INFO TECHNOLOGY DEPT				
	7495 PROF AND SPEC SERVICES	11/1/17	124449	LEMOORE SPORTSMANS CLUB	4,680.00	1400-08	RANGE FEES/ANNUAL MBERSHP	
				LEMOORE SPORTSMANS CLUB				
Division Total 1513 POLICE-OPERATIONS					6,332.15			
1514 POLICE-TRAFFIC ENFORCEMNT	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124375	DECATUR ELECTRONICS INC	530.89	IN00017209	DATA CORD FOR RADAR	
				DECATUR ELECTRONICS INC				
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124375	DECATUR ELECTRONICS INC	15.00	IN00017209	ESTIMATED SHIPPING/HANDLI	
				DECATUR ELECTRONICS INC				
Division Total 1514 POLICE-TRAFFIC ENFORCEMNT					545.89			
1516 POLICE-SCHOOL OFFICER PRG	7450 PUBLICATIONS AND DUES	11/1/17	124469	NATIONAL ASSOC OF S R O, INC	40.00		WESTLUND 2018	
				NATIONAL ASSOC OF S R O, INC				
Division Total 1516 POLICE-SCHOOL OFFICER PRG					40.00			
1518 POLICE-ANIMAL CONTROL	7495 PROF AND SPEC SERVICES	11/1/17	124413	HANFORD VETERINARY HOSPITAL, INC	49.50	1069301	EMERGENCY EXAM 09/22	
				HANFORD VETERINARY HOSPITAL, INC				
	7495 PROF AND SPEC SERVICES	11/1/17	124413	HANFORD VETERINARY HOSPITAL, INC	110.00	1069303	EMERGENCY EXM 09/21	
				HANFORD VETERINARY HOSPITAL, INC				
Division Total 1518 POLICE-ANIMAL CONTROL					159.50			
1610 FIRE-ADMIN/SUPPRESS ION	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124244	HOME DEPOT U S A INC DBA	321.19		BLANKET PURCHASE ORDER	
				HOME DEPOT STORES, THE				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S	15.27		BLANKET PURCHASE ORDER	
				LOWE'S				
	7455 POSTAGE AND FREIGHT	10/13/17	124256	EXPRESS MESSENGER SYSTEMS DBA	3.59	8683457	TYCO 09/29	
				ON TRAC				

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1610 FIRE-ADMIN/SUPPRESSION	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-02	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-03	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-05	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-06	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	150.00		2017-07	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-08	
	7305 CALL FIREFIGHTERS	10/24/17	124307	JOSHUA M PUERNER PUERNER, JOSHUA M	60.00		2017-09	
	7785 UTILITIES-GAS	10/24/17	124309	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	85.72		2017-10 0260155100 #1	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	44.82	10347757	2017-09	
	7495 PROF AND SPEC SERVICES	11/1/17	124399	GOLDEN STATE OVERNIGHT GOLDEN STATE OVERNIGHT	44.27	3420349	FW-032 CERT MAIL	
	7495 PROF AND SPEC SERVICES	11/1/17	124399	GOLDEN STATE OVERNIGHT GOLDEN STATE OVERNIGHT	44.27	3420349	FW-052 CERT MAIL	
	7495 PROF AND SPEC SERVICES	11/1/17	124399	GOLDEN STATE OVERNIGHT GOLDEN STATE OVERNIGHT	6.20	3420349	FW-054 CERT MAIL	
	7495 PROF AND SPEC SERVICES	11/1/17	124399	GOLDEN STATE OVERNIGHT GOLDEN STATE OVERNIGHT	44.27	3420349	FW-072 CERT MAIL	
	7495 PROF AND SPEC SERVICES	11/1/17	124467	MUNICIPAL EMERGENCY SERVICES INC MUNICIPAL EMERGENCY SERVICES INC	683.74	IN1169308	SCBA FLOW TESTS	
	7495 PROF AND SPEC SERVICES	11/1/17	124484	TAYLOR BROTHERS, INC DBA R E S COM	52.00	1574498	MONTHLY PEST CONTROL	

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1610 FIRE-ADMIN/SUPPRESSION	7495 PROF AND SPEC SERVICES	11/1/17	124484	TAYLOR BROTHERS, INC DBA R E S COM	45.00	1574499	MONTHLY PEST CONTROL	
	7495 PROF AND SPEC SERVICES	11/1/17	124501	SHAW'S AIR CONDITIONING & HEATING SHAW'S AIR CONDITIONING & HEATING	1,250.00	0000012226	EVAPORATOR COIL SVC	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	79.60		2017-10 0711175100 #2	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	217.12	96401893-0	2017-10	
	7320 COMMUNICATIONS	11/1/17	124540	VERIZON WIRELESS VERIZON WIRELESS	484.19	9794106004	272128171 WIRELESS	
	7320 COMMUNICATIONS	11/1/17	124543	VERIZON WIRELESS VERIZON WIRELESS	502.44	9794628097	342019390 DATA PORTS	
Division Total 1610 FIRE-ADMIN/SUPPRESSION					4,433.69			
1611 FIRE-FIRE PREVENTION	7600 SPECIAL DEPARTMENTAL EXP	10/13/17	124257	LOWE'S HOME CENTERS INC ORCHARD SUPPLY COMPANY LLC	130.34		BLANKET PURCHASE ORDER	
	7440 OFFICE EXPENSE	10/18/17	124295	STAPLES STAPLES	20.26	75371	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	11/1/17	124428	JERRY MATOS DBA JERRY MATOS DISCING SERVICE	434.00	1221	CLEAN UP 404 E 9TH ST	
Division Total 1611 FIRE-FIRE PREVENTION					584.60			
1710 PARKS & REC-ADMIN	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	9.29	10347744	2017-09 582-1152 FAX	
	7440 OFFICE EXPENSE	11/1/17	124368	ROSA CONTRERAS CONTRERAS, ROSA	72.74		REIM/HALLOWEEN DECOR	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	37.76	96401893-0	2017-10	

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Division Total 1710 PARKS & REC-ADMIN					119.79			
1711	7495	10/13/17	124252	WARREN LEASURE	66.00		SFTBAL OFFCL 09/12	
PARKS & REC-SPORTS	PROF AND SPEC SERVICES			LEASURE, WARREN				
	7495	10/13/17	124258	ZANE PERREIRA	44.00		SFTBAL OFFCL 09/12	
	PROF AND SPEC SERVICES			PERREIRA, ZANE				
	7320	11/1/17	124328	A T & T	22.43	10347745	2017-09 582-4092	
	COMMUNICATIONS			A T & T (13982)				
	7495	11/1/17	124334	GEORGE AUSTIN	119.00		SFTBAL OFCL 10/23-26	
	PROF AND SPEC SERVICES			AUSTIN, GEORGE				
	7495	11/1/17	124334	GEORGE AUSTIN	88.00		SFTBAL OFFCLS 10/9-17	
	PROF AND SPEC SERVICES			AUSTIN, GEORGE				
	7495	11/1/17	124372	DREW CRISP	100.00		SFTBAL OFFCL 10/26	
	PROF AND SPEC SERVICES			CRISP, DREW				
	7495	11/1/17	124382	RAYMOND ELIZONDO	88.00		SFTBAL OFFCL 10/12-26	
	PROF AND SPEC SERVICES			ELIZONDO, RAYMOND				
	7495	11/1/17	124403	BRYAN HACKWORTH	150.00		SFTBAL OFFCL 10/26	
	PROF AND SPEC SERVICES			HACKWORTH, BRYAN				
	7495	11/1/17	124404	CALVIN HAKKER	34.50		SFTBAL OFFCL 08/10	
	PROF AND SPEC SERVICES			HAKKER, CALVIN				
	7495	11/1/17	124406	JUSTIN HAKKER	150.00		SFTBAL OFFCL 10/26	
	PROF AND SPEC SERVICES			HAKKER, JUSTIN				
	7495	11/1/17	124416	RUDY HERNANDEZ	209.00		SFTBAL OFFCL 10/21-22	
	PROF AND SPEC SERVICES			HERNANDEZ, RUDY				
	7495	11/1/17	124416	RUDY HERNANDEZ	495.00		SFTBAL OFFCL 10/7-15	
	PROF AND SPEC SERVICES			HERNANDEZ, RUDY				
	7495	11/1/17	124432	AARON JOHNSON	11.00		SFTBAL OFFCL 10/16	
	PROF AND SPEC SERVICES			JOHNSON, AARON				
	7495	11/1/17	124446	RODNEY LAWRENCE	88.00		SFTBAL OFFCL 10/9-16	
	PROF AND SPEC SERVICES			LAWRENCE, RODNEY				

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1711 PARKS & REC-SPORTS	7495	11/1/17	124448	WARREN LEASURE LEASURE, WARREN	264.00		SFTBAL OFFCL 10/09-19	
	7495	11/1/17	124452	ISMAEL MALDONADO MALDONADO, ISMAEL	132.00		SFTBL OFFCL 10/2-26	
	7495	11/1/17	124453	TONI MARIN MARIN, TONI	132.00		SFTBAL OFFCL 10/09-19	
	7495	11/1/17	124453	TONI MARIN MARIN, TONI	22.00		SFTBAL OFFCLS 10/26	
	7495	11/1/17	124463	RYAN MERCER MERCER, RYAN	154.00		SFTBAL OFFCL 10/10-19	
	7495	11/1/17	124463	RYAN MERCER MERCER, RYAN	110.00		SFTBAL OFFCL 10/23-26	
	7495	11/1/17	124475	CAMBRIA PEDRO PEDRO, CAMBRIA	143.00		SFTBAL OFFCL 10/7-8	
	7495	11/1/17	124477	KELLY PERREIRA PERREIRA, KELLY	72.00		SFTBAL OFFCL 10/20	
	7495	11/1/17	124477	KELLY PERREIRA PERREIRA, KELLY	336.00		SFTBAL OFFCL 10/21-26	
	7495	11/1/17	124477	KELLY PERREIRA PERREIRA, KELLY	420.00		SFTBAL OFFCL 10/7-19	
	7495	11/1/17	124478	ZANE PERREIRA PERREIRA, ZANE	55.00		SFTBAL OFFCL 10/23-26	
	7495	11/1/17	124478	ZANE PERREIRA PERREIRA, ZANE	244.00		SFTBAL OFFCL 10/7-19	
	7495	11/1/17	124497	ANTHONY SANCHEZ SANCHEZ, ANTHONY	33.00		SFTBAL OFFCL 10/19	
	7495	11/1/17	124497	ANTHONY SANCHEZ SANCHEZ, ANTHONY	489.50		SFTBAL OFFCL 10/20-26	
	7495	11/1/17	124497	ANTHONY SANCHEZ SANCHEZ, ANTHONY	583.00		SFTBAL OFFCL 10/7-16	

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1711 PARKS & REC-SPORTS	7495 PROF AND SPEC SERVICES	11/1/17	124510	STEPHEN SMITH SMITH, STEPHEN	253.00		SFTBAL OFFCL 10/21-22	
	7495 PROF AND SPEC SERVICES	11/1/17	124510	STEPHEN SMITH SMITH, STEPHEN	539.00		SFTBAL OFFCL 10/7-15	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	683.61		2017-10 GREENFIELD	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	1,358.77		2017-10 SOFTBALL COMP	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124517	SUNSHINE MONTOYA-KENTON DBA SUNCO DESIGNS	141.57	201708078	CHAMPION T-SHIRTS	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124517	SUNSHINE MONTOYA-KENTON DBA SUNCO DESIGNS	136.21	201770	CHAMPION T-SHIRTS	
	7495 PROF AND SPEC SERVICES	11/1/17	124527	ERIC TINLIN TINLIN, ERIC	175.00		SFTBAL OFFCL 10/26	
Division Total 1711 PARKS & REC-SPORTS					8,141.59			
1713 PARKS & REC-LONGFIELD	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	23.21	10347757	2017-09	
	7495 PROF AND SPEC SERVICES	11/1/17	124378	DIRECTV LLC DIRECTV LLC	79.49	3282183186	022650924 BLANKET PO	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	14.30		2017-10 1949155800	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	205.86	09741	BLANKET PURCHASE ORDER	
Division Total 1713 PARKS & REC-LONGFIELD					322.86			
1714 PARKS & REC-POOL/SKATE	7650 CHEMICALS	10/13/17	124253	LINCOLN EQUIPMENT INC LINCOLN AQUATICS	456.45	SI325336	POOL CHEMICALS	

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
1714 PARKS & REC-POOL/SKATE	7650 CHEMICALS	10/13/17	124253	LINCOLN EQUIPMENT INC LINCOLN AQUATICS	942.94	SI326366	POOL CHEMICALS	
	4480 AQ-AQUATICS CONCESSIONS	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	480.00		FY18 QTR1 USE TAX	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	22.10	10347757	2017-09	
	7495 PROF AND SPEC SERVICES	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	65.00	0091611410	2017-10 PLUNGE	
	7495 PROF AND SPEC SERVICES	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	24.50	1656162	2017-11 PLUNGE	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	14.30		2017-10 1234156900	
Division Total 1714 PARKS & REC-POOL/SKATE					2,005.29			
1716 PARKS & REC-FACILITIES	7495 PROF AND SPEC SERVICES	10/24/17	124301	COMCAST CABLE COMMUNICATIONS, INC COMCAST CABLE COMMUNICATIONS, INC	109.95	045492910/1	8155500390454929 ETHERNET	
	4510 FM-FACILITIES-OTHER RENTS	11/1/17	124488	SHERRY RENTERIA RENERIA, SHERRY	45.00	2003076	REFUND PRK SHLTR 9706	
	4510 FM-FACILITIES-OTHER RENTS	11/1/17	124545	YVETTE WEISSER WEISSER,YVETTE	25.00	2003084	REFUND PARK SHLTR9829	
Division Total 1716 PARKS & REC-FACILITIES					179.95			
1719 PARKS & REC-YOUTH SERV	7495 PROF AND SPEC SERVICES	10/13/17	124237	DIRECTV LLC DIRECTV LLC	135.48	3251324627	014877658 BLNKT PO	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124261	SANCHEZ FEED & SEED, INC SANCHEZ FEED & SEED, INC	35.39	133720	CHALK 6 50LB BAGS	
	4471 CA-TEEN CTR CONCESSIONS	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	26.00		FY18 QTR1 USE TAX	

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1719 PARKS & REC-YOUTH SERV	7013 PART-TIME EMPLOYEES	10/31/17	124324	ALYSSA MIRANDA MIRANDA, ALYSSA	76.48		CY17 PP22 REISSUE	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	21.93	10347757	2017-09	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	20.34	10350775	2017-09 587-1658	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124364	SUSAN CHAVEZ CHAVEZ, SUSAN	35.39	34399	CNTR PIECES-LUNCHEON	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124393	FUN EXPRESS LLC FUN EXPRESS LLC	666.79	685925481-0	PRIZES-SPECIAL EVENTS	
	7495 PROF AND SPEC SERVICES	11/1/17	124431	JOEY'S JUMPING CASTLE INC JOEY'S JUMPING CASTLE INC	430.00	1485	BOUNCER RENTAL	
	7495 PROF AND SPEC SERVICES	11/1/17	124431	JOEY'S JUMPING CASTLE INC JOEY'S JUMPING CASTLE INC	475.00	1684	BOUNCER/FALL FAM FEST	
	7495 PROF AND SPEC SERVICES	11/1/17	124431	JOEY'S JUMPING CASTLE INC JOEY'S JUMPING CASTLE INC	595.00	1483	EASTER RENTAL	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	18.88	96401893-0	2017-10	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	62.41	01415	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	316.97	01417	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	26.76	03456 10/17	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	121.21	04749	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	111.29	04750	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	221.66	05948	BLANKET PURCHASE ORDER	

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1719 PARKS & REC-YOUTH SERV	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124544	WAL MART WAL MART	375.25	09170	BLANKET PURCHASE ORDER	
	7470 PRINTING	11/1/17	124550	XEROX CORP XEROX CORP	92.10	90916906	2017-09 LEASE/COPIES	
	5017-701 TR-CONTRACTED CLASSES	11/1/17	124551	GINA LEWIS YOUNG YOUNG, GINA LEWIS	182.00		2017-09 ADDL CHEER	
	5017-701 TR-CONTRACTED CLASSES	11/1/17	124551	GINA LEWIS YOUNG YOUNG, GINA LEWIS	616.00		2017-10 CHEER	
Division Total 1719 PARKS & REC-YOUTH SERV					4,662.33			
1720 PARKS & REC-ADULT/SPCL	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	22.08	10347757	2017-09	
	7495 PROF AND SPEC SERVICES	11/1/17	124377	DIRECTV LLC DIRECTV LLC	79.49	3263182988	014877658/ BLNKT PO	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124387	F T G FINE EMBROIDERY & DESIGN F T G FINE EMBROIDERY & DESIGN	337.84	3384	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124387	F T G FINE EMBROIDERY & DESIGN F T G FINE EMBROIDERY & DESIGN	151.22	3676	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124387	F T G FINE EMBROIDERY & DESIGN F T G FINE EMBROIDERY & DESIGN	34.32	3710	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124387	F T G FINE EMBROIDERY & DESIGN F T G FINE EMBROIDERY & DESIGN	333.55	3740	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	11/1/17	124388	GARY FEINSTEIN FEINSTEIN, GARY	250.00	105	PHOTOGRAPHER/EVENTS	
	5012-201 CA-CONTRACTED CLASSES	11/1/17	124466	SUSAN MORELOCK MORELOCK, SUSAN	451.50		2017-09 BALLRM DANCE	
	7495 PROF AND SPEC SERVICES	11/1/17	124492	CINDY LYNN RODRIGUEZ RODRIGUEZ, CINDY LYNN	195.00		2017-10 AEROBICS	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	9.44	96401893-0	2017-10	

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1720 PARKS & REC-ADULT/SPCL	7560	11/1/17	124531	AMSTERDAN PRINTING & LITHO DBA	110.57	5769493	SR MONTHLY PLANNER	
	ADVERTISING & PUBLIC REL			U S DIARY				
	7495	11/1/17	124549	CATHERINE WUNDERLY	360.00		2017-10 ZUMBA	
	PROF AND SPEC SERVICES			WUNDERLY, CATHERINE				
Division Total 1720 PARKS & REC-ADULT/SPCL					2,335.01			
1721 PARKS & REC-COMM PROM/EVT	7560	11/1/17	124464	MOMENTUM BROADCASTING DBA	648.00	9574-1	RADIO AD 10/02-07	
	ADVERTISING & PUBLIC REL			MOMENTUM BROADCASTING DBA				
	7320	11/1/17	124520	U S TELEPACIFIC CORP DBA	9.44	96401893-0	2017-10	
	COMMUNICATIONS			T P X COMMUNICATIONS				
	7611	11/1/17	124544	WAL MART	144.60	01274	RENAISSANCE FAIRE	
	RENAISSANCE FAIRE			WAL MART				
	7470	11/1/17	124550	XEROX CORP	92.09	90916906	2017-09 LEASE/COPIES	
	PRINTING			XEROX CORP				
Division Total 1721 PARKS & REC-COMM PROM/EVT					894.13			
1722 PARKS & REC-PARKS	7600	10/13/17	124244	HOME DEPOT U S A INC DBA	258.75		BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EX			HOME DEPOT STORES, THE				
	7600	10/13/17	124251	LAWRENCE TRACTOR CO	26.80	247148	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EX			LAWRENCE TRACTOR CO				
	7600	10/13/17	124254	LOWE'S	702.07		BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EX			LOWE'S				
	7600	10/13/17	124265	INTERLINE BRANDS INC DBA	848.54	412059669	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EX			SUPPLYWORKS				
	7600	10/18/17	124290	HOFMANS NURSERY	887.06	22875	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EX			HOFMANS NURSERY				
7780	10/18/17	124292	P G & E	10.18		2017-09 6276476966-7		
	UTILITIES-ELECTRICITY			P G & E				

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1722 PARKS & REC-PARKS	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	18.62	1473268	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	15.44	1475554	BLANKET PURCHASE ORDER	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	234.30	5183798 9/1	2017-09 UNIFORMS	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124339	BIRD-B-GONE, INC BIRD-B-GONE, INC	25.56	195382	BIRD NET ZIPPER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124379	ZERO WASTE USA INC DBA DOG WASTE DEPOT	251.55	168637	DOG WASTE BAGS (2 CS)	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124394	GAMETIME, INC GAMETIME, INC	2,161.60	PJI-0071712	PLAYGROUND PARTS	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124400	PAUL ENCINIAS DBA GOPHER GRABBERS LLC	1,300.00	4320	RODANT ABAITMNT-PRKS	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	192.89	1093	EMBROIDERY HATS	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124490	RICHARD K GONZALES DBA RICHARD'S TREE SERVICE	3,500.00	1313	PRUNE PALMS COE PARK	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	45.88		2017-09	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	18.88	96401893-0	2017-10	
Division Total 1722 PARKS & REC-PARKS					10,498.12			
2010 PW-ADMINISTRATION & ENGR	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	21.45	10347746	2017-09 583-1529	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	74.92	5183651 9/1	2017-09 UNIFORMS	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124383	ENGINEER SUPPLY, LLC ENGINEER SUPPLY, LLC	263.98	2236468	WHEEL & DIG LEVEL - ENGIN	

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2010 PW-ADMINISTRATION & ENGR	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124411	HANFORD SENTINEL CLASSIFIED HANFORD SENTINEL CLASSIFIED	243.02		52 WK SUBSCRIPTION	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	77.16	1093	EMBROIDERY HATS	
	7460 DUPLICATING EXPENSE	11/1/17	124489	MARCEY L STARK DBA REPROGRAPHIC MACHINE SALES CO	207.31	197871	PLOTTER PAPER	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124505	SHRED-IT US JV LLC DBA SHRED-IT USA LLC	62.38	8123304490	DOC SHREDDING	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	169.92	96401893-0	2017-10	
Division Total 2010 PW-ADMINISTRATION & ENGR					1,120.14			
2011 PW-STREET MAINTENANCE	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124226	ALERT-O-LITE ALERT-O-LITE	869.16	0015680-IN	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124226	ALERT-O-LITE ALERT-O-LITE	471.26	0018681-IN	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124235	DASSEL'S PETROLEUM, INC DASSEL'S PETROLEUM, INC	27.46	36909	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124235	DASSEL'S PETROLEUM, INC DASSEL'S PETROLEUM, INC	62.82	36953	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124235	DASSEL'S PETROLEUM, INC DASSEL'S PETROLEUM, INC	63.66	36988	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124235	DASSEL'S PETROLEUM, INC DASSEL'S PETROLEUM, INC	49.02	37323	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124240	SHERWIN WILLIAMS COMPANY DBA FRAZEE INDUSTRIES	15.73	17155	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S LOWE'S	320.04		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	328.67	1471833	BLANKET PURCHASE ORDER	

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2011 PW-STREET MAINTENANCE	7780 UTILITIES-ELECTRICITY	10/31/17	124325	P G & E P G & E	273.34		2017-09 6899346425-1	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	218.85	5183671 9/1	2017-09 UNIFORMS	
	7720 STREET CONST & MAINT MTR	11/1/17	124347	CALAVERAS MATERIALS INC CALAVERAS MATERIALS INC	227.08	1835905	ASPHALT 4.19 TONS	
	7720 STREET CONST & MAINT MTR	11/1/17	124347	CALAVERAS MATERIALS INC CALAVERAS MATERIALS INC	426.02	1838907	ASPHALT 7.95 TONS	
	7780 UTILITIES-ELECTRICITY	11/1/17	124353	CALIF DEPT OF TRANSPORTATION CALIF DEPT OF TRANSPORTATION	10,111.16	SL180051	7-9/17 HWY SIG & LTS	
	7495 PROF AND SPEC SERVICES	11/1/17	124362	CENTRAL VALLEY COMPREHENSIVE CARE CENTRAL VALLEY COMPREHENSIVE CARE	221.00		B JACKSON	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124425	J A MOMANEY SERVICES INC DBA J A M SERVICES INC	1,640.93	99410	VIDEO MONITORS	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	192.89	1093	EMBROIDERY HATS	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124434	K R C SAFETY CO INC K R C SAFETY CO INC	550.64	35397	PAPER NO PKNG SIGNS	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124495	SAFEWAY SIGN COMPANY SAFEWAY SIGN COMPANY	423.35	12090	SIGNS, 24X9 STREET NAME	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124495	SAFEWAY SIGN COMPANY SAFEWAY SIGN COMPANY	313.44	12090	SIGNS, 30X9 STREET NAME	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124495	SAFEWAY SIGN COMPANY SAFEWAY SIGN COMPANY	129.77	12090	SIGNS, 36X9 STREET NAME	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124507	D L H TOOLS INC DBA SIGNMAX	413.00	0027183-IN	FLARE BLNKT/POST CAPS	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	18.88	96401893-0	2017-10	
	7720 STREET CONST & MAINT MTR	11/1/17	124524	TERRY JOHNSON TRUCKING, INC TERRY JOHNSON TRUCKING, INC	750.00	98110	3 LOADS SAND	

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2011 PW-STREET MAINTENANCE	7720 STREET CONST & MAINT MTR	11/1/17	124524	TERRY JOHNSON TRUCKING, INC TERRY JOHNSON TRUCKING, INC	3,279.20	98107	40.61 TON COLDMIX	
Division Total 2011 PW-STREET MAINTENANCE					21,397.37			
2014 SPECIAL AVIATION	817655 HANGER TAXILANE REHAB 2-	11/1/17	124460	MEAD & HUNT INC MEAD & HUNT INC	63,646.58	273525	2017-09 PROF SVC	
	818655 HANGER TAXILANE REHAB 4	11/1/17	124460	MEAD & HUNT INC MEAD & HUNT INC	61,565.59	272374	2017-08	
	818655 HANGER TAXILANE REHAB 4	11/1/17	124460	MEAD & HUNT INC MEAD & HUNT INC	3,476.50	273339	2017-09	
	817655 HANGER TAXILANE REHAB 2-	11/1/17	124553	ZUMWALT HANSEN, INC ZUMWALT HANSEN, INC	1,364.94	12005	09/4-10/01/17 PROF SV	
Division Total 2014 SPECIAL AVIATION					130,053.61			
2020 AIRPORT-OPERATING	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	950.84		2017-09	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	28.74	10347757	2017-09	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	20.34	10347743	2017-09 582-0101	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	107.34	10347753	DSL 584-8994	
	7433 FUEL AND LUBE MAINTENANCE	11/1/17	124336	W BANKS MOORE, INC DBA BANKS & CO	100.00	79749	2017-10 UST INSPECT	
	7433 FUEL AND LUBE MAINTENANCE	11/1/17	124336	W BANKS MOORE, INC DBA BANKS & CO	40.00	79608 A	INCORRECT AMT PAID	
	7955 TAXES	11/1/17	124444	LAKESIDE IRRIGATION WATER DISTRICT LAKESIDE IRRIGATION WATER DISTRICT	652.40		STANDBY CHARGES	

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2020	7495	11/1/17	124456	MATSON ALARM COMPANY, INC	30.00	1656162	2017-11 AIRPORT	
AIRPORT-OPERATING	PROF AND SPEC SERVICES			MATSON ALARM COMPANY, INC				
Division Total 2020 AIRPORT-OPERATING					1,929.66			
2031	7412	10/13/17	124244	HOME DEPOT U S A INC DBA	205.22		BLANKET PURCHASE ORDER	
REFUSE	EQUIPMENT MAINTENANCE			HOME DEPOT STORES, THE				
	7550	10/13/17	124249	KINGS WASTE & RECYCLE AUTHORITY	205,188.49		2017-09 DISPOSAL FEES	
	OTHER CONTRACTUAL SERV			KINGS WASTE & RECYCLE AUTHORITY				
	7300	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC	364.10	5183682 9/1	2017-09 UNIFORMS	
	UNIFORM EXPENSE			ARAMARK UNIFORM SERVICES, INC				
	7495	11/1/17	124362	CENTRAL VALLEY COMPREHENSIVE CARE	89.00		J ANAYA	
	PROF AND SPEC SERVICES			CENTRAL VALLEY COMPREHENSIVE CARE				
	7495	11/1/17	124362	CENTRAL VALLEY COMPREHENSIVE CARE	89.00		R CARRILLO	
	PROF AND SPEC SERVICES			CENTRAL VALLEY COMPREHENSIVE CARE				
	7495	11/1/17	124362	CENTRAL VALLEY COMPREHENSIVE CARE	179.00		R LOYA, JR	
	PROF AND SPEC SERVICES			CENTRAL VALLEY COMPREHENSIVE CARE				
	7149	11/1/17	124422	I C M A RETIREMENT CORP #303617	125.00	40843	FY18 QTR2 PLAN FEE	
	OTHER PERSONNEL BENEFIT			I C M A RETIREMENT CORP				
	7300	11/1/17	124427	J H TACKETT INC DBA	334.34	1093	EMBROIDERY HATS	
	UNIFORM EXPENSE			J H TACKETT MARKETING				
	7300	11/1/17	124427	J H TACKETT INC DBA	26.81	1093	JACKET EMBLEM	
	UNIFORM EXPENSE			J H TACKETT MARKETING				
	7770	11/1/17	124455	GEOFFREY MARTINEZ	73.00		CLASS B DRIVERS LIC	
	TRAINING/TRAVEL/MEETING			MARTINEZ, GEOFFREY				
	7320	11/1/17	124520	U S TELEPACIFIC CORP DBA	37.76	96401893-0	2017-10	
	COMMUNICATIONS			T P X COMMUNICATIONS				
Division Total 2031 REFUSE					206,711.72			

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2032 REFUSE-STREET CLEANING	7300	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC	52.80	5183688 9/1	2017-09 UNIFORMS	
	UNIFORM EXPENSE			ARAMARK UNIFORM SERVICES, INC				
	7300	11/1/17	124427	J H TACKETT INC DBA	77.16	1093	EMBROIDERY HATS	
	UNIFORM EXPENSE			J H TACKETT MARKETING				
Division Total 2032 REFUSE-STREET CLEANING					129.96			
2040 FLEET MAINTENANCE	7495	10/13/17	124229	MC KEE ENTERPRISES, LLC DBA	35.00	60711	BLANKET PURCHASE ORDER	
	PROF AND SPEC SERVICES			BRAD'S HANFORD SMOG-N-TUNE				
	7495	10/13/17	124229	MC KEE ENTERPRISES, LLC DBA	35.00	60818	BLANKET PURCHASE ORDER	
	PROF AND SPEC SERVICES			BRAD'S HANFORD SMOG-N-TUNE				
	7433	10/13/17	124231	FLEETCOR TECHNOLOGIES INC DBA	350.62	51554834	2017-08 GAS CARD	
	FUEL AND LUBE MAINTENANCE			CHEVRON & TEXACO BUSINESS CARD SVC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	91.78	750020173	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	158.79	750020279	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	4,951.80	750020337	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	1,325.74	750020343	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	681.02	750020357	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	1,060.56	750020471	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	1,907.30	750020472	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	1,495.30	750020672	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				
	7434	10/13/17	124236	DELRAY TIRE & RETREADING, INC	331.42	750020707	BLANKET PURCHASE ORDER	
	TIRES AND TUBES			DELRAY TIRE & RETREADING, INC				

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2040 FLEET MAINTENANCE	7433 FUEL AND LUBE MAINTENANCE	10/13/17	124238	ELBERT DISTRIBUTING, INC ELBERT DISTRIBUTING, INC	283.08	PI0002535	BLANKET PURCHASE ORDER	
	7433 FUEL AND LUBE MAINTENANCE	10/13/17	124238	ELBERT DISTRIBUTING, INC ELBERT DISTRIBUTING, INC	791.66	PI0002915	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124238	ELBERT DISTRIBUTING, INC ELBERT DISTRIBUTING, INC	70.01	PI0002515	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124238	ELBERT DISTRIBUTING, INC ELBERT DISTRIBUTING, INC	109.35	PI0002880	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124238	ELBERT DISTRIBUTING, INC ELBERT DISTRIBUTING, INC	130.24	PI0002916	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124241	HANFORD ALIGNMENT SERVICE HANFORD ALIGNMENT SERVICE	79.00	52413	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124241	HANFORD ALIGNMENT SERVICE HANFORD ALIGNMENT SERVICE	79.00	52431	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124241	HANFORD ALIGNMENT SERVICE HANFORD ALIGNMENT SERVICE	147.00	52443	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124241	HANFORD ALIGNMENT SERVICE HANFORD ALIGNMENT SERVICE	37.15	52443	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124242	HANFORD MOTORS, LLC DBA HANFORD CHRYSLER DODGE JEEP RAM	120.00	102493	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124242	HANFORD MOTORS, LLC DBA HANFORD CHRYSLER DODGE JEEP RAM	87.53	78292	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124242	HANFORD MOTORS, LLC DBA HANFORD CHRYSLER DODGE JEEP RAM	213.13	78293	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EXPENSE	10/13/17	124242	HANFORD MOTORS, LLC DBA HANFORD CHRYSLER DODGE JEEP RAM	62.33	78294	BLANKET PURCHASE ORDER	
	7433 FUEL AND LUBE MAINTENANCE	10/13/17	124245	INTER STATE OIL COMPANY INTER STATE OIL COMPANY	503.80	0621467-IN	FUEL-BLANKET PO	
	7433 FUEL AND LUBE MAINTENANCE	10/13/17	124246	J C LANSDOWNE DIST INC J C LANSDOWNE DIST INC	4,276.54	252393	BLANKET PURCHASE ORDER	

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2040	7433	10/13/17	124246	J C LANSDOWNE DIST INC	429.00	262746	BLANKET PURCHASE ORDER	
FLEET MAINTENANCE	FUEL AND LUBE MAINTENANCE			J C LANSDOWNE DIST INC				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	25.58	D205029	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	303.36	D205088	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	8.53	D205125	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	102.71	D205146	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	2.51	D205153	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	85.26	D205162	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	80.62	D205175	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	303.36	D205275	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	260.78	D205291	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	825.87	D205326	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	5.77	D205327	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	564.14	D205328	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	149.71	D205882	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				
	7600	10/13/17	124247	JEFF'S AUTO SUPPLY	4.57	D205906	BLANKET PURCHASE ORDER	
	SPECIAL DEPARTMENTAL EXPENSE			JEFF'S AUTO SUPPLY				

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2040 FLEET MAINTENANCE	7495 PROF AND SPEC SERVICES	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	207.00	634862	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	33.38	50098596	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	2.25	50099035	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	57.81	50099045	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	6.52	50099076	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	92.32	50099150	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124248	J V A C INC DBA KELLER FORD LINCOLN	88.55	50099177	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124250	THE LAWNMOWER MAN LAWNMOWER MAN, THE	94.16	4721430	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124251	LAWRENCE TRACTOR CO LAWRENCE TRACTOR CO	206.00	248203	MOTOR DERATE/CLEAN	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124251	LAWRENCE TRACTOR CO LAWRENCE TRACTOR CO	279.70	243963	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124251	LAWRENCE TRACTOR CO LAWRENCE TRACTOR CO	72.85	244305	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124251	LAWRENCE TRACTOR CO LAWRENCE TRACTOR CO	129.56	247696	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124260	RUCKSTELL CALIF SALES CO RUCKSTELL CALIF SALES CO	90.00	600254	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO RUCKSTELL CALIF SALES CO	301.90	600264	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO RUCKSTELL CALIF SALES CO	757.25	702488	BLANKET PURCHASE ORDER	

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2040 FLEET MAINTENANCE	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO	1,508.45	702541	BLANKET PURCHASE ORDER	
				RUCKSTELL CALIF SALES CO				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO	722.22	702542	BLANKET PURCHASE ORDER	
				RUCKSTELL CALIF SALES CO				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO	907.18	702575	BLANKET PURCHASE ORDER	
				RUCKSTELL CALIF SALES CO				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124260	RUCKSTELL CALIF SALES CO	712.75	702629	BLANKET PURCHASE ORDER	
				RUCKSTELL CALIF SALES CO				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	(64.35)	01CR029233	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	(171.60)	01CR031082	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	(476.27)	01CR031204	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	(65.10)	01CR031277	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	269.22	01IM208242	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	121.25	01IN204654	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	538.44	01IN208088	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	121.25	01IN208187	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	42.90	01IN210573	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	65.10	01IN210671	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124263	SMITH AUTO PARTS, INC	1,204.99	01IN210931	BLANKET PURCHASE ORDER	
				SMITH AUTO PARTS, INC				

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2040 FLEET MAINTENANCE	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124267	TURF STAR INC TURF STAR INC	75.46	6986612-01	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124267	TURF STAR INC TURF STAR INC	75.07	6986612-03	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124267	TURF STAR INC TURF STAR INC	360.88	6987856-00	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124267	TURF STAR INC TURF STAR INC	1,512.64	6987856-01	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124267	TURF STAR INC TURF STAR INC	1,707.46	6991593-00	BLANKET PURCHASE ORDER	
	7433 FUEL AND LUBE MAINTENANC	10/18/17	124286	BUFORD OIL COMPANY INC BUFORD OIL COMPANY INC	18,426.13	59555	FUEL BLANKET PO	
	7433 FUEL AND LUBE MAINTENANC	10/18/17	124291	INTER STATE OIL COMPANY INTER STATE OIL COMPANY	36.53	0621467-INA	FUEL-UNDR PD CK124245	
	7433 FUEL AND LUBE MAINTENANC	10/18/17	124293	SILVAS OIL CO INC SILVAS OIL CO INC	18,971.73	840629	FUEL BLANKET PO	
	7433 FUEL AND LUBE MAINTENANC	10/24/17	124300	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	1,114.06	2117 10/17	TANK FEE 7-9/17	
	7495 PROF AND SPEC SERVICES	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	1,088.60	1469428	LABOR/BCKHOE ARM #177	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	80.74	1469017	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	400.17	1471204	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	91.97	1472878	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	23.84	1469428	PARTS/BCKHOE ARM #177	
	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	266.40		2017-10	

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2040	7495	11/1/17	124326	A & E WELDING & MACHINE, INC	4,303.50	3389	REAR LOADER DOOR#147	
FLEET MAINTENANCE	PROF AND SPEC SERVICES			A & E WELDING & MACHINE, INC				
	7300	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC	151.32	5183696 9/1	2017-09 UNIFORMS	
	UNIFORM EXPENSE			ARAMARK UNIFORM SERVICES, INC				
	7495	11/1/17	124336	W BANKS MOORE, INC DBA	100.00	79748	2017-10 UST INSPECT	
	PROF AND SPEC SERVICES			BANKS & CO				
	7495	11/1/17	124340	BOBCAT OF FRESNO	1,711.50	S28616	LABOR A/C LOADER #188	
	PROF AND SPEC SERVICES			BOBCAT OF FRESNO				
	7600	11/1/17	124340	BOBCAT OF FRESNO	4,337.94	S28616	PARTS A/C LOADER #188	
	SPECIAL DEPARTMENTAL EX			BOBCAT OF FRESNO				
	7440	11/1/17	124346	C D W GOVERNMENT LLC	235.95	KLG9969	HEADSET - SENNHEISER SD P	
	OFFICE EXPENSE			C D W GOVERNMENT LLC				
	7433	11/1/17	124352	CALIF DEPT OF TOXIC SUBSTANCES CTRL	225.00	201714054	2017 EPA MANIFEST FEE	
	FUEL AND LUBE MAINTENANC			CALIF DEPT OF TOXIC SUBSTANCES CTRL				
	7600	11/1/17	124355	CALIFORNIA INDUSTRIAL RUBBER	105.87	T-090554	BELTING/REFUSE #158	
	SPECIAL DEPARTMENTAL EX			CALIF INDUSTRIAL RUBBER				
	7600	11/1/17	124357	CALIF TURF EQUIPMENT & SUPPLY INC	201.88	350568	WHEEL BEARINGS #207	
	SPECIAL DEPARTMENTAL EX			CALIF TURF EQUIPMENT & SUPPLY INC				
	7495	11/1/17	124373	CUMMINS PACIFIC LLC	355.27	022-92961	INSPECT/QUOTE #263	
	PROF AND SPEC SERVICES			CUMMINS PACIFIC LLC				
	7495	11/1/17	124397	ERIC DODD DBA	750.00	2718	LABOR-DATA LINE	
	PROF AND SPEC SERVICES			GILBERT ELECTRIC CO				
	7600	11/1/17	124397	ERIC DODD DBA	217.18	2718	PARTS-DATA LINE	
	SPECIAL DEPARTMENTAL EX			GILBERT ELECTRIC CO				
	7300	11/1/17	124427	J H TACKETT INC DBA	154.31	1093	EMBROIDERY HATS	
	UNIFORM EXPENSE			J H TACKETT MARKETING				
	7495	11/1/17	124500	SEQUOIA EQUIP CO INC	168.75	1118277	LABOR/BACKHOE #177	
	PROF AND SPEC SERVICES			SEQUOIA EQUIP CO INC				
	7600	11/1/17	124500	SEQUOIA EQUIP CO INC	57.57	1118277	PARTS/BACKHOE #177	
	SPECIAL DEPARTMENTAL EX			SEQUOIA EQUIP CO INC				

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2040 FLEET MAINTENANCE	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124504	SHIELDS HARPER & CO, INC SHIELDS HARPER & CO, INC	1,474.89	3056109	FUEL NOZZLES	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	96.89		2017-10 1130155600	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	18.88	96401893-0	2017-10	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124534	UNITED TRANSMISSION EXCHANGE UNITED TRANSMISSION EXCHANGE	965.00	0123271	TRANS ECM	
	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124534	UNITED TRANSMISSION EXCHANGE UNITED TRANSMISSION EXCHANGE	5,721.64	0123138	UTE REMAN TRANS	
	7495 PROF AND SPEC SERVICES	11/1/17	124548	WORLD OIL ENVIRONMENTAL SERVICES WORLD OIL ENVIORNMENTAL SERVICES	120.00	1500002501	USED OIL MIXED 70 GAL	
Division Total 2040 FLEET MAINTENANCE					96,126.62			
2061 STORM DRAINAGE-OPERATING	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	20.34	10347754	2017-09 584-9430	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	99.55	5183710 9/1	2017-09 UNIFORMS	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	102.87	1093	EMBROIDERY HATS	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	14.10		.25 MI CANAL 30'	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	88.54		1.50 MI CANAL 30'	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	181.44		ROW/FURLONG CR	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	181.44		ROW/FURLONG DR	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124553	ZUMWALT HANSEN, INC ZUMWALT HANSEN, INC	626.45	12004	LOC PROP/CONER FROBE	

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Division Total 2061 STORM DRAINAGE-OPERATING 1,314.73								
2071 WASTEWATER TREATMENT PLNT	7650 CHEMICALS	10/13/17	124227	AQUA BEN CORP AQUA BEN CORP	6,364.22	36436	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124239	FRUIT GROWERS LABORATORY, INC DBA F G L ENVIRONMENTAL	80.00	743591A	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124239	FRUIT GROWERS LABORATORY, INC DBA F G L ENVIRONMENTAL	508.00	744092A	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124239	FRUIT GROWERS LABORATORY, INC DBA F G L ENVIRONMENTAL	124.00	744313A	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124239	FRUIT GROWERS LABORATORY, INC DBA F G L ENVIRONMENTAL	153.00	744316A	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/13/17	124239	FRUIT GROWERS LABORATORY, INC DBA F G L ENVIRONMENTAL	124.00	744803A	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124244	HOME DEPOT U S A INC DBA HOME DEPOT STORES, THE	1,124.07		BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124246	J C LANSLOWNE DIST INC J C LANSLOWNE DIST INC	983.72	262392	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S LOWE'S	466.60		BLANKET PURCHASE ORDER	
	7412 EQUIPMENT MAINTENANCE	10/13/17	124255	CONSOLIDATED ELEC DIST, INC DBA MEDALLION SUPPLY	171.29	9130-799208	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601466101	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601480771	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601495365	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601509981	BLANKET PURCHASE ORDER	
	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601509981	BLANKET PURCHASE ORDER	

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
2071 WASTEWATER TREATMENT PLNT	7495 PROF AND SPEC SERVICES	10/24/17	124297	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	107.25	601524627	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	113.18	1471860	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	10.12	1472531	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	38.12	1474053	BLANKET PURCHASE ORDER	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	95.96	10347752	2017-09 584-8633	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	313.56	5183840 9/1	2017-09 UNIFORMS	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124335	B R B FABRICATION B R B FABRICATION	4,200.00	69	ROOF -WALKWAY BTW AD BLDG	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124338	JOE BETTENCOURT BETTENCOURT, JOE	33.96		MEAL/TRAINING	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124371	CRAIN'S, INC CRAIN'S, INC	462.09	54026	A/C REPAIR WWTP	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124386	JACQUELINE ESTRADA ESTRADA, JACQUELINE CAIN, JACQUELI	103.50	TR ESTRAD	ADV/PLSNTON/11/01-02	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124391	FRESNO PIPE & SUPPLY INC FRESNO PIPE & SUPPLY INC	749.68	60654	BONNET, 6" DEZURITE	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124391	FRESNO PIPE & SUPPLY INC FRESNO PIPE & SUPPLY INC	88.48	60654	ESTIMATED SHIPPING/HANDLI	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124391	FRESNO PIPE & SUPPLY INC FRESNO PIPE & SUPPLY INC	5.36	60654	FUEL SURCHARGE	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124391	FRESNO PIPE & SUPPLY INC FRESNO PIPE & SUPPLY INC	163.02	60654	NUT ADPTR, 2"	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124391	FRESNO PIPE & SUPPLY INC FRESNO PIPE & SUPPLY INC	1,222.65	60654	PLUG, 6" DEZURITE	

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2071 WASTEWATER TREATMENT PLNT	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	192.89	1093	EMBROIDERY HATS	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	949.42		1.5MI CANAL ON NS	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	273.12		CANAL 1/2MI W	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	524.22		CANAL 17/20/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	376.26		CANAL C/L E1/2	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	691.32		CANAL IN S1/2	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	211.14		CANAL SANTA PAULA	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	6,114.70		E1/2 SEC29/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	1,620.20		NE1/4 OF NW1/4	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	3,883.92		NE1/4 SEC20/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	3,641.50		NW1/4 SEC21/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	1,620.20		S1/2 OF SE1/4	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	4,009.20		SE1/4 SEC17/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	3,078.28		SE1/4 SEC20/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	5,401.66		SEC 28/20/21	

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2071 WASTEWATER TREATMENT PLNT	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	4,079.96		SW1/4 SEC16/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	3,142.04		SW1/4 SEC21/20/21	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	258.92		WATER WELL SITE	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	672.88		WELL HALL #1	
	7955 TAXES	11/1/17	124440	KINGS CO TAX COLLECTOR KINGS CO TAX COLLECTOR	807.48		WELL SANTA PAULA #1	
	7495 PROF AND SPEC SERVICES	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	24.50	1656162	2017-11 WWTP	
	7550-001 OTHER CONTR-SOLAR SYSTEM	11/1/17	124472	OPTERRA ENERGY SERVICES INC OPTERRA ENERGY SERVICES INC	18,425.00	2615	M & V FEES SOLAR YR5	
	7550-001 OTHER CONTR-SOLAR SYSTEM	11/1/17	124472	OPTERRA ENERGY SERVICES INC OPTERRA ENERGY SERVICES INC	15,386.00	2616	O & M FEES SOLAR YR5	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	906.16		2017-10 0732175100	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	84.96	96401893-0	2017-10	
	7770 TRAINING/TRAVEL/MEETING	11/1/17	124547	COLE WOODS WOODS, COLE	232.19	EXP 10/1-4	EXP/VACAVILLE/10/1-4	
Division Total 2071 WASTEWATER TREATMENT PLNT 94,842.95								
2072 SANITARY SEWER COLLECTION	7412 EQUIPMENT MAINTENANCE	10/13/17	124255	CONSOLIDATED ELEC DIST, INC DBA MEDALLION SUPPLY	282.90	9130-799209	BLANKET PURCHASE ORDER	
	7780 UTILITIES-ELECTRICITY	10/18/17	124292	P G & E P G & E	270.36		2017-09 5401477022-3	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	53.42		2017-09	

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2072 SANITARY SEWER COLLECTION	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	2,288.94		2017-09	
	7780 UTILITIES-ELECTRICITY	10/31/17	124325	P G & E P G & E	238.49		2017-09 6359810294-3	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	127.06	5183830 9/1	2017-09 UNIFORMS	
	7320 COMMUNICATIONS	11/1/17	124367	COMCAST CABLE COMMUNICATIONS, INC COMCAST CABLE COMMUNICATIONS, INC	52.97	043976310/1	8155500390439763 SCADA	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	102.87	1093	EMBROIDERY HATS	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	18.88	96401893-0	2017-10	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124523	TELSTAR INSTRUMENTS, INC TELSTAR INSTRUMENTS, INC	17,988.07	91395	PUMP/GUIDE RAILS RPLC	
	7495 PROF AND SPEC SERVICES	11/1/17	124523	TELSTAR INSTRUMENTS, INC TELSTAR INSTRUMENTS, INC	1,283.00	91088	SCADA PH SUPP/RENEW FY17-1	
Division Total 2072 SANITARY SEWER COLLECTION 22,706.96								
2081 WATER-OPERATIONS	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124244	HOME DEPOT U S A INC DBA HOME DEPOT STORES, THE	65.78		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S LOWE'S	80.99		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124257	LOWE'S HOME CENTERS INC ORCHARD SUPPLY COMPANY LLC	10.17		ZIP LOCK BAGS - GALLON SI	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124266	TRIPLE J CONCRETE TRIPLE J CONCRETE	76.58	11121	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124268	UNIVAR UNIVAR	295.87	F087463	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124268	UNIVAR UNIVAR	532.57	F0877464	BLANKET PURCHASE ORDER	

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2081 WATER-OPERATIONS	7650 CHEMICALS	10/13/17	124268	UNIVAR UNIVAR	236.70	F0877465	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124268	UNIVAR UNIVAR	340.25	F0877466	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124268	UNIVAR UNIVAR	576.95	F0877467	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	10/13/17	124270	MICHAEL MARIS DBA VASCO, THE POOL PEOPLE	18.28	13724	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	28.93	1471980	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/24/17	124305	MORGAN & SLATES MORGAN & SLATES	85.75	1474611	BLANKET PURCHASE ORDER	
	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	80,497.34		2017-09	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	19.38	10347750	2017-09 584-0137	
	7560 ADVERTISING & PUBLIC REL	11/1/17	124330	ALL VALLEY PRINTING ALL VALLEY PRINTING	48.26	170683	SET UP FEE	
	7560 ADVERTISING & PUBLIC REL	11/1/17	124330	ALL VALLEY PRINTING ALL VALLEY PRINTING	712.36	170683	WTR NOTICE VIOLATIONS	
	7450 PUBLICATIONS AND DUES	11/1/17	124332	AMERICAN WATER WORKS ASSN AMERICAN WATER WORKS ASSN	3,791.00	7001429100	2018 ORGANIZATION DUE	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	281.05	5183717 9/1	2017-09 UNIFORMS	
	7320 COMMUNICATIONS	11/1/17	124367	COMCAST CABLE COMMUNICATIONS, INC COMCAST CABLE COMMUNICATIONS, INC	52.96	043976310/1	8155500390439763 SCADA	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	257.19	1093	EMBROIDERY HATS	
	7412 EQUIPMENT MAINTENANCE	11/1/17	124481	DE VAULT ELECTRIC PRODUCTS INC DBA POWERS ELECTRIC PRODUCTS CO	112.61	69380	2/C STD ELECTRODE	

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2081 WATER-OPERATIONS	7560 ADVERTISING & PUBLIC REL	11/1/17	124482	REBECCA KOZLOWSKI DBA PRESORT CENTER OF FRESNO, LLC	6,877.73	410037259 A	CONSUM CONF RPT BAL	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	37.76	96401893-0	2017-10	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	295.87	F0877741	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	384.64	F0877742	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	473.40	F0877743	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	547.36	F0877744	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	355.05	F0877745	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	251.49	F0877900	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	517.79	F0877901	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	325.46	F0877902	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	133.14	F0877903	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	221.90	F0877904	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	443.81	F0878082	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	414.22	F0878083	BLANKET PURCHASE ORDER	
	7650 CHEMICALS	11/1/17	124535	UNIVAR	310.67	F0878084	BLANKET PURCHASE ORDER	
				UNIVAR				
				UNIVAR				
				UNIVAR				
				UNIVAR				
				UNIVAR				
				UNIVAR				

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2081 WATER-OPERATIONS	7650 CHEMICALS	11/1/17	124535	UNIVAR	414.22	F0878085	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	325.46	F0878086	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	517.79	F0878201	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	310.67	F0878202	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	576.95	F0878203	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	547.36	F0878204	BLANKET PURCHASE ORDER	
				UNIVAR				
	7650 CHEMICALS	11/1/17	124535	UNIVAR	340.25	F0878206	BLANKET PURCHASE ORDER	
				UNIVAR				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	169.05	0037881-IN	ESTIMATED SHIPPING/HANDLI	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	154.20	0037963-IN	ESTIMATED SHIPPING/HANDLI	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	169.18	0038020-IN	ESTIMATED SHIPPING/HANDLI	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	4,056.73	0038020-IN	METER ETR OUTPUT 3" BRONZ	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	3,019.08	0038020-IN	METER ETR OUTPUT 4" BRONZ	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	4,478.96	0038020-IN	METER ETR OUTPUT 6" BRONZ	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	4,179.43	0037881-IN	WATER METER 1-1/2" POSITI	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	10,493.16	0037999-IN	WATER METERS 2" COMPOUND	
				ZENNER PERFORMANCE METERS INC				

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2081 WATER-OPERATIONS	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	7,743.45	0037963-IN	WATER METERS 2" POSITIVE	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	11,427.06	0037881-IN	WATER METERS 2" TURBINE (	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	7,934.01	0037999-IN	WATER METERS 3" COMPOUND	
				ZENNER PERFORMANCE METERS INC				
	7990 MATERIALS/SUPP'S/INVENTR	11/1/17	124552	ZENNER PERFORMANCE METERS INC	962.16	0037963-IN	WATER METERS 3/4" POSITIV	
				ZENNER PERFORMANCE METERS INC				
	818011 3-FIRE HYDRANT MTR 3"	11/1/17	124552	ZENNER PERFORMANCE METERS INC	889.10	0037885-IN	REGISER CHANGE OUTS	
				ZENNER PERFORMANCE METERS INC				
	818011 3-FIRE HYDRANT MTR 3"	11/1/17	124552	ZENNER PERFORMANCE METERS INC	1,332.00	0037911-IN	REGISER CHANGE OUTS	
				ZENNER PERFORMANCE METERS INC				
Division Total 2081 WATER-OPERATIONS					159,751.53			
2091 INTERMODAL-OPERATING	7550 OTHER CONTRACTUAL SERV	11/1/17	124328	A T & T	36.87	10347749	2017-9 583-9688 AMTK	
				A T & T (13982)				
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC	45.00	0106699810	2017-10 AMTRAK	
				CLARK PEST CONTROL, INC				
	7550 OTHER CONTRACTUAL SERV	11/1/17	124397	ERIC DODD DBA	965.11	2716	AMTRAK/RESTRM LIGHT	
				GILBERT ELECTRIC CO				
	7550 OTHER CONTRACTUAL SERV	11/1/17	124408	BERNADETTE A OLIVEIRA DBA	340.00		2017-10 AMTRAK STN	
				HANFORD JANITORIAL SERVICE				
	7550 OTHER CONTRACTUAL SERV	11/1/17	124433	JORGENSEN CO INC	575.00	5693480	SPRINKLER INSPECT-5YR - T	
				JORGENSEN CO INC				
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC	49.00	1656162	2017-11 AMTRAK	
				MATSON ALARM COMPANY, INC				
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO	269.50		2017-10	
				SOUTHERN CALIF EDISON CO				
Division Total 2091 INTERMODAL-OPERATING					2,280.48			

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2100 BUILDING MAINTENANCE	7550 OTHER CONTRACTUAL SERV	10/13/17	124228	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	89.30	601487127	BLANKET PURCHASE ORDER	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124228	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	77.31	601501769	BLANKET PURCHASE ORDER	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124228	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	89.30	601516404	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124240	SHERWIN WILLIAMS COMPANY DBA FRAZEE INDUSTRIES	4.28	16942	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124240	SHERWIN WILLIAMS COMPANY DBA FRAZEE INDUSTRIES	25.74	21124	BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124244	HOME DEPOT U S A INC DBA HOME DEPOT STORES, THE	98.40		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S LOWE'S	349.76		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124257	LOWE'S HOME CENTERS INC ORCHARD SUPPLY COMPANY LLC	18.32		BLANKET PURCHASE ORDER	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124269	GEIL ENTERPRISES, INC DBA VALLEY SECURITY & ALARM	180.00	331372	2017/10-12 ALARM MNTR	
	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	7,252.91		2017-10	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	36.87	10347748	2017-9 583-8452 CPYD	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	38.77	10350774	2017-9 583-8911 CTYHL	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	38.82	10347756	2017-9 585-0706 VETEL	
	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	38.77	10347761	2017-9 589-6436 CITHL	
	7300 UNIFORM EXPENSE	11/1/17	124333	ARAMARK UNIFORM SERVICES, INC ARAMARK UNIFORM SERVICES, INC	154.75	5183817 9/1	2017-09 UNIFORMS	

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2100 BUILDING MAINTENANCE	7600 SPECIAL DEPARTMENTAL EX	11/1/17	124339	BIRD-B-GONE, INC BIRD-B-GONE, INC	44.83	194994	CABLE CLIPS	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124348	CALIFORNIA BOILER INC CALIF BOILER INC	506.40	130556	BOILER TUNING PROCEDURE	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	56.00	0079019010	2017-10 CITY OFC	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	40.00	0002405710	2017-10 CIVIC AUD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	50.00	0097036610	2017-10 COE PARK	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	45.00	0106699710	2017-10 CORP YARD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	49.00	0095060910	2017-10 LONGFIELD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	40.00	0087821610	2017-10 POLICE	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	40.00	0090125510	2017-10 VETS	
	7300 UNIFORM EXPENSE	11/1/17	124427	J H TACKETT INC DBA J H TACKETT MARKETING	77.16	1093	EMBROIDERY HATS	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	110.50	1656162	2017-11 CITY OFFICES	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	71.00	1656162	2017-11 CIVIC AUD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	24.50	1656162	2017-11 CORP YD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	24.50	1656162	2017-11 LONGFIELD	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	48.00	1656162	2017-11 PD EVIDENCE	

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2100 BUILDING MAINTENANCE	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	30.00	1656162	2017-11 PD INVEST	
	7550 OTHER CONTRACTUAL SERV	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	34.50	1656162	2017-11 VETS/SR CTR	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	39.73		2017-10 0961156800	
	7320 COMMUNICATIONS	11/1/17	124520	U S TELEPACIFIC CORP DBA T P X COMMUNICATIONS	28.32	96401893-0	2017-10	
Division Total 2100 BUILDING MAINTENANCE					9,852.74			
2104 ACCUM CAPITAL OUTLAY	817606 LONGFIELD RE-ROOF/COOLE	11/1/17	124397	ERIC DODD DBA GILBERT ELECTRIC CO	2,896.04	2719	LONGFIELD COOLERS	
	818602 ENERGY CONSERVTN PROJ/R	11/1/17	124397	ERIC DODD DBA GILBERT ELECTRIC CO	1,716.94	2720	LNGFLD FLOOD LIGHTS	
	813602 GENERAL/MASTR PLAN UPDA	11/1/17	124483	QUAD KNOFF, INC QUAD KNOFF, INC	7,677.10	89282	2017-07 PROF SVC	
	814644 SIXTH/DOUTY PKNG LOT REM	11/1/17	124490	RICHARD K GONZALES DBA RICHARD'S TREE SERVICE	800.00	1318	TREE REMOVAL	
	818648 DOWNTOWN 2010 PLAN	11/1/17	124518	PATRICK ENTERPRISES, INC DBA SUPERIOR SOIL SUPPLEMENTS	1,930.50	17-75242	ORCHARD BARK 100 YDS	
Division Total 2104 ACCUM CAPITAL OUTLAY					15,020.58			
2131 COURTHOUSE SQUARE-OPERTNG	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124254	LOWE'S LOWE'S	71.27		BLANKET PURCHASE ORDER	
	7600 SPECIAL DEPARTMENTAL EX	10/13/17	124257	LOWE'S HOME CENTERS INC ORCHARD SUPPLY COMPANY LLC	61.12		BLANKET PURCHASE ORDER	
	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	1,620.49		2017-10	

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2131 COURTHOUSE SQUARE-OPERTNG	7320 COMMUNICATIONS	11/1/17	124328	A T & T A T & T (13982)	21.53	10347751	2017-09 584-8145 CHEL	
	7495 PROF AND SPEC SERVICES	11/1/17	124365	CLARK PEST CONTROL, INC CLARK PEST CONTROL, INC	60.00	0100629810	2017-10 COURTHOUSE	
	7495 PROF AND SPEC SERVICES	11/1/17	124397	ERIC DODD DBA GILBERT ELECTRIC CO	617.28	2722	INSTLL CIRCUIT #205	
	7495 PROF AND SPEC SERVICES	11/1/17	124408	BERNADETTE A OLIVEIRA DBA HANFORD JANITORIAL SERVICE	400.00		2017-10 CRTHS	
	7495 PROF AND SPEC SERVICES	11/1/17	124456	MATSON ALARM COMPANY, INC MATSON ALARM COMPANY, INC	178.00	1656162	2017-11 CRTHS	
	7495 PROF AND SPEC SERVICES	11/1/17	124499	SCHINDLER ELEVATOR CORP SCHINDLER ELEVATOR CORP	1,181.88	7100349243	ELEVATOR PHONE REPAIR	
	7785 UTILITIES-GAS	11/1/17	124513	SOUTHERN CALIF GAS CO SOUTHERN CALIF GAS CO	33.38		2017-10 0919156843	
Division Total 2131 COURTHOUSE SQUARE-OPERTNG 4,244.95								
2180 PARKS FACILITY IMPACT FEE	817616 ROTARY FIELD LIGHTING	11/1/17	124468	MUSCO SPORTS LIGHTING, LLC MUSCO SPORTS LIGHTING, LLC	321,721.04	301755	LIGHT-STRUCTURE GREEN	
	817616 ROTARY FIELD LIGHTING	11/1/17	124553	ZUMWALT HANSEN, INC ZUMWALT HANSEN, INC	1,731.35	12003	9/20-10/01/17 PROF SV	
Division Total 2180 PARKS FACILITY IMPACT FEE 323,452.39								
2181 TRANSPORTN FACLT IMP FEE	815627 TRAF SIG/GRGVL & 13TH AV	11/1/17	124465	MOORE TWINING ASSOCIATES, INC MOORE TWINING ASSOCIATES, INC	1,600.00	0051565	2017-08 PROF SVC	
	815627 TRAF SIG/GRGVL & 13TH AV	11/1/17	124521	T R C ENGINEERS, INC T R C ENGINEERS, INC	2,700.00	19195	2017-08 PROF SVC	
	815665 LCY REALIGN-SH43/SIERRA	11/1/17	124546	WILLIAMS SCOTSMAN, INC WILLIAMS SCOTSMAN, INC	2,842.57	99795065	PORTABLE BLDG/HELENA- INS	

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Division Total 2181 TRANSPORTN FACLT Y IMP FEE 7,142.57								
2183 POLICE PROTECTION IMP FEE	815606 POL STA DESIGN/PROP ACQ	11/1/17	124445	LANE ENGINEERS, INC LANE ENGINEERS, INC	591.50	41590	2017-09 PROF SVC	
	815606 POL STA DESIGN/PROP ACQ	11/1/17	124532	UNITED PARCEL SERVICE UNITED PARCEL SERVICE	26.85	F7476V397	PLNS/BLDR EXCH-SIMILE	
Division Total 2183 POLICE PROTECTION IMP FEE 618.35								
2185 WATER SYSTEM IMPACT FEE	815642 WATER DIST MAIN EXT PGM	10/13/17	124243	HAYDON CONSTRUCTION, INC HAYDON CONSTRUCTION, INC	30,177.37		5% RETAINAGE	
Division Total 2185 WATER SYSTEM IMPACT FEE 30,177.37								
240 LAD 90-1 T606 PINECASTLE	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	1,027.42	996	2017-09	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	95.46		2017-10	
Division Total 240 LAD 90-1 T606 PINECASTLE 1,122.88								
241 LAD 90-2 T610 PARK MONTRY	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	89.20	997	2017-09	
Division Total 241 LAD 90-2 T610 PARK MONTRY 89.20								
242 LAD 90-3 T595 MANS #7 & 8	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	93.26	997	2017-09	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	24.62		2017-10	
Division Total 242 LAD 90-3 T595 MANS #7 & 8 117.88								

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243	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	19.80	999	2017-09	
LAD 90-4 T619 HYDE PARK	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 243 LAD 90-4 T619 HYDE PARK					19.80			
244	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	105.84	999	2017-09	
LAD 91-1 T641 SIERA VISTA	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 244 LAD 91-1 T641 SIERA VISTA					105.84			
245	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	152.21	996	2017-09	
LAD 92-1 PORTOFINO 1 & 2	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7780	11/1/17	124512	SOUTHERN CALIF EDISON CO	23.11		2017-10	
	UTILITIES-ELECTRICITY			SOUTHERN CALIF EDISON CO				
Division Total 245 LAD 92-1 PORTOFINO 1 & 2					175.32			
246	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	78.36	998	2017-09	
LAD 92-2 CIELO EN TIERRA	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 246 LAD 92-2 CIELO EN TIERRA					78.36			
247	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	128.73	998	2017-09	
LAD 93-1 T634 VINTAGE EST	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7780	11/1/17	124512	SOUTHERN CALIF EDISON CO	23.07		2017-10	
	UTILITIES-ELECTRICITY			SOUTHERN CALIF EDISON CO				
Division Total 247 LAD 93-1 T634 VINTAGE EST					151.80			
248	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	191.36	999	2017-09	
LAD 93-2 T673 WALNUT FRST	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	44.13	999	2017-09	
	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				

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Division Total 248 LAD 93-2 T673 WALNUT FRST					235.49			
249 LAD 94-1 T712 GATEWAY EST	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	91.80	996	2017-09	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	45.56	996	2017-09 BASIN	
	7780 UTILITIES-ELECTRICITY	10/24/17	124308	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	46.38		2017-10	
Division Total 249 LAD 94-1 T712 GATEWAY EST					183.74			
250 LAD 94-2 T708 STONECREST	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	925.44	997	2017-09 FRNTAGE	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	472.73	997	2017-09 PRK FRNTAGE	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	466.46	997	2017-09 RR FRNTAGE	
Division Total 250 LAD 94-2 T708 STONECREST					1,864.63			
251 LAD 94-3 T696 QUAIL RUN	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	209.55	997	2017-09	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	826.98	997	2017-09 INTERIOR PARK	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	26.29		2017-10	
Division Total 251 LAD 94-3 T696 QUAIL RUN					1,062.82			
252 LAD 97-1 T711 ROSEWOOD	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	49.91	999	2017-09	

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252 LAD 97-1 T711 ROSEWOOD	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	23.09		2017-10	
Division Total 252 LAD 97-1 T711 ROSEWOOD					73.00			
253 LAD 97-2 T742 SUMMERFLD	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	39.49	996	2017-09	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	18.10		2017-09	
Division Total 253 LAD 97-2 T742 SUMMERFLD					57.59			
254 LAD 97-3 T743 COUNTRY CR	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	602.65	999	2017-09	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	66.50		2017-09	
Division Total 254 LAD 97-3 T743 COUNTRY CR					669.15			
255 LAD 98-1 T747 CRYSTL SPR	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	215.58	996	2017-09	
	7780 UTILITIES-ELECTRICITY	11/1/17	124512	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	23.21		2017-10	
Division Total 255 LAD 98-1 T747 CRYSTL SPR					238.79			
256 LAD 98-2 T759 MT VW #1	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	428.77	999	2017-09	
Division Total 256 LAD 98-2 T759 MT VW #1					428.77			
257 LAD 01-1 T680 PAC GR #1	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	102.09	998	2017-09	

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257	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	44.23	998	2017-09 BASIN	
LAD 01-1 T680 PAC GR #1	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 257 LAD 01-1 T680 PAC GR #1					146.32			
258	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	110.57	997	2017-09	
LAD 01-2 T770 CAMBRIA #1	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	205.61	997	2017-09 RR FRNTAGE	
	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7600	11/1/17	124490	RICHARD K GONZALES DBA	2,000.00	1317	REMOVE DEAD TREES	
	SPECIAL DEPARTMENTAL EX			RICHARD'S TREE SERVICE				
Division Total 258 LAD 01-2 T770 CAMBRIA #1					2,316.18			
259	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	97.87	997	2017-09	
LAD 01-3 T771 POPPY HILL	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7780	11/1/17	124512	SOUTHERN CALIF EDISON CO	24.77		2017-10	
	UTILITIES-ELECTRICITY			SOUTHERN CALIF EDISON CO				
Division Total 259 LAD 01-3 T771 POPPY HILL					122.64			
260	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	1,220.75	998	2017-09	
LAD 01-4 T769 SILVER OAK	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 260 LAD 01-4 T769 SILVER OAK					1,220.75			
261	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	832.31	999	2017-09	
LAD 02-1 T776 ASHTON PARK	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 261 LAD 02-1 T776 ASHTON PARK					832.31			
262	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	98.18	998	2017-09	
LAD 03-1 T789 LA PARC	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				

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262	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	269.51	998	2017-09 RAILROAD	
LAD 03-1 T789 LA PARC	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 262 LAD 03-1 T789 LA PARC					367.69			
263	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	172.75	999	2017-09	
LAD 04-1 T810 SIDONIA	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7600	11/1/17	124389	RAYMOND FIGUEROA DBA	8,908.00	1062	REPAIR BLOCK WALL	
	SPECIAL DEPARTMENTAL EX			FIGUEROA CONCRETE PARTNERS				
Division Total 263 LAD 04-1 T810 SIDONIA					9,080.75			
264	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	505.37	997	2017-09	
LAD 04-2 T799 CAMBRIDGE	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	82.11	997	2017-09 INTERIOR BASN	
	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 264 LAD 04-2 T799 CAMBRIDGE					587.48			
265	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	994.14	998	2017-09 PARK	
LAD 04-3 T795 CAMBRIDGE	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	256.18	998	2017-09 RAILROAD	
	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	885.70	998	2017-09 STREET	
	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
Division Total 265 LAD 04-3 T795 CAMBRIDGE					2,136.02			
266	7550	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC	235.67	996	2017-09	
LAD 04-4 T802-3 SIERRA	OTHER CONTRACTUAL SERV			CLEAN CUT LANDSCAPE MANAGEMENT INC				
	7780	10/24/17	124308	SOUTHERN CALIF EDISON CO	69.01		2017-10	
	UTILITIES-ELECTRICITY			SOUTHERN CALIF EDISON CO				

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Division Total 266 LAD 04-4 T802-3 SIERRA					304.68			
2665 GAS TAX - 2103	815626 TRAF SIG/11TH AV & HOUSTN	11/1/17	124553	ZUMWALT HANSEN, INC ZUMWALT HANSEN, INC	555.00	12007	9/25-10/01/17 PROF SV	
Division Total 2665 GAS TAX - 2103					555.00			
2667 T.D.A. - TRANSPORTATION	818615 NEW SIDEWALK & ADA IMPR	11/1/17	124359	CEN CAL PAVING INC CEN CAL PAVING INC	9,555.91	2248	207.25 SQ FT CEMENT	
	818615 NEW SIDEWALK & ADA IMPR	11/1/17	124359	CEN CAL PAVING INC CEN CAL PAVING INC	3,038.44	2250	CEMENT, LABOR, ETC	
Division Total 2667 T.D.A. - TRANSPORTATION					12,594.35			
267 LAD 05-1 MISSION PARK	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	35.95	996	2017-09	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	38.88	996	2017-09 BASIN	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	20.29		2017-10	
Division Total 267 LAD 05-1 MISSION PARK					95.12			
2672 CMAQ FUNDS	817628 BICYCLE FACILITY IMPR	11/1/17	124483	QUAD KNOPF, INC QUAD KNOPF, INC	3,295.49	90070	8/27-9/23/17 PROF SVC	
Division Total 2672 CMAQ FUNDS					3,295.49			
268 LAD 05-2 T835 COPPER VLLY	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	527.51	998	2017-09	
Division Total 268 LAD 05-2 T835 COPPER VLLY					527.51			

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
269 LAD 06-1 T794 QUAIL PARK	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	1,034.29	997	20017-09	
Division Total 269 LAD 06-1 T794 QUAIL PARK					1,034.29			
270 LAD 09-1 T877 VICTORY	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	84.30	998	2017-09	
Division Total 270 LAD 09-1 T877 VICTORY					84.30			
271 LAD 09-2 T843 LENNAR	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	305.33	999	2017-09	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	459.72	999	2017-09 IND II	
	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	665.12	999	2017-09 IND III	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	86.24		2017-10	
Division Total 271 LAD 09-2 T843 LENNAR					1,516.41			
273 LAD 14-01 T843 INDEP SUB3	7550 OTHER CONTRACTUAL SERV	10/13/17	124233	CLEAN CUT LANDSCAPE MANAGEMENT INC CLEAN CUT LANDSCAPE MANAGEMENT INC	790.00	999	2017-09 IND IV	
	7780 UTILITIES-ELECTRICITY	10/18/17	124294	SOUTHERN CALIF EDISON CO SOUTHERN CALIF EDISON CO	64.42		2017-09	
Division Total 273 LAD 14-01 T843 INDEP SUB3					854.42			
361 WASTEWATER OPERATION	2020-001 USE TAXES PAYABLE	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	1,275.25		FY18 QTR1 USE TAX	
Division Total 361 WASTEWATER OPERATION					1,275.25			

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
390 WATER-OPERATIONS	2020-002	10/13/17	124259	ROGERS, BRITTNEY B	100.63	REFUND	UB REFUND	Y
	UNAPPLIED CREDITS FOR UB			ROGERS, BRITTNEY B				
	2020-002	10/13/17	124259	ROGERS, BRITTNEY B	(100.63)	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			ROGERS, BRITTNEY B				
	1010	10/18/17	124289	CITY OF HANFORD	1,000.00		INCR UB VAULT CHANGE	
	IC-WATER CHANGE FUND			HANFORD, CITY OF				
	2020-001	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION	11.63		FY18 QTR1 USE TAX	
	USE TAXES PAYABLE			CALIF STATE BOARD OF EQUALIZATION				
	2020-002	11/1/17	124331	ALVARADO, BERNIE & EVER	14.01	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			ALVARADO, BERNIE & EVER				
	2020-002	11/1/17	124341	BOTELHO, MARIA L	21.54	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			BOTELHO, MARIA L				
	2020-002	11/1/17	124342	BRESLOW, AMY D	53.47	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			BRESLOW, AMY D				
	2020-002	11/1/17	124343	BURCIAGA, ALENE R	38.45	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			BURCIAGA, ALENE R				
	2020-002	11/1/17	124344	BURSIAGA, BLAKE J	140.77	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			BURSIAGA, BLAKE J				
	2020-002	11/1/17	124345	BUWALDA, JOHN	108.11	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			BUWALDA, JOHN				
	2020-002	11/1/17	124358	CAMARA, LORRIE E	72.35	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			CAMARA, LORRIE E				
	2020-002	11/1/17	124361	CENTRAL VALLEY CAPITAL, LP	44.80	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			CENTRAL VALLEY CAPITAL, LP				
	2020-002	11/1/17	124370	CRAFT/CSISZAR PROPERTIES LLD	358.97	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			CRAFT/CSISZAR PROPERTIES LLD				
	2020-002	11/1/17	124380	DUKULY, ABRAHAM B	33.14	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			DUKULY, ABRAHAM B				
	2020-002	11/1/17	124381	DYSON, STEVEN N	28.65	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			DYSON, STEVEN N				

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
390 WATER-OPERATIONS	2020-002	11/1/17	124385	ESCALANTE, JUAN C	106.88	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			ESCALANTE, JUAN C				
	2020-002	11/1/17	124395	GARCIA WAUGH, CRISTINA M	32.36	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			GARCIA WAUGH, CRISTINA M				
	2020-002	11/1/17	124401	GREGG, CAROL	72.11	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			GREGG, CAROL				
	2020-002	11/1/17	124405	HAKKER, JOHANNA T	56.55	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HAKKER, JOHANNA T				
	2020-002	11/1/17	124409	HANFORD MARKET	37.65	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HANFORD MARKET				
	2020-002	11/1/17	124410	HANFORD PIPE & SUPPLY	31.16	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HANFORD PIPE & SUPPLY				
	2020-002	11/1/17	124417	HEWITT, TOM	32.18	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HEWITT, TOM				
	2020-002	11/1/17	124420	HOLT, MATTHEW W	56.22	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HOLT, MATTHEW W				
	2020-002	11/1/17	124421	HOPPER, JASON S	24.37	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			HOPPER, JASON S				
	2020-002	11/1/17	124435	KELLY, MARY ELLEN	14.91	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			KELLY, MARY ELLEN				
	2020-002	11/1/17	124443	KWOLEK, DEBORAH L	44.37	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			KWOLEK, DEBORAH L				
	2020-002	11/1/17	124457	MC CANN, ROBERT D	43.47	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			MC CANN, ROBERT D				
	2020-002	11/1/17	124461	MEDINA, SARAH	106.21	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			MEDINA, SARAH				
	2020-002	11/1/17	124462	MEJIA VASQUEZ, CECILIA E	56.77	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			MEJIA VASQUEZ, CECILIA E				
	2020-002	11/1/17	124473	OROZCO, ROSA M	16.36	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			OROZCO, ROSA M				

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390 WATER-OPERATIONS	2020-002	11/1/17	124474	PARK, HA CHONG	56.77	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			PARK, HA CHONG				
	2020-002	11/1/17	124476	PEREZ, KRISTEN L	15.95	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			PEREZ, KRISTEN L				
	2020-002	11/1/17	124479	PIPHER, WANDA L	144.41	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			PIPHER, WANDA L				
	2020-002	11/1/17	124485	RAMIREZ MENDEZ, JOSE	155.78	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			RAMIREZ MENDEZ, JOSE				
	2020-002	11/1/17	124486	RAMIREZ, EMILY J	36.09	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			RAMIREZ, EMILY J				
	2020-002	11/1/17	124487	RAMOS ALVARADO, PEDRO	49.47	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			RAMOS ALVARADO, PEDRO				
	2020-002	11/1/17	124491	RODRIGUES, LEONARD E	70.26	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			RODRIGUES, LEONARD E				
	2020-002	11/1/17	124493	RODRIGUEZ, KAILEEN M	31.38	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			RODRIGUEZ, KAILEEN M				
	2020-002	11/1/17	124503	SHERBROOK, JUSTIN F	61.92	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			SHERBROOK, JUSTIN F				
	2020-002	11/1/17	124506	SIERRA NEVADA CONSTRUCTION INC	13.90	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			SIERRA NEVADA CONSTRUCTION INC				
	2020-002	11/1/17	124508	SIMON, ERIN D	43.08	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			SIMON, ERIN D				
	2020-002	11/1/17	124509	SMITH FAGUNDES, MCKENNA N	18.00	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			SMITH FAGUNDES, MCKENNA N				
	2020-002	11/1/17	124515	STOW, RANAE E	26.79	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			STOW, RANAE E				
	2020-002	11/1/17	124516	STRATUS PROPERTY MGMT	28.33	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			STRATUS PROPERTY MGMT				
	2020-002	11/1/17	124522	TDH LAND & CATTLE	238.28	REFUND	UB REFUND	
	UNAPPLIED CREDITS FOR UB			TDH LAND & CATTLE				

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
390 WATER-OPERATIONS	2020-002 UNAPPLIED CREDITS FOR UB	11/1/17	124536	VANGRONINGEN, KRISTINA K VANGRONINGEN, KRISTINA K	69.09	REFUND	UB REFUND	
	2020-002 UNAPPLIED CREDITS FOR UB	11/1/17	124537	VARO-REAL INVESTMENTS INC VARO-REAL INVESTMENTS INC	84.62	REFUND	UB REFUND	
	2020-002 UNAPPLIED CREDITS FOR UB	11/1/17	124538	VARO-REAL INVESTMENTS INC VARO-REAL INVESTMENTS INC	104.95	REFUND	UB REFUND	
	Division Total 390 WATER-OPERATIONS				3,906.53			
400 CITY PAYROLL REVOLVING	2073 AMERICAN FID FLEX DEF	10/13/17	124275	AMERICAN FIDELITY ASSURANCE-FLEX AMERICAN FIDELITY ASSURANCE-FLEX	2,710.91		DED:396 AMFLEX DEF	
	2063 EMPLOYEES ATTACHMENT P	10/13/17	124276	CALIF STATE DISBURSEMENT UNIT CALIF STATE DISBURSEMENT UNIT	541.85		DED:206 ATTACHMENT	
	2063 EMPLOYEES ATTACHMENT P	10/13/17	124277	FRANCHISE TAX BOARD FRANCHISE TAX BOARD	187.00		DED:210 ATTACHMENT	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124278	G E M A 1121211070 G E M A	720.00		DED:621 GEMA	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124279	H M E A 0000129193 H M E A	36.00		DED:600 HMEA	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124280	H P O A 3242162141 H P O A	2,600.00		DED:607 HPOA	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124281	I A F F, LOCAL 3898 A/C#9129026 I A F F, LOCAL 3898	1,171.50		DED:615 I A F F	
	2063 EMPLOYEES ATTACHMENT P	10/13/17	124282	KINGS COUNTY SHERIFF'S OFFICE KINGS COUNTY SHERIFF'S OFFICE	259.00		DED:209 ATTACHMENT	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124283	S E I U LOCAL 521 S E I U LOCAL 521	2,779.66		DED:601 SEIU MEMBR	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124283	S E I U LOCAL 521 S E I U LOCAL 521	415.73		DED:602 SEIU FEEPR	
	2059 EMPLOYEES ASSOCNS PAYA	10/13/17	124283	S E I U LOCAL 521 S E I U LOCAL 521	2.28		DED:602 SEIU FEEPR	

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400 CITY PAYROLL REVOLVING	2063 EMPLOYEES ATTACHMENT P	10/13/17	124284	U S DEPT OF EDUCATION U S DEPT OF EDUCATION	179.61		DED:212 ATTACHMENT	
	2072 AMERICAN FID ASSURANCE	10/24/17	124296	AMERICAN FIDELITY ASSURANCE AMERICAN FIDELITY ASSURANCE	2,192.36	B668979	2017-10 AMFID ASSUR	
	2073 AMERICAN FID FLEX DEF	10/27/17	124312	AMERICAN FIDELITY ASSURANCE-FLEX AMERICAN FIDELITY ASSURANCE-FLEX	2,710.91		DED:396 AMFLEX DEF	
	2063 EMPLOYEES ATTACHMENT P	10/27/17	124313	CALIF STATE DISBURSEMENT UNIT CALIF STATE DISBURSEMENT UNIT	541.85		DED:206 ATTACHMENT	
	2063 EMPLOYEES ATTACHMENT P	10/27/17	124314	FRANCHISE TAX BOARD FRANCHISE TAX BOARD	188.00		DED:210 ATTACHMENT	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124315	G E M A 1121211070 G E M A	720.00		DED:621 GEMA	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124316	H M E A 0000129193 H M E A	37.00		DED:600 HMEA	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124317	H P O A 3242162141 H P O A	2,600.00		DED:607 HPOA	
	2074 TRANSAMERICA	10/27/17	124318	GEORGE HERNANDEZ HERNANDEZ, GEORGE	13.00		RFD CY17 PP19 TRANSAM	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124319	I A F F, LOCAL 3898 A/C#9129026 I A F F, LOCAL 3898	1,171.50		DED:615 I A F F	
	2063 EMPLOYEES ATTACHMENT P	10/27/17	124320	KINGS COUNTY SHERIFF'S OFFICE KINGS COUNTY SHERIFF'S OFFICE	295.00		DED:209 ATTACHMENT	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124321	S E I U LOCAL 521 S E I U LOCAL 521	2,808.45		DED:601 SEIU MEMBR	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124321	S E I U LOCAL 521 S E I U LOCAL 521	8.22		DED:601 SEIU MEMBR	
	2059 EMPLOYEES ASSOCNS PAYA	10/27/17	124321	S E I U LOCAL 521 S E I U LOCAL 521	415.73		DED:602 SEIU FEEPR	
	2063 EMPLOYEES ATTACHMENT P	10/27/17	124322	U S DEPT OF EDUCATION U S DEPT OF EDUCATION	179.61		DED:212 ATTACHMENT	

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
400 CITY PAYROLL REVOLVING	2074 TRANSAMERICA	10/27/17	124323	TRANSAMERICA LIFE INSURANCE CO TRANSAMERICA LIFE INSURANCE CO	2,173.10		2017-10 TRANSAM	
	2057-004 INSUR-P/R DED LIFE	11/1/17	124514	STANDARD INSURANCE COMPANY STANDARD INSURANCE COMPANY	426.04		2017-11 LIFE EE	
	2057-004 INSUR-P/R DED LIFE	11/1/17	124514	STANDARD INSURANCE COMPANY STANDARD INSURANCE COMPANY	1,592.19		2017-11 LIFE ER	
	Division Total 400 CITY PAYROLL REVOLVING				29,676.50			
416 BUILDING MAINTENANCE	2020-001 USE TAXES PAYABLE	10/24/17	124299	CALIF STATE BOARD OF EQUALIZATION CALIF STATE BOARD OF EQUALIZATION	1.15		FY18 QTR1 USE TAX	
	Division Total 416 BUILDING MAINTENANCE				1.15			
511 MISC CASH DEPOSITS TRUST	3005-070 DISAB ACCES-BL-SB1186	10/24/17	124306	PLANET SOLAR INC PLANET SOLAR INC VASQUEZ, MICHAEL	1.00		RFD/BUS LIC OVERPMT	
	3005-044 BLDG STD ADMIN REVLY FUN	11/1/17	124349	CALIF BUILDING STANDARDS COMM CALIF BUILDING STANDARDS COMM	1,343.70		07-09/17 BLDG STD FEE	
	3005-003 STRONG MOTION INSTRU PR	11/1/17	124350	CALIF DEPT OF CONSERVATION CALIF DEPT OF CONSERVATION	3,872.19		07-09/17 SEISMIC FEE	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124354	CALIF DIVISION OF STATE ARCHITECTS CALIF DIVISION OF STATE ARCHITECTS	432.30		FY18 Q1 DISAB SB1186	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124376	DENNY'S DENNY'S	6.00		LICENSE REFUND	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124415	HANHOP INC. HANHOP INC.	100.00		LICENSE REFUND	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124430	JOEY'S JUMPING CASTLE JOEY'S JUMPING CASTLE	5.00		LICENSE REFUND	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124459	MC MAHAN, DONA R. MC MAHAN, DONA R.	29.00		LICENSE REFUND	

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511 MISC CASH DEPOSITS TRUST	3001-1 REC-AUDITORIUM DEP TRUS	11/1/17	124471	DULCE & JAIME OCHOA OCHOA, DULCE & JAIME	250.00	2003078	REFUND CIVIC DEP 9100	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124498	SANTA FE DRIVING & TRAFFIC SCH SANTA FE DRIVING & TRAFFIC SCH	17.50		LICENSE REFUND	
	3005-070 DISAB ACCES-BL-SB1186	11/1/17	124525	THOMAS, PAULINE THOMAS, PAULINE	6.25		LICENSE REFUND	
	Division Total 511 MISC CASH DEPOSITS TRUST				6,062.94			
520 TRAFFIC SAFETY FUND	4305-002 PARKING FINES-AVENAL	10/24/17	124298	CITY OF AVENAL AVENAL, CITY OF	56.66		2017-09 AVENAL	
	4305-003 PARKING FINES-CORCORAN	10/24/17	124302	CITY OF CORCORAN CORCORAN, CITY OF	827.36		2017-09 CORCORAN	
	4305-001 PARKING FINES-HANFORD	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	750.00		2017-09 CTHS/JAIL FDS	
	4305-001 PARKING FINES-HANFORD	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	395.00		2017-09 PENLTY EQ/REG	
	4305-002 PARKING FINES-AVENAL	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	25.00		2017-09 CTHS/JAIL FDS	
	4305-002 PARKING FINES-AVENAL	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	82.50		2017-09 PENLTY EQ/REG	
	4305-003 PARKING FINES-CORCORAN	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	250.00		2017-09 CTHS/JAIL FDS	
	4305-003 PARKING FINES-CORCORAN	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	229.50		2017-09 PENLTY EQ/REG	
	4305-005 PARKING FINES-LEMOORE	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	137.50		2017-09 CTHS/JAIL FDS	
	4305-005 PARKING FINES-LEMOORE	10/24/17	124303	KINGS CO TREASURER KINGS CO TREASURER	67.50		2017-09 PENLTY EQ/REG	
	4305-005 PARKING FINES-LEMOORE	10/24/17	124304	CITY OF LEMOORE LEMOORE, CITY OF	87.35		2017-09 LEMOORE	

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Division # and Name	Acct # and Name	Check Date	Check Number	Vendor Name	Transaction Amt	Inv#	Transaction Description	Void
520 TRAFFIC SAFETY FUND	4305-002 PARKING FINES-AVENAL	10/24/17	124310	TURBO DATA SYS INC	25.84	26814	2017-09	
	TURBO DATA SYS INC							
	4305-003 PARKING FINES-CORCORAN	10/24/17	124310	TURBO DATA SYS INC	79.14	26814	2017-09	
				TURBO DATA SYS INC				
	4305-005 PARKING FINES-LEMOORE	10/24/17	124310	TURBO DATA SYS INC	21.43	26814	2017-09	
				TURBO DATA SYS INC				
	4305-001 PARKING FINES-HANFORD	11/1/17	124526	SHEKENNA THREADGILL	280.00	REFUND	10005349 PARKING RFD	
				THREADGILL, SHEKENNA				
Division Total 520 TRAFFIC SAFETY FUND					3,314.78			
					1,527,314.14			

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AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: A
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SUBJECT:

General Plan Amendment No. 2017-03 (A): a request to change the land use designation on a 9.48-acre portion of a parcel from Office to High-Density Residential. Rezone No. 2017-01: a request to change the zoning designation on a 9.48-acre portion of a parcel from O Office to R-H High-Density Residential. Tentative Parcel Map No. 2017-01: a request to divide the 19.68-acre parcel, located at APN 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. Mitigated Negative Declaration No. 2017-11: a request to certify that the project will not have a significant effect on the environment with the incorporation of mitigation measures. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

See City Council Staff Report attached.

FISCAL IMPACT:

ATTACHMENTS:

City Council Staff Report -GPA 2017-03 (A), RZ 2017-01, and TPM 2017-01
 Resolution No. 17-52-R
 Ordinance No. 17-20
 Resolution No. 17-53-R
 Exhibit A - Tentative Parcel Map No. 2017-01
 Exhibit B - Comment received from William Hofmans
 Exhibit C (1) -Signed Resolution No. 2017-15
 Exhibit C (2) -Signed Resolution No. 2017-16
 Exhibit C (3) -Signed Resolution No. 2017-17
 Exhibit D - Mitigated Negative Declaration No. 2017-11
 Exhibit E - KART Consultation

**CITY OF HANFORD CITY COUNCIL
STAFF REPORT**

MEETING DATE: Tuesday, November 7, 2017

PROJECT: **GENERAL PLAN AMENDMENT NO. 2017-03 (A):** a request to change the designation on a 9.48-acre portion of a parcel from Office to High Density Residential.

REZONE NO. 2107-01: a request to change the zoning designation on a 9.48-acre portion of a parcel from O Office to R-H High-Density Residential.

TENTATIVE PARCEL MAP NO. 2017-01: a request to divide the 19.68-acre parcel, located at APN 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres.

MITIGATED NEGATIVE DECLARATION NO. 2017-11: a request to certify that the project will not have a significant effect on the environment with the incorporation of mitigation measures.

LOCATION: The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

STAFF RECOMMENDATION

Staff recommends that the City Council:

1. Certify Mitigated Negative Declaration No. 2017-11 for the project.
2. Adopt Resolution 17-52-R, approving General Plan Amendment No. 2017-03 (A).
3. Introduce and waive the first reading of Ordinance No. 17-20, approving Rezone No. 2017-01.
4. Adopt Resolution 17-53-R, approving Tentative Parcel Map No. 2017-01.

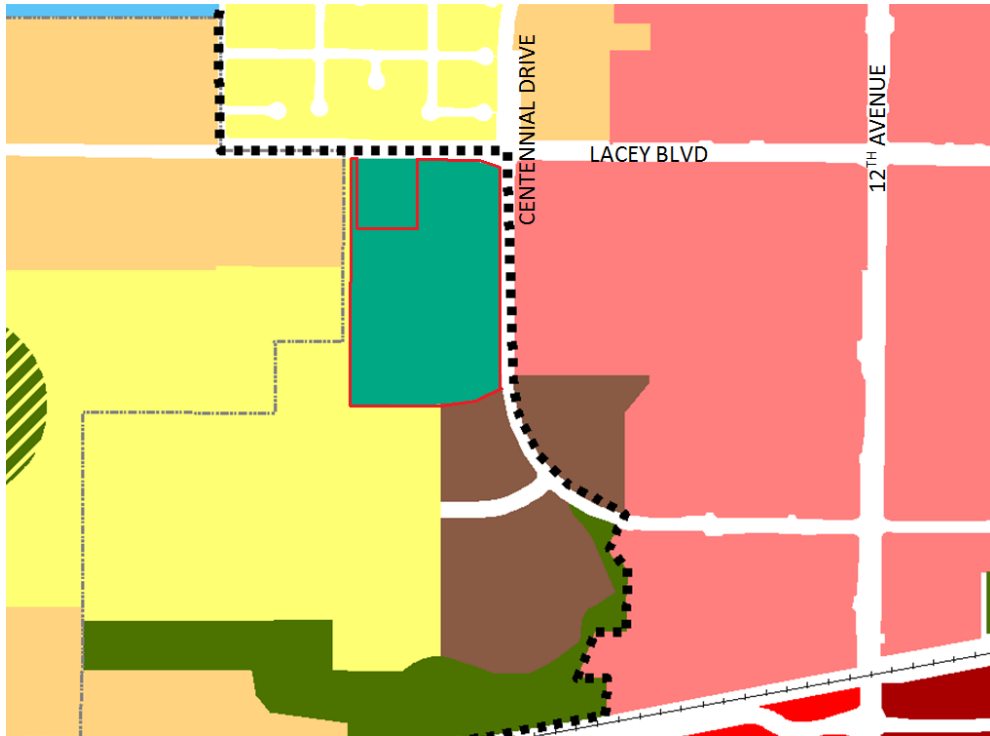
RECOMMENDED MOTION

1. I move to certify Mitigated Negative Declaration No. 2017-11 for the project.
2. I move to adopt Resolution 17-52-R, approving General Plan Amendment No. 2017-03 (A).
3. I move to introduce and waive the first reading of Ordinance No. 17-20 for Rezone No. 2017-01.
4. I move to adopt Resolution 17-53-R, approving Tentative Parcel Map No. 2017-01.

PROJECT DESCRIPTION

General Plan Amendment No. 2017-03 (A) is a request to change the General Plan designation on a 9.48-acre portion of parcel from Office to High-Density See below.

General Plan Designation:
Existing: Office

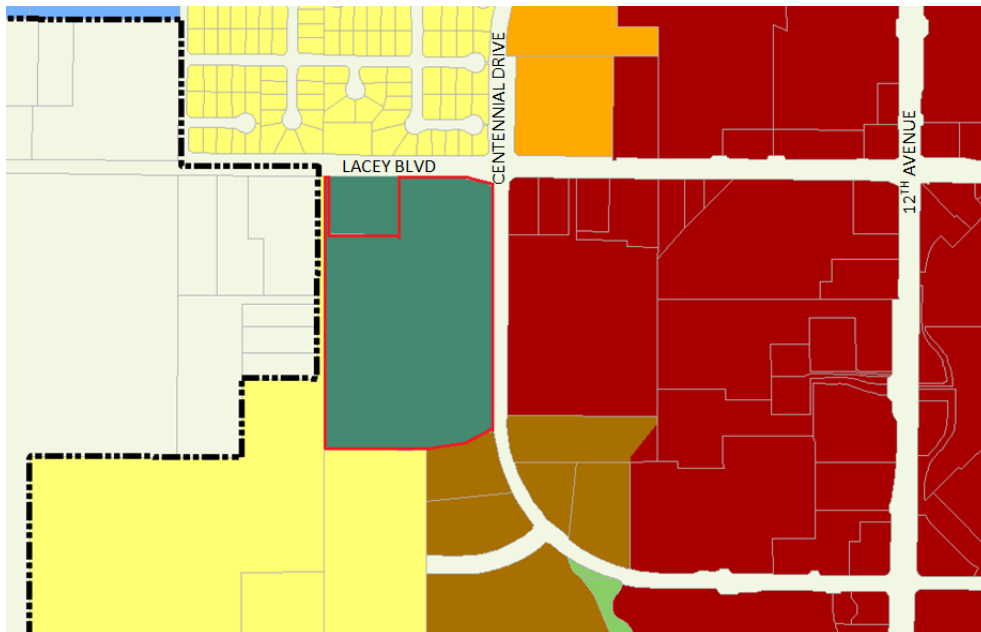


General Plan Designation:
Proposed: under General Plan Amendment No. 2017-03 (A)
High-Density Residential

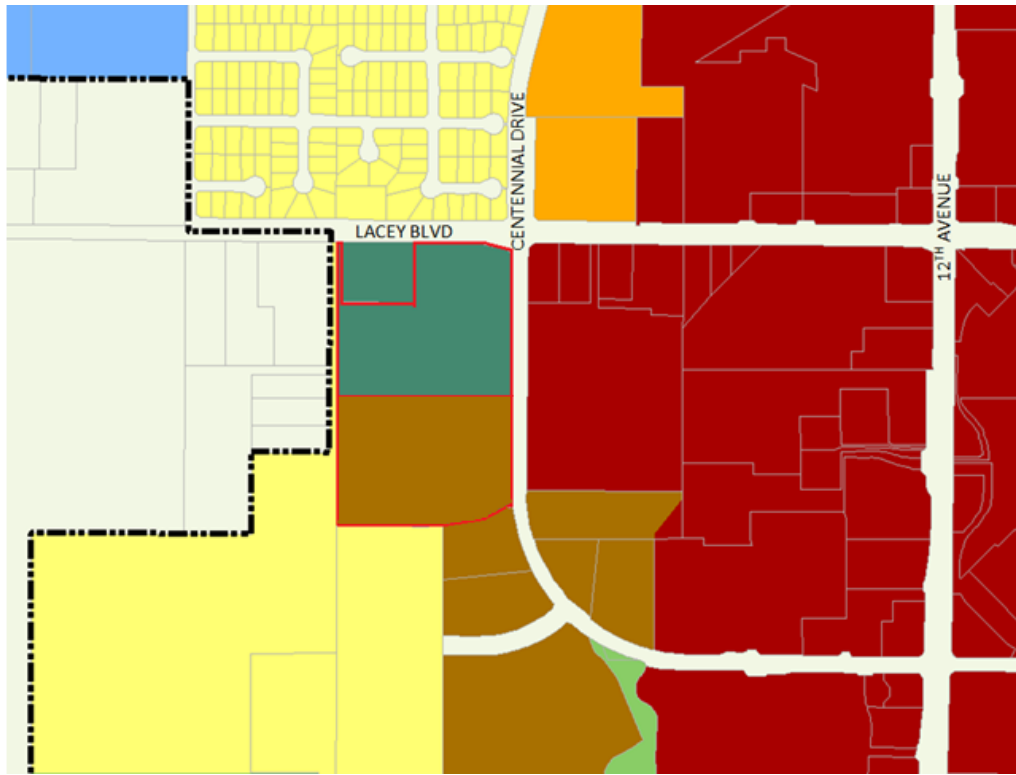


Rezone No. 2017-01 is a request to change the zoning designation on Parcel A of Tentative Parcel Map No. 2017-01 (cited above) from O Office to R-H High Density Residential. See below.

Zoning Designation:
Existing: O Office



Zoning Designation:
Proposed under Rezone No. 2017-01
R-H High-Density Residential



Tentative Parcel Map No. 2017-01 is a request to divide a 19.68-acre parcel, located at 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. See the proposed parcel split, Tentative Parcel Map No. 2017-01, attached as **Exhibit A**.

BACKGROUND

The project site is a 19.68-acre parcel located at the southwest corner of Lacey Boulevard and Centennial Drive, APN 011-020-042. The site is vacant and not in a flood plain (Flood Insurance Rate Map Community Panel No. 06031C0185C (Zone X), dated June 16, 2009).

Surrounding land uses are as follows:

	Zoning	General Plan Designation	Land Use
North	R-L-5	Low-Density Residential	Residential
East	C-R	Regional Commercial	Vacant and Commercial
South	R-L-5 and R-H	High-Density Residential; Low-Density Residential	Vacant

West	County	Medium-Density Residential and Low-Density Residential	Vacant and Nursery
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Land Use
Vacant
Parcel outlined in red



Planning Commission:

The project was presented to the Planning Commission at their regularly scheduled meeting on October 10, 2017.

Commissioner questions prior to opening public comment:

- Commissioner Paden had a question regarding the Safe Routes to School and if there would be safe routes to school in that area?
 - o Community Development Director, Darlene R. Mata responded, sidewalks, curb and gutter would be required upon development of the site.
- Commissioner Paden asked if a bus stop would be a condition of development, as requested by KART?
 - o Darlene Mata responded, a KART bus stop has been required as a condition of approval. The condition puts the developer on notice that at the time of a physical development for the area, a bus stop would be requested by KART.

Public comment for the item included the following:

Favor

- John Zumwalt, represented the applicant and spoke in favor of the project
 - o Supported the recommendation of staff
 - o Indicated the project is supported by the Air Resources Board, since it reduces vehicle miles traveled, as it is near major employer centers
 - o Indicated that the developer intends to file plans for development with the City within the next year

Opposed

- Mrs. Hofmans (did not give first name) – a letter was submitted by William Hofmans of Hofmans Nursery opposing the rezone, attached as **Exhibit B**.
 - o Mrs. Hofman indicated that her husband submitted the letter being unaware that the rezone would only be changing the designation on the southern 9.48 acres of the parcel.
 - o She indicated that she believes the distance of spray from the nursery to the high-density residential zone is a safe enough distance away
- Dick Congdan
 - o Lives west of the project site
 - o Opposed to the designation change to R-H High-Density Residential
 - o Stated concerns that traffic would be greater due to the high-density residential zone
 - Darlene Mata responded that the office designation has the potential to generate more traffic than high-density residential

Commissioner questions after closing public comment:

- Commissioner Paden asked Mr. Congdan how he accesses his residence.
 - o Mr. Congdan indicated the residence is accessed via a private drive.
 - Darlene Mata responded that the private drive will eventually be a public street, as identified in the Circulation Element
- Commissioner Johnson asked staff if a wall would be required to mitigate noise.
 - o Darlene Mata responded block walls are required on collector and arterial streets and that the development will be evaluated and conditioned when a physical project was submitted.
- Commissioner Johnson asked if a wall would be required along the office complex and the nursery.
 - o Darlene Mata responded that the developer may propose one; however, one would not be required.

The Commissioners voted 7, 0 to recommend all items for approval to the City Council.

Copies of the signed Planning Commission resolutions are attached as **Exhibit C**.

PROJECT EVALUATION

General Plan Amendment No. 2017-03 (A)

General Plan Amendment No. 2017-03 (A) is a request to change the designation on a 9.48-acre portion of a parcel from Office to High-Density Residential.

The project site is currently designated as O Office. The project proposes an amendment to the land-use designation on Parcel A of Tentative Parcel Map No. 2017-01, which totals 9.48 acres. The amendment is consistent with the General Plan policy. The designated remainder is proposed to remain designated as Office.

Policy L38 Purpose of the High-Density Residential Land Use Designation: Establish the High-Density Residential land use designation primarily for multi-family apartment and condominium development in proximity to arterial streets, commercial and recreational facilities, and employment centers.

Policy L41 Location and Size of the High-Density Residential Land Use Designation: Locate High-Density Residential land use designations in close proximity to arterial streets, commercial centers, recreational facilities, and employment centers.

Analysis: The designation is proposed south of Lacey Boulevard, which is an arterial street. The subject property is directly west of commercial facilities. A major employment center, the Kings County Government Center, is located less than one mile from the project site.

Policy L40 Design of the High-Density Residential Land Use Designation: Develop and enforce design policies and/or ordinances for High-Density Residential developments that ensure high-quality construction, design, open-space amenities, safety and security, overall compatibility with the rest of the neighborhood.

Analysis: There is not a physical project proposed for the site, at this time. Development of the site would be limited to the uses permitted, conditionally permitted, administratively permitted, or temporarily permitted in the R-H High-Density Residential Zone District, as prescribed in the land use table in Section 17.08.030 of the Hanford Municipal Code. The project would be subject to all applicable design standards for high-density residential development. Overall, the change in land use of Parcel A of Tentative Parcel Map No. 2017-01, is consistent with the surrounding land uses. There is a High-Density Residential land use designation directly south of the project site. The future use of the project site would be compatible with the surrounding uses.

Policy L50 Location and Size of Regional Commercial Land Use Designation Locate Regional Commercial land use designations along arterial streets near access to Highway 198 or 43. Offices and high-density residential development are typically located adjacent to the Regional Commercial land use designation. Require new development projects to be a minimum 10 acres in size.

Analysis: In accordance with Policy L50, high-density residential development is typically located adjacent to the Regional Commercial land use designation. The project site is surrounded by Regional Commercial land use designations to the east, northeast, and southeast.

Rezone No. 2017-01

Rezone No. 2017-01 is a request to change the designation on a 9.48-acre portion of a parcel from O Office to R-H High-Density Residential.

17.06.060 Zone Changes. Changes to the zoning map shall be approved by ordinance of the City Council, in accordance with Chapter 17.86. Chapter 17.86 of the Municipal Code describes the process for consideration of a Rezone. The reviewing authority is required to make the required findings below:

1. That the amendment is internally consistent with the goals, objectives, and policies of the general plan and the Municipal Code.
2. The amendment would not be detrimental to the public health, safety, or welfare of the community.
3. The amendment would maintain the appropriate balance of land uses within the City.
4. The anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

An analysis of the required findings appears below.

Tentative Parcel Map No. 2017-01:

Tentative Parcel Map No. 2017-01 is a request to divide a 19.68-acre parcel, located at APN 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres.

See the proposed parcel split, Tentative Parcel Map No. 2017-01, attached as **Exhibit A**.

Project Design:

	Entire Site	Parcel A	Designated Remainder
Area:	19.68 acres	9.48 acres	10.2 acres
Width:	292.97 ft. minimum width; 793.82 ft. maximum width (approximately)	765.19 ft. minimum width; 793.82 ft. maximum width (approximately)	292.97 ft. minimum width; 765.19 ft. maximum width
Depth:	1,029.8 ft. minimum depth; 1,253.79 ft. maximum depth	377.67 ft. minimum depth; 558.15 ft. maximum depth	652.13 ft. minimum depth; 695.64 ft. maximum depth
Sidewalk:	Sidewalk only existing at corner	Non-existent along Centennial Drive	Non-existent along Centennial Drive; Non-existent along Lacey

			Blvd (only existing at corner)
Existing Use:	Vacant	Vacant	Vacant
Proposed Use:	Split into two parcels	Future high-density residential development (no physical project proposed at this time)	Future office development (no physical project proposed at this time)

Parcel A:

Parcel A is proposed to be designated as R-H High-Density Residential, under General Plan Amendment No. 2017-03 (A) and Rezone No. 2017-01.

Lot Area

In accordance with Section 17.14.030 Lot Area, the minimum lot area shall be 5,000 square feet. The subdivision the existing 19.68-acre parcel, as proposed under Tentative Parcel Map No. 2017-01, will not affect the consistency of Parcel A with the requirements for lot size, in accordance with Section 17.14.030. Parcel A is proposed to be 9.48 acres.

Lot Dimensions

In accordance with Section 17.14.040 Lot Dimensions, lot dimensions shall be as follows:

- A. The minimum lot frontage shall be 40 feet.
- B. The minimum lot width shall be 50 feet for interior lots and sixty feet for corner lots.
- C. The minimum lot depth shall be 90 feet.
- D. Lots developed adjacent to an arterial or collector street are to be designed as walled or fenced back-on or side-on lots with a minimum five and maximum 10-foot wide landscape easement continuous and adjacent to the street right-of-way line. The minimum lot dimensions are to be exclusive of the landscape easement area. The wall or fence shall be located in the landscape easement area adjacent to the easement line.

The division of the parcel, as proposed under Tentative Parcel Map No. 2017-01, will not affect the consistency of Parcel A with requirements for lot dimensions, in accordance with Section 17.14.040. Centennial Drive is a collector street; therefore, a walled/fenced landscape easement will be a condition of the physical development for Parcel A.

Land Use

There is not a physical project proposed for the site, at this time. Development of the site would be limited to the uses permitted, conditionally permitted, administratively permitted, or temporarily permitted in the R-H High-Density Residential Zone District, as prescribed in the land use table in Section 17.08.030.

Designated Remainder:

The designated remainder is proposed to remain designated as O Office.

Lot Area

In accordance with Section 17.32.030 Lot Area, the minimum lot area shall be 20,000 square feet, unless a smaller site is approved with a conditional use permit. Subdivision of the parcel, as proposed under Tentative Parcel Map No. 2017-01, will not affect the consistency of the designated remainder with the requirements for lot size, in accordance with Section 17.32.030. The designated remainder is proposed to be 10.20 acres.

Lot Dimensions

In accordance with Section 17.32.040 Lot Dimensions, the minimum lot frontage shall be 60 feet, unless a reciprocal use agreement for shared common access and parking areas is recorded with the Kings County Recorder's Office.

Division of the parcel, as proposed under Tentative Parcel Map No. 1, will not affect the consistency of the designated remainder with the requirements for lot dimensions, in accordance with Section 17.32.040. The designated remainder has adequate street frontage on Lacey Boulevard and Centennial Drive.

Land Use

There is not a physical project proposed for the site, at this time. Development of the site would be limited to the uses permitted, conditionally permitted, administratively permitted, or temporarily permitted in the O Office Zone District, as prescribed in the land use table in Section 17.08.030.

FINDINGS FOR APPROVAL

General Plan Amendment No. 2017-03 (A)

In accordance with Section 17.88.040 of the Hanford Municipal Code, before a general plan amendment may be approved, all of the following findings shall be made by the reviewing authority:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (A) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs-rich area. The proposal to change the designation from Office to High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on Parcel A of Tentative Parcel Map No. 2017-01 and Office uses on the designated remainder. General Plan Policies L 38, L41, L40 and L50 promote the location of high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

Rezone No. 2017-01

In accordance with the Hanford Municipal Code Section 17.86.030, before a zone change may be approved, all of the following findings shall be made by the reviewing authority:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-01 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50. The plan is consistent with the Hanford Municipal Code. All regulations pertaining to R-H High-Density Residential and O Office will be required of development, accordingly.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Department, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change

the designation from O Office to R-H High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on Parcel A of Tentative Parcel Map No. 2017-01 and Office uses on the designated remainder. General Plan Policies L38, L41, L40, and L50 promote the location of high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

Tentative Parcel Map No. 2017-01:

Pursuant to Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act, the Planning Commission is required to make the following findings:

1. Consistency Finding:

ANALYSIS: That the proposed subdivision is consistent with the applicable General Plan Designation, as proposed under General Plan Amendment No. 2017-03 (A). The proposed subdivision is consistent with the applicable General Plan designation for High-Density Residential for Parcel A and Office for the designated remainder. The designated remainder, which is designated as Office, is 10.20 acres, which meets the size requirement of 10 acres, as required in Policy L76 of the General Plan. There is not a size designation required by the General Plan for High-Density Residential.

2. Design Finding:

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential development, would be required to adhere to the development regulations for High-Density Residential development, in accordance with the Hanford Municipal Code. The designated remainder is remaining as Office land use. Any future development of the designated remainder as office development would be required to adhere to the development regulations pertaining to the Office district, in accordance with the Hanford Municipal Code.

3. Type of Development Finding:

ANALYSIS: That the proposed site is located on vacant flat land and is not located in a flood zone. There is not a physical project proposed, at this time. Parcel A is designated for future R-H High-Density Residential development. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the R-H Zone District. The designated remainder is designated as O Office. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the O Zone District.

4. Density Finding: that the site is physically suitable for the proposed density of development.

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential

development, would be limited to the density range prescribed by the General Plan, between 14 to 29 units per gross acre. The designated remainder is remaining as Office land use. There is not a prescribed density for the Office land use.

5. Environmental Finding:

ANALYSIS: That an initial study was conducted; and, on the basis on the initial study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment, with the incorporation of mitigation measures. Mitigated Negative Declaration No. 2017-11 has been prepared for the project. The initial study, Mitigated Negative Declaration No. 2017-11, and mitigation measures required of development are attached as **Exhibit D**.

6. Public Health Finding:

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public.

7. Improvements and Access Findings:

ANALYSIS: The proposed parcels will have street frontage along public streets, Centennial Drive and Lacey Boulevard. Any off-site improvements such as curbs, gutters, sidewalks, drive approaches, and transitional paving, when installed by the developer, will be inspected and/or verified to ensure the design, material, and installation of said improvements meet or exceed standards adopted by the City of Hanford. The design of the subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision.

CONSULTATION

Pre-Consultation

In accordance with Section 15603(g) of the California Environmental Quality Act (CEQA) Guidelines, the project proposal was forwarded to the responsible and interested agencies for early consultation on August 21, 2017. Responses were received from the following agencies:

1. Hanford Elementary School District – Gerry Mulligan
2. Hanford Joint Unified High School District – Cheryl Silva
3. Tachi Yokut Tribe – Shana Powers

Responses to comments are addressed within the initial study and are as follows:

Hanford Elementary School District

During pre-consultation, Gerry Mulligan, of the Hanford Elementary School District, provided the following:

I received the Tentative Tract Parcel Map No. 2017-01 and have concerns. The children living in the proposed project area in grades 1-6 would be in the Simas Elementary School area of attendance and children in grades 7-8 would be in the Woodrow Wilson Junior High School area of attendance.

Student enrollment at current Hanford Elementary School District schools is over capacity. The District must build additional schools if new residential development continues. The District currently has no future school sites. While we do approve of Tentative Tract Parcel Map No. 2017-01, we respectfully request the City of Hanford to consider schools in the approval of future development.

Analysis: No physical development of the site as office or high-density residential is being proposed at this time. The City's role in development and managing school sites and programs is limited. The various school districts truly govern where a new school site would be located and when it would be necessary to construct or expand facilities, in order to adequately accommodate population growth. Elected governing school boards are responsible for budgeting and decision-making and the State Department of Education establishes school site and construction standards. The General Plan provides policy which focus on collaboration with school districts in determining new school locations and utilizing school facilities for general public needs. School districts would be able to utilize the General Plan along with other plans, standards, and codes to establish new school sites and to make decisions on school amenities and cohesiveness with the surrounding area.

Further, Senate Bill 50 amended Government Code Section 65996 (a) to prohibit state or local agencies from imposing school impact mitigation fees, dedications, or other requirements in excess of those provided in the statute in connection with any legislative or adjudicative act by any state or local agency involving the planning, use, or development of real property. The legislation also amended Government Code Section 65996(b) to prohibit local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any legislative or adjudicative act involving the planning, use or development of real property.

Hanford Joint Unified High School District – Cheryl Silva

A pre-consultation response was received from Cheryl Silva of the Hanford Joint Unified High School District providing the following:

The proposed zoning change would significantly impact the intersection of 13th and Lacey Blvd. This is currently controlled by a 4-way stop sign and only one of two ways to get to Sierra Pacific High School and College of the Sequoias. Additional housing (high density) would negatively impact our path to schools.

Analysis: In response, the Utilities and Engineering Director, John Doyel, indicated that the intersection is controlled by Kings County and is currently approved for a traffic signal to be constructed in 2018. When a physical project is proposed, the Engineering Division would be responsible for reviewing the request and conditioning development accordingly.

Tachi Yokut Tribe – Shana Powers

Under SB 18 and AB 52, the Tachi Yokut Tribe requested formal notification of all projects requiring an environmental review under the California Environmental Quality Act (CEQA). During pre-consultation, the City received a letter from Shana Powers, Cultural Specialist II for the Tachi Yokut Tribe, indicating the following:

Based upon the cultural sensitivity of the area, the Tribe has concerns that burials and cultural resources will be disturbed during ground-disturbing activities if this parcel is developed. If the area is developed, the Tribe would like to be retained to provide Native American Monitoring and then provide a cultural presentation for the construction staff prior to ground disturbing activities.

In order to address the concerns of the Tachi Yokut Tribe, the City is requiring the following as mitigation measures:

- That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth-disturbing activities (this condition applies as a mitigation measure to all projects that require an initial study).

As a project-specific mitigation measure, the City is requiring:

- That the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground-disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring to continue until released by the Tachi Tribal Cultural Department.
- That a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.

These mitigation measures were made conditions of a previous project, for which meaningful consultation was initiated with the Tachi Yokut Tribe. As consultation for the previous project, staff met with the Tribe on January 10, 2017 and developed the above mitigations.

CONSULTATION

In accordance with Section 15073 of the California Environmental Quality Act Guidelines, a notice of intent to adopt a mitigated negative declaration was sent to the concerned agencies on September 14, 2017. Comments were received from the following agencies:

Responses to comments are addressed within the initial study and are as follows:

1. Kings County Area Public Transit Agency (KART) – Mark Pedriro

During normal consultation, Mark Pedriro with Kings County Area Public Transit provided the following:

KART would like consideration for a bus stop. A section of sidewalk seven feet wide from curb to back of sidewalk. With seven feet we can fit a sign and bench and four feet of ADA-clearance.

Analysis: The project has been conditioned to include the request.

See KART consultation comments received, attached as **Exhibit E**.

ENVIRONMENTAL ASSESSMENT

Mitigated Negative Declaration No. 2017-11 is recommended for the project based on the following:

In accordance with the California Environmental Quality Act (CEQA), General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01 were evaluated in an Environmental Assessment/Initial Study. Based on the review, it was determined that the proposed project would not result in a significant adverse impact on the environment with the incorporation of mitigation measures, therefore Mitigated Negative Declaration No. 2017-11 has been prepared, attached as **Exhibit D**.

PUBLIC COMMENTS

Notice of Intent to Adopt a Mitigated Negative Declaration was published in the newspaper on September 15, 2017 and mailed to property within 500 feet of the project site on September 14, 2017. The environmental document was made available for a comment period of 20 days, September 15 – October 6, 2017. During that period, one comment was received from William Hofmans of Hofmans Nursery, attached as **Exhibit B**. Additional comments were made during the Planning Commission public hearing by Mrs. Hofmans. An analysis appears in the background information above.

Notice of the public hearing before the City of Hanford City Council was published on October 27, 2017 and mailed to property owners within a 500 ft. radius on October 26, 2017. No additional public comments have been received as of the date of preparation of this report.

STAFF RECOMMENDATION.

Staff recommends that the City Council:

1. Certify Mitigated Negative Declaration No. 2017-11 for the project.
2. Adopt Resolution 17-52-R, approving General Plan Amendment No. 2017-03 (A).
3. Introduce and waive the first reading of Ordinance No. 17-20, approving Rezone No. 2017-01.
4. Adopt Resolution 17-53-R, approving Tentative Parcel Map No. 2017-01.

Applicant:

Village @ Hanford Square, LLC
(c/o Daniel Bailey)
480 E. Bogert Trail
Palms Springs, CA

Property Owner:

Hanford Southport, LLC
(c/o Gary Gavin)
14908 Gavan Vista Rd
Poway, CA

RESOLUTION NO. 17-52-R

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
APPROVING AN AMENDMENT TO THE LAND USE ELEMENT OF THE GENERAL
PLAN. GENERAL PLAN AMENMENT NO. 2017-03 (A): A REQUEST TO CHANGE
THE DESIGNATION ON A 9.48-ACRE PORTION OF THE PROPERTY LOCATED AT
APN 011-020-042 FROM OFFICE TO HIGH-DENSITY RESIDENTIAL.**

At a regular meeting of the City Council of the City of Hanford, duly called to order and held on November 7, 2017, at 7:00 p.m., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, General Plan Amendment No. 2017-03 (A) proposes to amend the land use designation of certain real property as follows:

General Plan Amendment No. 2017-03 (A):

9.48-acre portion of APN 011-020-042 from Office to High-Density Residential, as shown in attached **Exhibit A**; and

WHEREAS, the proposed general plan amendment was presented to the Planning Commission of the City of Hanford; and

WHEREAS, the City of Hanford Planning Commission, at its regularly scheduled meeting on October 10, 2017, held a public hearing and received testimony and evidence for and against the proposed general plan amendment. After closing the public hearing, the Planning Commission, by resolution, recommended that the City Council of the City of Hanford approve General Plan Amendment No. 2017-03 (A); and

WHEREAS, the City Council of the City of Hanford, at its regularly scheduled meeting on November 7, 2017, held a public hearing and received testimony and evidence regarding proposed General Plan Amendment No. 2017-03 (A); and

WHEREAS, the City Council of the City of Hanford considered the evidence presented in the staff report and testimony presented during the public hearing; and

WHEREAS, the City Council of the City of Hanford finds that no significant environmental impacts would result from the proposed project with the incorporation of mitigations, as presented in the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**; and

WHEREAS, Mitigated Negative Declaration No. 2017-11 was prepared and adopted; and,

WHEREAS, on the basis of the application for the amendment to the general plan, the documentation and information provided in the staff report, and the evidence and testimony submitted at the public hearing, the City Council of the City of Hanford hereby makes the following findings in accordance with Section 17.88.040 of the Hanford Municipal Code:

General Plan Amendment No. 2017-03 (A)

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (A) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs-rich area. The proposal to change the designation from Office to High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on a 9.48-acre parcel (Parcel A of Tentative Parcel Map No. 2017-01) and Office uses on the designated remainder of APN 011-020-042. General Plan Policies L 38, L41, L40 and L50 promote the location of high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Hanford hereby approves General Plan Amendment No. 2017-03 (A). Passed and adopted at a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

 DAVID G. AYERS
 MAYOR of the City of Hanford

Attest:

 JENNIFER GOMEZ
 CITY CLERK

STATE OF CALIFORNIA)
 COUNTY OF KINGS) ss
 CITY OF HANFORD)

I, Jennifer Gomez, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the __ day of _____, 2017.

Date: _____

 City Clerk

Exhibit A**General Plan Amendment No. 2017-03 (A)**

General Plan Designation:

Existing: Office



General Plan Designation: Proposed under General Plan Amendment No. 2017-03 (A)

High-Density Residential and Office (this is a representation only)



Exhibit B
Mitigation Monitoring and Reporting Program
General Plan Amendment No. 2017-03 (A)

Attachment: Resolution No. 17-52-R (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

**Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11**

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.		
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures	City to require and ensure compliance; developer and future occupants to adhere
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	That the future development of the project site would be required to comply with all statutes and regulations related to solid waste.	City to require; developer to provide

ORDINANCE NO. 17-20**REZONE NO. 2017-01**

AN ORDINANCE OF THE CITY OF HANFORD CITY COUNCIL APPROVING REZONE NO. 2017-01, A REQUEST TO REZONE A 9.48-ACRE PORTION OF A PROPERTY FROM O OFFICE TO R-H HIGH-DENSITY. THE PROJECT IS LOCATED AT THE SOUTHWEST INTERSECTION OF CENTENNIAL DRIVE AND LACEY BOULEVARD (APN 011-020-042).

Section 1: the following described territory situated in the City of Hanford is hereby zoned under the terms of Chapter 17.86 of the Hanford Municipal Code:

Rezone No. 2017-01, filed by Village @ Hanford Square, LLC,

FROM: O Office

TO: R-H High-Density Residential

On property described as follows:

Approximately 9.86 acres located at the southwest intersection of Centennial Drive and Lacey Boulevard, as depicted in attached **Exhibit A**; and

Section 2: The Council does hereby find as a fact that the Planning Commission of the City of Hanford held a public hearing on October 10, 2017 after notice required by Section 17.70.110 of the Hanford Municipal Code and Government Code Section 65854. The City Council finds that Mitigated Negative Declaration No. 2017-11 is approved in conformance with the California Environmental Quality Act. The City Council hereby finds that the rezoning is consistent with the objectives of the zoning regulations as set forth in Section 17.86 of the Hanford Municipal Code, and that this Ordinance has been introduced by the City Council after public hearing held on the 7th day of November, 2017, at 7:00 p.m. of said day after notice required under the provisions of Section 65856 of the Government Code.

Section 3: That pursuant to Section 17.86.030, the City Council of the City of Hanford makes the following findings:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-01 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50. The plan is consistent with the Hanford Municipal Code. All regulations pertaining to R-H High-Density Residential and O Office will be required of development, accordingly.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Department, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program, attached as **Exhibit B**.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the designation from O Office to R-H High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on Parcel A of Tentative Parcel Map No. 2017-01, attached as **Exhibit C**, and Office uses on the designated remainder. General Plan Policies L38, L41, L40, and L50 promote the location of

high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

Section 4: This ordinance shall take effect (30) days after its passage, and be published once in the Hanford Sentinel within fifteen (15) days after its passage or a summary of this ordinance shall be published in the Hanford Sentinel in a manner consistent with the requirements of the California Government Code.

Passed and adopted at a regular meeting of the City Council of the City of Hanford duly called and held on _____, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

APPROVED

DAVID G. AYERS
MAYOR of the City of Hanford

ATTEST:

JENNIFER GOMEZ
CITY CLERK

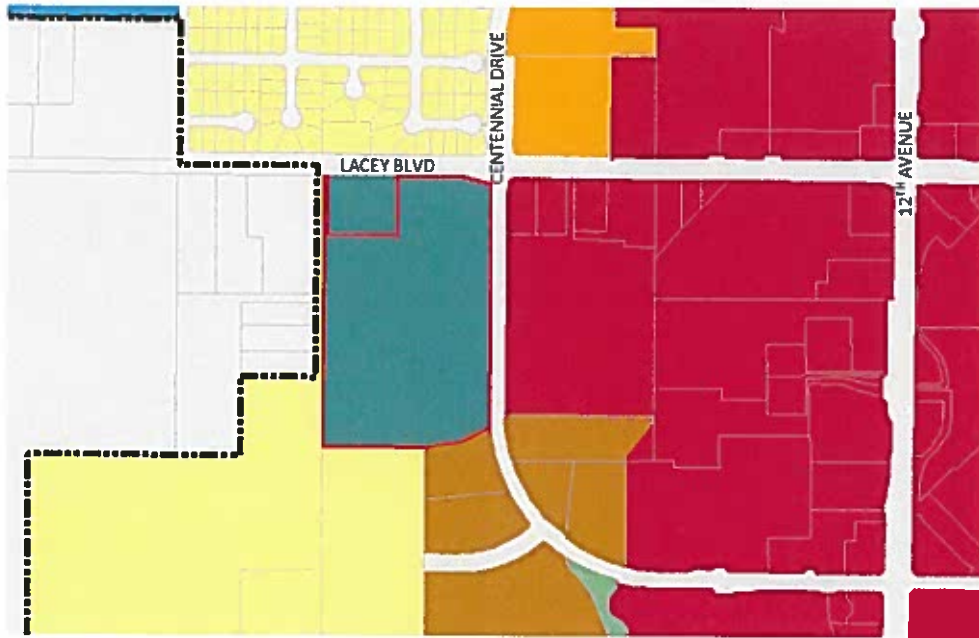
STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I JENNIFER GOMEZ, City Clerk of the City of Hanford, do hereby certify the foregoing ordinance was duly introduced at a regular meeting of the City Council of the City of Hanford on the 7^h day of November, 2017, and it was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the 21st day of November, 2017.

JENNIFER GOMEZ
CITY CLERK

Exhibit A
Rezone No. 2017-01

Zoning Designation:
Existing: O Office



Zoning Designation:
Proposed under Rezone No. 2017-01
R-H High-Density Residential

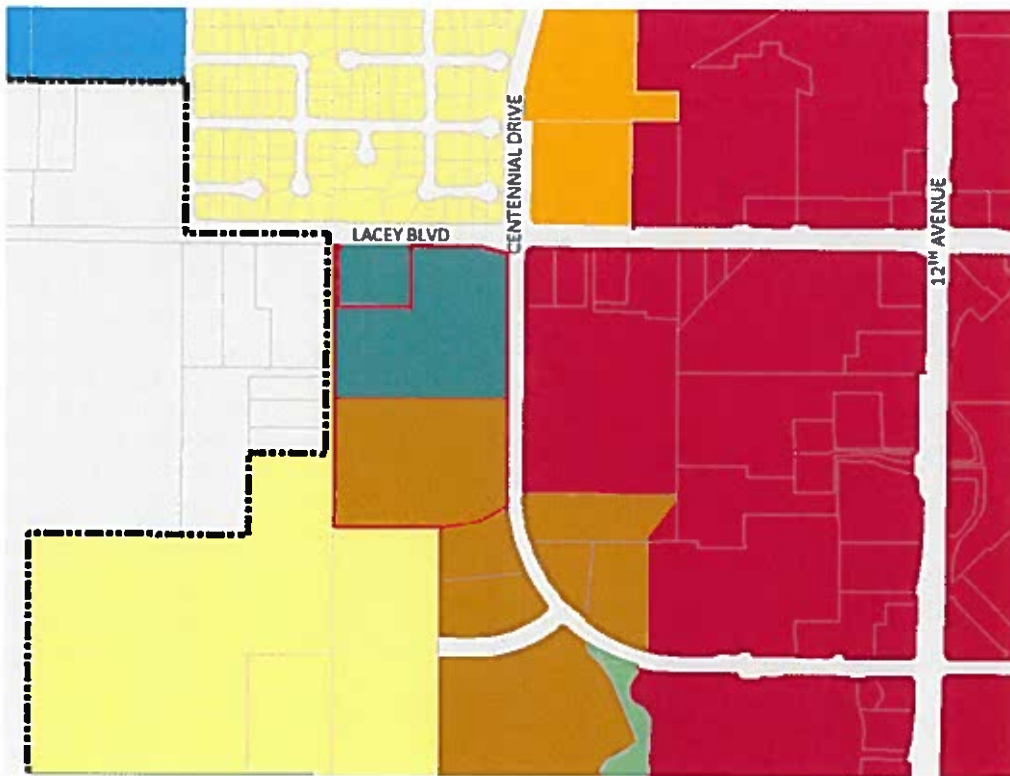


Exhibit B:
Mitigation Monitoring and Reporting Program

Attachment: Ordinance No. 17-20 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.		
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures	City to require and ensure compliance; developer and future occupants to adhere
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	That the future development of the project site would be required to comply with all statutes and regulations related to solid waste.	City to require; developer to provide

Exhibit C:
Tentative Parcel Map No. 2017-01

Attachment: Ordinance No. 17-20 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

10.1111/j.1365-3113.2012.00542.x, © 2012 The Authors. Journal compilation © 2012 British Ecological Society, *Journal of Animal Ecology*, 81, 1009–1019

RESOLUTION NO. 17-53-R**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
APPROVING TENTATIVE PARCEL MAP NO. 2017-01, A REQUEST TO DIVIDE A
19.68-ACRE PARCEL INTO ONE PARCEL, PARCEL A, TOTALING 9.48 ACRES,
AND A DESIGNATED REMAINDER, TOTALING 10.2 ACRES. THE PROJECT IS
LOCATED AT THE SOUTHWEST INTERSECTION OF CENTENNIAL DRIVE AND
LACEY BOULEVARD**

At a regular meeting of the City Council of the City of Hanford, duly called to order and held on November 7, 2017, at 7:00 p.m., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, Tentative Parcel Map No. 2017-01 is a proposal to divide a 19.68-acre parcel into one parcel, Parcel A, totaling 9.48 acres, and a designated remainder, totaling 10.2 acres, as shown in attached **Exhibit A**; and

WHEREAS, the proposed tentative parcel map was presented to the Planning Commission of the City of Hanford; and

WHEREAS, the City of Hanford Planning Commission, at its regularly scheduled meeting on October 10, 2017, held a public hearing and received testimony and evidence for and against the proposed tentative parcel map. After closing the public hearings, the Planning Commission, by resolution, recommended that the City Council of the City of Hanford approve Tentative Parcel Map No. 2017-01; and

WHEREAS, the City Council of the City of Hanford, at its regularly scheduled meeting on November 7, 2017, held a public hearing and received testimony and evidence regarding proposed Tentative Parcel Map No. 2017-01; and

WHEREAS, the City Council of the City of Hanford considered the evidence presented in the staff report and testimony presented during the public hearing; and

WHEREAS, the City Council of the City of Hanford finds that no significant environmental impacts would result from the proposed project with the incorporation of mitigations, as presented in the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**; and

WHEREAS, Mitigated Negative Declaration No. 2017-11 was prepared and adopted; and

WHEREAS, on the basis of the application for the tentative parcel map, the documentation and information provided in the staff report, and the evidence and testimony submitted at the public hearing, the City Council of the City of Hanford hereby makes the following findings, in accordance with Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act:

1. Consistency Finding:

ANALYSIS: That the proposed subdivision is consistent with the applicable General Plan Designation, as proposed under General Plan Amendment No. 2017-03 (A). The proposed subdivision is consistent with the applicable General Plan designation for High-Density Residential for Parcel A and Office for the designated remainder. The designated remainder, which is designated as Office, is 10.20 acres, which meets the size requirement of 10 acres, as required in Policy L76 of the General Plan. There is not a size designation required by the General Plan for High-Density Residential.

2. Design Finding:

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential development, would be required to adhere to the development regulations for High-Density Residential development, in accordance with the Hanford Municipal Code. The designated remainder is remaining as Office land use. Any future development of the designated remainder as office development would be required to adhere to the development regulations pertaining to the Office district, in accordance with the Hanford Municipal Code.

3. Type of Development Finding:

ANALYSIS: That the proposed site is located on vacant flat land and is not located in a flood zone. There is not a physical project proposed, at this time. Parcel A is designated for future R-H High-Density Residential development. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the R-H Zone District. The designated remainder is designated as O Office. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the O Zone District.

4. Density Finding:

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential development, would be limited to the density range prescribed by the General Plan, between 14 to 29 units per gross acre. The designated remainder is remaining as Office land use. There is not a prescribed density for the Office land use.

5. Environmental Finding:

ANALYSIS: That an initial study was conducted; and, on the basis on the initial study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment, with the incorporation of mitigation measures. Mitigated Negative Declaration No. 2017-11 has been prepared for the project.

6. Public Health Finding:

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public.

7. Improvements and Access Findings:

ANALYSIS: The proposed parcels will have street frontage along public streets, Centennial Drive and Lacey Boulevard. Any off-site improvements such as curbs, gutters, sidewalks, drive approaches, and transitional paving, when installed by the developer, will be inspected and/or verified to ensure the design, material, and installation of said improvements meet or exceed standards adopted by the City of Hanford. The design of the subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision.

THEREFORE, BE IT RESOLVED that Tentative Parcel Map No. 2017-01 be approved subject to the following conditions:

ADMINISTRATION DEPARTMENT

Contact the City Attorney: (559) 584-6656

Concerning questions that you may have on the conditions listed below:

Defense and Indemnification Provisions:

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.

PLANNING DEPARTMENT

Contact Associate Planner Gabrielle de Silva (559) 585-2578

concerning questions that you may have on the conditions listed below:

General:

1. That approval of this project does not exempt compliance with all applicable sections of the Uniform Fire and Building Codes, Zoning Ordinance, Public Works Improvement Standards, and other City Ordinances.
2. That all approved proposals of the application be conditions of development if not mentioned herein.

3. That the general design of the parcel map be approved with minor modifications being approved by the Community Development and Public Works Departments.
4. That prior to recording the parcel map, it is to be submitted to the City Engineer and Community Development Department for compliance with the tentative approval.
5. That in accordance with California Government Code Section 66020, the applicant is hereby notified that the 90 day appeal period identified in California Government Code Section 66020 during which you may protest the imposition of the fees, dedications, reservations and other extractions identified in this Tentative Parcel Map No. 2017-01 will begin to run on the date of the approval of this application by the City Council.
6. That the applicant hereby agrees to hold the City of Hanford and all of its departments, officers, agents, and employees free and harmless of and from all claims of any kind or nature arising out of or by reason of the approval of this project.
7. That all conditions cited in the Mitigation, Monitoring, and Reporting Program, attached as **Exhibit B**, shall also become conditions of approval of this Tentative Parcel Map.
8. That the development of Parcel A be limited to developing consistent with the General Plan and Zoning Designation for the parcel, which is R-H High-Density Residential, as amended by General Plan Amendment No. 2017-03 (A) and Rezone No. 2017-01.
9. That the development of the designated remainder be limited to developing consistent to the General Plan and Zoning Designation for the parcel, which is O Office.
10. That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.

BUILDING DIVISION

Contact Building Official: Tom Webb (559) 585-2584

Concerning questions that you may have on the conditions listed below:

1. New lot lines shall not create any violations to current building codes or Municipal Codes.
2. Any future development will be required to meet the building codes at the time of construction.

PUBLIC WORKS DEPARTMENT

Contact Samantha Long, Assistant Engineer at (559) 585-2556
concerning questions that you may have on the conditions listed below:

General Requirements:

1. That the development shall comply with all applicable City of Hanford Standards and Specifications, latest edition. Any deviation from said Standards and Specifications must be approved by the City Engineer prior to construction.
2. That encroachment permits for all work proposed within the public street right-of-way shall be obtained from the Public Works Department prior to beginning construction. For additional information contact the City Engineering Division at (559) 585-2558.
3. That work permitted within the public street right of way is subject to engineering plan review and inspection fees in accordance with City Resolution NO. 92-58-R., or any revision thereof. Subject fees shall be payable prior to approval of improvement plans.

Dedications Requirements:

1. The 12 ½ Avenue street right of way alignment depicted on the tentative map shall also be delineated, dimensioned, and dedicated on the final Parcel Map.

Street Improvements Requirements:

1. That City Standard street frontage improvements, including but not limited to, concrete curbs, gutters, commercial sidewalks, pave-out, and drive approaches provided with ADA access crossing, shall be constructed on Parcel "A" frontages. This improvement requirement may be deferred until development of the Parcel "A" and shall be noted by a statement on the final Parcel Map.

Sewer Service Requirements:

1. That a separate sanitary sewer lateral shall be provided to serve Parcels "A" in conformance with City Standards, unless otherwise determined by the City Engineer. New sewer services shall be bored to the main. This improvement requirement may be deferred until development of the Parcel "A" and shall be noted by a statement on the final Parcel Map.

Storm Drainage Improvements:

1. That a Drainage/Site Improvement Plan be required for each parcel prior to any construction. This improvement requirement may be deferred until development of parcels & shall be noted by a statement on the final Parcel Map.

Water Service Requirements:

1. That a separate water service assembly shall be provided to serve Parcels "A" in conformance with City Standards, unless otherwise determined by the City Engineer. New

water services shall be bored to the main. This improvement requirement may be deferred until development of the parcels and shall be noted by a statement on the final Parcel Map.

City Development Impact Fees:

1. That development is subject to a Police Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
2. That development is subject to a Fire Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
3. That development is subject to a Park Development Impact Fee as required by City Ordinance No. 90-10 and any revisions thereof. Fee payable with each building permit.
4. That development is subject to a Transportation mitigation impact fee as required by City Ordinance No. 90-09 and any revisions thereof. Fee payable with each building permit.
5. That the development is subject to a Wastewater System Development Impact fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
6. That development is subject to a Water System Development Impact Fee as required by City Ordinance No. 98-14 or any revisions thereof. Fee payable with each building permit.
7. That development is subject to a Refuse and Recycling Development Impact Fee as required by City Ordinance No. 05-16 or any revisions thereof. Fee payable with each building permit.
8. That development is subject to a Storm Drainage Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable prior to recording of subdivision final map.
9. That development is subject to a 12th Avenue Sanitary Sewer area of benefit district assessment fee as required by City Ordinance No. 92-03 or any revisions thereof, if applicable. Fee shall be payable prior to recording to recording of final subdivision map.

KINGS COUNTY AREA PUBLIC TRANSIT (KART)

Contact Mark Pedreiro, Facilities and Fleet Specialist at (559) 852-2624

Concerning questions that you may have on the conditions listed below:

1. That KART requires a bus stop at this location. A section of sidewalk seven feet wide from curb to back of sidewalk would be required in order to accommodate a sign, a bench, and four feet of ADA-clearance.
2. That the bus stop be located as shown in attached **Exhibit C**.

EXPIRATION

This Tentative Parcel Map becomes null and void after eighteen (18) months has elapsed from the date of approval if the map has not been recorded. The City Council may grant a time extension if a written request and fee is received from the applicant prior to the expiration date. The time extension, if approved, will be subject to the improvement standards and fees in effect at the time the extension for the Tentative Parcel Map is granted.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Hanford hereby approves Tentative Parcel Map No. 2017-01. Passed and adopted at a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS
MAYOR of the City of Hanford

Attest:

JENNIFER GOMEZ
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, Jennifer Gomez, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the __ day of _____, 2017.

Date: _____

City Clerk

Exhibit A
Tentative Parcel Map No. 2017-01

Attachment: Resolution No. 17-53-R (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

Packet Pg. 477

Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Resolution No. 17-53-R (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

**Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11**

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.		
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures	City to require and ensure compliance; developer and future occupants to adhere
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	That the future development of the project site would be required to comply with all statutes and regulations related to solid waste.	City to require; developer to provide

Exhibit C
KART Comment

Attachment: Resolution No. 17-53-R (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

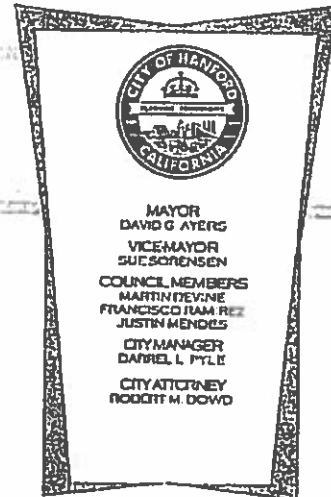
City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET

September 14, 2017

PROJECT REVIEW - CONSULTATION NOTICE

For: General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01,
and Tentative Parcel Map No. 2017-01.



The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01. The project has three components. Tentative Parcel Map No. 2017-01 is a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. General Plan Amendment No. 2017-03 is a request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01 is a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042). No physical development is proposed for the project area at this time. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by October 6, 2017 via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

COMMUNITY DEVELOPMENT DEPARTMENT 559-585-2580 ♦ FACSIMILE: 559-583-1633

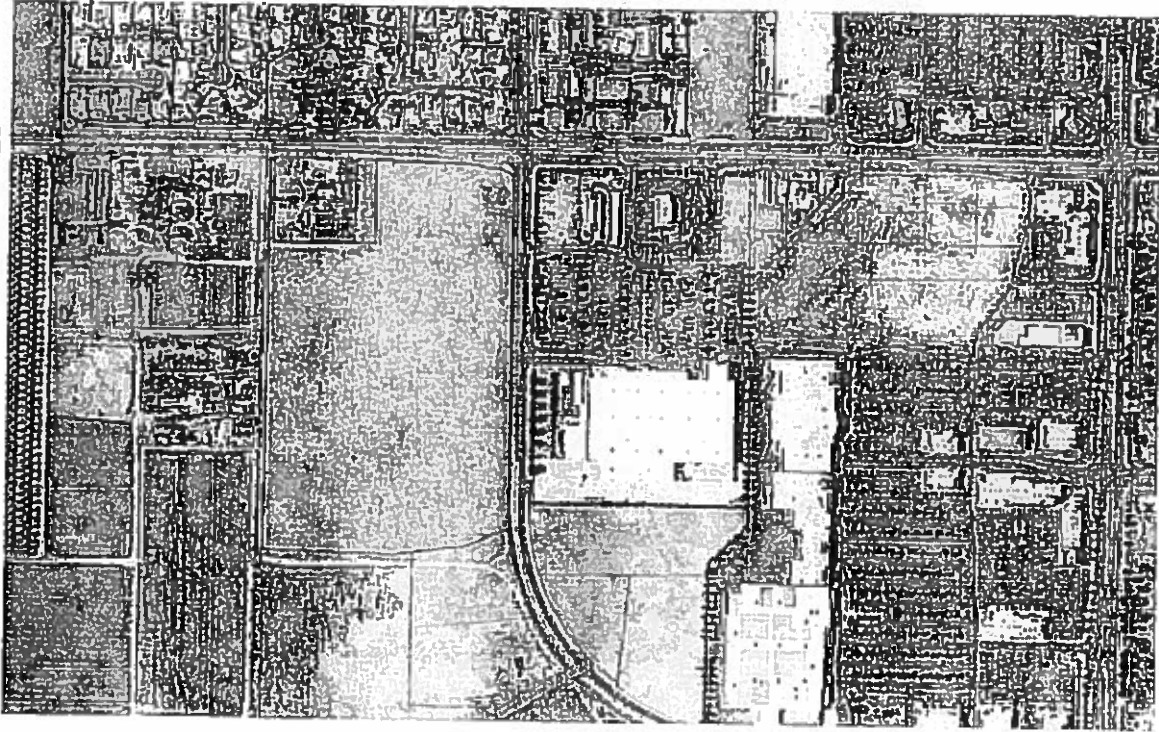
Attachment: Resolution No. 17-53-R (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01)

I ☒ do ☐ do not have comments regarding this Project

Mark B. Davis KART 7/21/17
Signature Agency Date

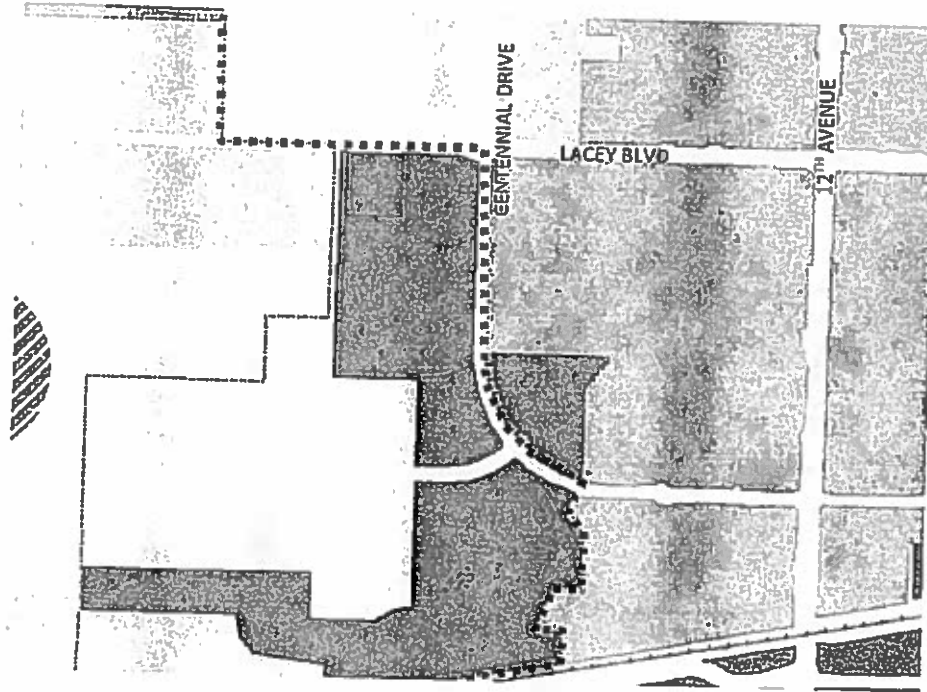
KART WOULD LIKE CONSIDERATION FOR A BUS STOP. A SECTION OF
SIDEWALK 7' WIDE FROM CURB TO BACK OF SIDEWALK. WITH 7' WE CAN
FIT A SIGN BENCH AND 4' OF ADA CLEARANCE.

Land Use:
Vacant
(Property outlined in red)

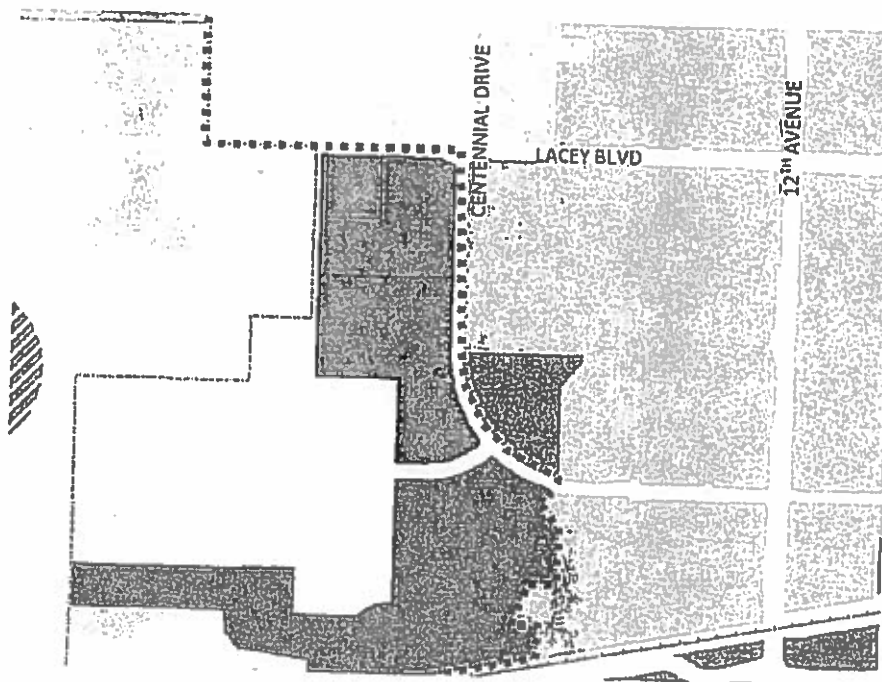


STIPULATED BY AGREEMENT OF THE PARTIES
NOTICE OF DISCREPANCY

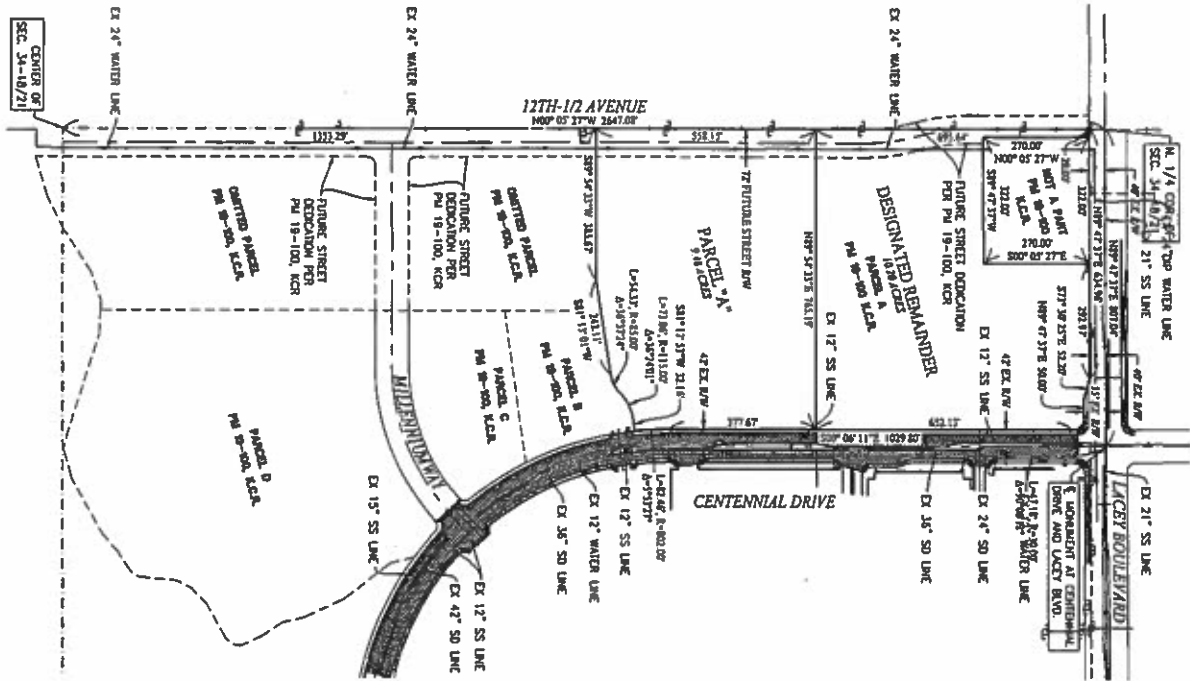
General Plan Designation:
Existing: Office
(Property outlined in red)



General Plan Designation:
Proposed: High-Density Residential
(Property outlined in red)



SUBJECT TO REVISION



- LEGEND**
- EXISTING PATHWAY
 - EXISTING CONCRETE
 - EXISTING ASPHALT
 - EXISTING WATER LINE
 - EXISTING STORM DRAIN LINE
 - EXISTING OVERHEAD ELECTRICAL LINE
 - EXISTING UTILITY POLE

VESTING TENTATIVE PARCEL MAP

Parcel A of Parcel Map provided in Book 19 of Page 100 of Kings County Records, being a portion of the Hanford Quarter of Section 34, T. 18 S., R. 21 E., M.D.B.A. 14, in the City of Hanford, County of Kings, State of California.

OWNER

HANFORD SQUARE, LLC
C/O GARY GAYN
1400 GAYN VISTA RD.
PO BOX 1, CA 93244
TEL: (415) 953-1444

GENERAL INFORMATION

Existing Zone: O
Proposed Zone: B-1
Existing Use: VACANT
Proposed Use: MULTI-FAMILY RESIDENTIAL
City of Hanford
City of Hanford
APN: 011-029-042

APPLICANT

VILLAGE AT HANFORD SQUARE, LLC
DANIEL N. BAILEY, MANAGER
400 E. ROBERT TRAIL
PALM SPRINGS, CA 92264
TEL: (909) 225-1177



VESTING TENTATIVE PARCEL MAP FOR VILLAGE AT HANFORD SQUARE, LLC

FOR REVIEW ONLY
PRELIMINARY

CAL ENGINEERS
ZUMWALT
HANSEN &
LAND SURVEYORS
609 N. Lincoln St.
Hanford, CA 93230
Office: (559) 582-0656
Fax: (559) 584-4143

DRAWN BY: JH
CHECKED BY: Z
DATE: 4/26/2017
JOB NO.: 0732111
SHEET: 1

No.	Revision	Date

William Hofmans DBA
Hofmans Nursery
12491 west Lacey Blvd.
Hanford Ca 93230
(559) 582-1805



October 6, 2017

Received

OCT - 6 2017

Hanford City Planning Department

City of Hanford
Community Development

Dear Hanford City Planning Commission,

RE: Rezoning of the parcel of land to the East and South of Hofmans Nursery (General Plan Amendment) No.2017-03 (A) Location (APN 011-020-042)

I request that you **do not** rezone the proposed area to High Density Residential. Here are my main concerns.

As owner of this 56 year old nursery business, it has been and continues to be essential to spray chemicals on a regular basis, weather permitting, to promote healthy plants, shrubs, trees, etc. for sale. Weeds need to be sprayed on property, also. Spraying is done after 5:00 p.m. for public health and safety reasons according to government regulations and laws: it must be done when no people are present, the spray must be dry before someone reenters the area, spray mist can travel some distance, and some sprays require 24 hours before reentry.

Most of the time, the wind blows from the North West to the South East this is the direct path of the property proposed to be rezoned!

If the zoning changes allow High Density Residential there will, most likely, be many more people around Hofmans' Nursery property at the time of regular spraying. With Office Zoning, most offices are closed **after** 5:00 pm and Saturday nights – normal spraying times for me. Even if offices are not closed at these times, most likely there would be less people present.



From my perspective, having a nursery zoned Office is more compatible with the surrounding area zoned the same. Also, please consider, with a nursery comes some measure of dust, noise, delivery trucks and heavy equipment.

It has been a blessing for me and my family to work in the city of Hanford and be part of its growing community. Thank you in advance for your consideration.

Sincerely,


William Hofmans

RESOLUTION NO. 2017-15

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL OF GENERAL PLAN AMENDMENT NO. 2017-03 (A) TO THE CITY COUNCIL. GENERAL PLAN AMENDMENT NO. 2017-03 (A) IS A REQUEST TO CHANGE THE GENERAL PLAN DESIGNATION ON A 9.48-ACRE PORTION OF A PARCEL FROM OFFICE TO HIGH-DENSITY RESIDENTIAL. THE PROJECT IS LOCATED AT THE SOUTHWEST INTERSECTION OF CENTENNIAL DRIVE AND LACEY BOULEVARD (APN 011-020-042).

At a regular meeting of the Planning Commission of the City of Hanford duly called and held on October 10, 2017, at 7:00 p.m., it was moved by Commissioner **PERICO**, and seconded by Commissioner **DOUGLAS**, that the following resolution be adopted:

WHEREAS, an application, filed by the Village at Hanford Square, LLC, for General Plan Amendment No. 2017-03 (A) requesting a General Plan Amendment to change the General Plan designation on a 9.48-acre portion of a parcel from Office to High-Density Residential, as shown in **Exhibit A**, was presented to the Hanford City Planning Commission on October 10, 2017; and

WHEREAS, the City of Hanford Planning Commission considered the general plan amendment, in accordance with Section 17.88 of the Hanford Municipal Code, at its regularly scheduled meeting on October 10, 2017; and,

WHEREAS, the City of Hanford Planning Commission considered the evidence presented in the staff report and testimony presented during the public hearing; and,

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-11, and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies; and

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-11 was prepared consistent with CEQA and City of Hanford Environmental Guidelines.

BE IT FURTHER RESOLVED that the City of Hanford Planning Commission, in accordance with Section 17.88.040 of the Hanford Municipal code, recommends approval to the City Council of General Plan Amendment No. 2017-03 (A), based upon the following findings and on the evidence presented:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (A) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs-rich area. The proposal to change the designation from Office to High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on Parcel A of Tentative Parcel Map No. 2017-01 and Office uses on the designated remainder. General Plan Policies L 38, L41, L40 and L50 promote the location of high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

PASSED AND ADOPTED at a regular meeting of the City of Hanford Planning Commission by the following vote:

AYES:	Commissioners	PERICO, DOUGLAS, HAM, GALVAN, PADEN, SANCHEZ, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, **Darlene R. Mata**, Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 10th day of October 2017.



Darlene R. Mata

Exhibit A
General Plan Amendment No. 2017-03 (A)

General Plan Designation:
Existing: Office



General Plan Designation: Proposed: under General Plan Amendment No. 2017-03 (A)
High-Density Residential (this is a representation only)

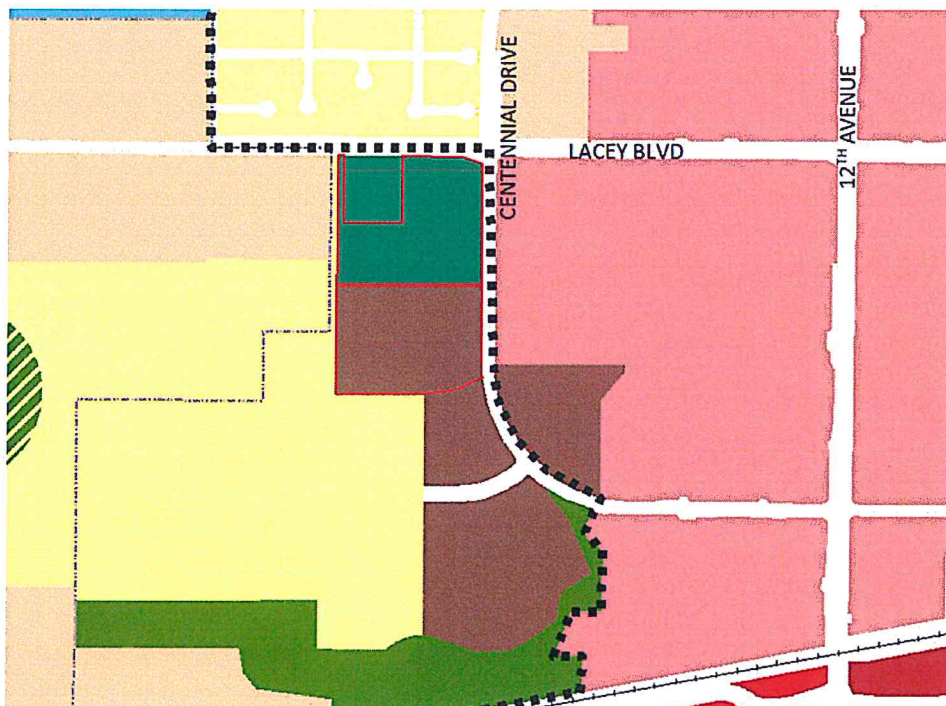


Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Exhibit C (1) -Signed Resolution No. 2017-15 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel

Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.		
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures	City to require and ensure compliance; developer and future occupants to adhere
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	That the future development of the project site would be required to comply with all statutes and regulations related to solid waste.	City to require; developer to provide

RESOLUTION NO. 2017-16

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL TO THE CITY COUNCIL OF REZONE NO. 2017-01. THE PROJECT IS A REQUEST TO CHANGE THE ZONING DESIGNATION ON A 9.48-ACRE PORTION OF A PARCEL FROM O OFFICE TO R-H HIGH-DENSITY RESIDENTIAL. THE PROJECT IS LOCATED AT THE SOUTHWEST INTERSECTION OF CENTENNIAL DRIVE AND LACEY BOULEVARD (APN 011-020-042).

At a regular meeting of the City of Hanford Planning Commission duly called and held on October 10, 2017, on motion of Commissioner **DOUGLAS**, seconded by Commissioner **PERICO**, and duly carried, the following resolution was adopted:

WHEREAS, an application, filed by the Village and Hanford Square, LLC, for Rezone No. 2017-01, requesting a zone change on a 9.48-acre portion of a parcel from O Office to R-H High-Density Residential, as shown in **Exhibit A**, was presented to the Hanford City Planning Commission on October 10, 2017; and

WHEREAS, the City of Hanford Planning Commission considered the rezone, in accordance with Section 17.86 of the Hanford Municipal Code, at its regularly scheduled meeting on October 10, 2017; and,

WHEREAS, the City of Hanford Planning Commission considered the evidence presented in the staff report and testimony presented during the public hearing; and,

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-11, and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies;

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-11 was prepared consistent with CEQA and City of Hanford Environmental Guidelines.

BE IT FURTHER RESOLVED that the City of Hanford Planning Commission, in accordance with Section 17.86.030 of the Hanford Municipal Code, recommends approval to the City Council of Rezone No. 2017-01, based upon the following findings and on the evidence presented:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-01 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with L38, L40, L41, and L50. The plan is consistent with the Hanford Municipal Code. All regulations pertaining to R-H High-Density Residential and O Office will be required of development, accordingly.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Department, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the designation from O Office to R-H High-Density Residential on 9.48 acres will not affect the City's ability to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be High-Density Residential on Parcel A of Tentative Parcel Map No. 2017-01 and Office uses on the designated remainder. General Plan Policies L38, L41, L40, and L50 promote the location of high-density residential near commercial and office uses. The uses are compatible with existing and future surrounding uses.

PASSED AND ADOPTED at a regular meeting of the City of Hanford Planning Commission by the following vote:

AYES:	Commissioners	DOUGLAS, PERICO, HAM, GALVAN, PADEN, SANCHEZ, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

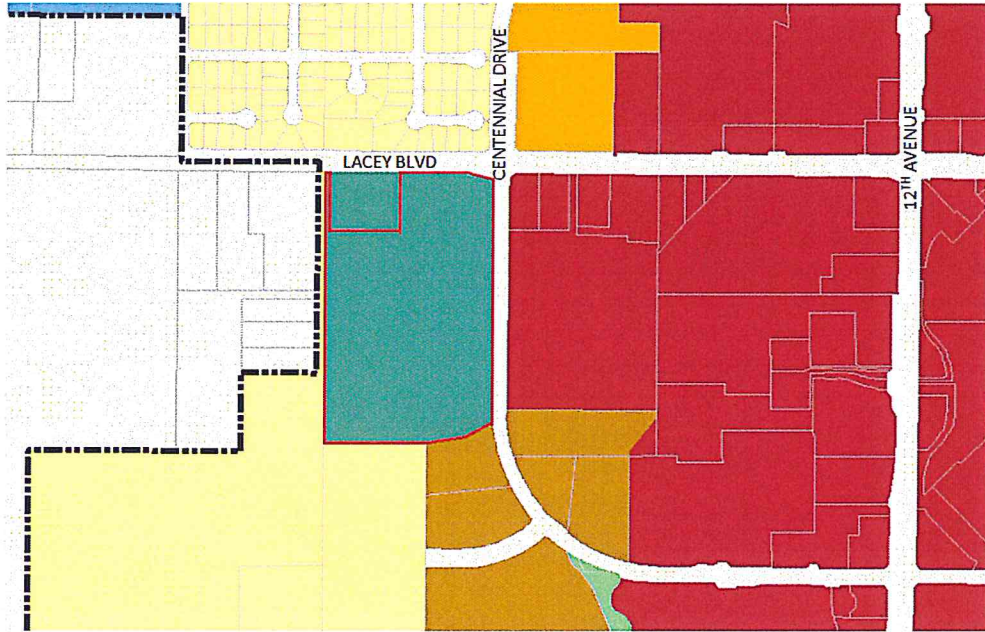
STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, **Darlene R. Mata**, Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 10th day of October 2017.

Darlene R. Mata

Exhibit A
Rezone No. 2017-01

Zoning Designation:
Existing: O Office



Zoning Designation: Proposed under Rezone No. 2017-01
R-H High-Density Residential (this is a representation only)

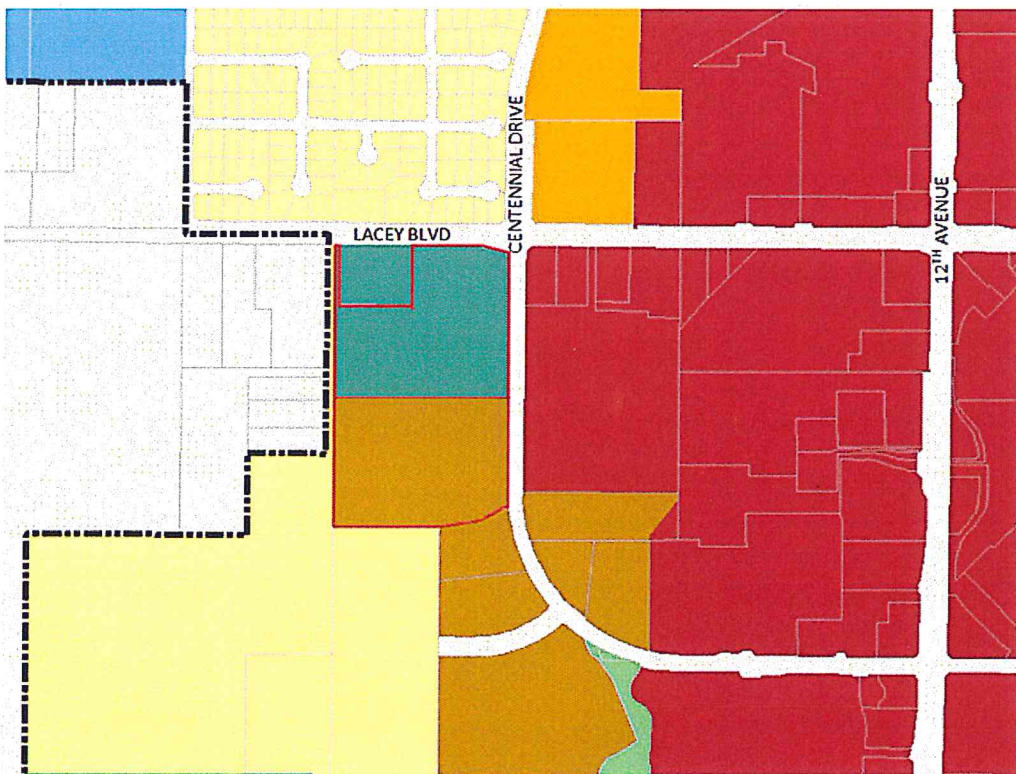


Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Exhibit C (2) -Signed Resolution No. 2017-16 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel

Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.	
UTILITIES AND SERVICE SYSTEMS		
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	City to require and ensure compliance; developer and future occupants to adhere
		City to require; developer to provide

RESOLUTION NO. 2017-17

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL OF TENTATIVE PARCEL MAP NO. 2017-01 TO THE CITY COUNCIL. THE PROJECT IS A REQUEST TO DIVIDE THE 19.68-ACRE PARCEL, LOCATED AT APN 011-020-042, INTO ONE PARCEL, TOTALING 9.48 ACRES (PARCEL A), AND A DESIGNATED REMAINDER, TOTALING 10.2 ACRES. THE PROJECT IS LOCATED AT THE SOUTHWEST CORNER OF CENTENNIAL DRIVE AND LACEY BOULEVARD (APN 011-020-042).

At a regular meeting of the City of Hanford Planning Commission duly called and held on October 10, 2017 on motion of Commissioner **HAM**, seconded by Commissioner **SANCHEZ**, and duly carried, the following resolution was adopted:

WHEREAS, on October 10, 2017, the Planning Commission of the City of Hanford conducted a public hearing, in accordance with Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act, pertaining to Tentative Parcel Map No. 2017-01, a request to divide the 19.68-acre parcel, located at APN 011-020-042, into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres; and

WHEREAS, Tentative Parcel Map No. 2017-01 has been reviewed by the Planning Commission of the City of Hanford as an advisory agency, in accordance with Title 16 of the Hanford Municipal Code; and

WHEREAS, the configuration of the proposed parcels are shown on attached **Exhibit A**; and

WHEREAS, staff, all affected public utility companies, various governmental department agencies, and the Planning Commission have given careful consideration to this tentative subdivision map and have made recommendations thereon; and

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-11 and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies; and

WHEREAS, the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-11 was prepared consistent with CEQA and City of Hanford Environmental Guidelines; and

WHEREAS, on the basis of the facts and evidence provided in the staff report and the written and oral evidence presented at the public hearing, the Planning Commission hereby makes the following findings pursuant to Section 16.04.010 of the Subdivision Ordinance Code and Section 66474 of the Subdivision Map Act:

1. Consistency Finding:

ANALYSIS: That the proposed subdivision is consistent with the applicable General Plan Designation, as proposed under General Plan Amendment No. 2017-03 (A). The proposed subdivision is consistent with the applicable General Plan designation for High-Density

Residential for Parcel A and Office for the designated remainder. The designated remainder, which is designated as Office, is 10.20 acres, which meets the size requirement of 10 acres, as required in Policy L76 of the General Plan. There is not a size designation required by the General Plan for High-Density Residential.

2. Design Finding:

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential development, would be required to adhere to the development regulations for High-Density Residential development, in accordance with the Hanford Municipal Code. The designated remainder is remaining as Office land use. Any future development of the designated remainder as office development would be required to adhere to the development regulations pertaining to the Office district, in accordance with the Hanford Municipal Code.

3. Type of Development Finding:

ANALYSIS: That the proposed site is located on vacant flat land and is not located in a flood zone. There is not a physical project proposed, at this time. Parcel A is designated for future R-H High-Density Residential development. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the R-H Zone District. The designated remainder is designated as O Office. Any future development of the site would be subject to the applicable requirements of the Hanford Municipal Code for the O Zone District.

4. Density Finding: that the site is physically suitable for the proposed density of development.

ANALYSIS: That there is not a physical project proposed at this time for Parcel A or the designated remainder. Parcel A, which is designated for High-Density Residential development, would be limited to the density range prescribed by the General Plan, between 14 to 29 units per gross acre. The designated remainder is remaining as Office land use. There is not a prescribed density for the Office land use.

5. Environmental Finding:

ANALYSIS: That an initial study was conducted; and, on the basis on the initial study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment, with the incorporation of mitigation measures. Mitigated Negative Declaration No. 2017-11 has been prepared for the project. The initial study, Mitigated Negative Declaration No. 2017-11, and mitigation measures required of development are attached as **Exhibit B**.

6. Public Health Finding:

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any improvements or mitigations required for public health and safety were applied to the proposal and required in the conditions of approval. The City of Hanford Building Division is responsible for ensuring that future construction of the site follows adopted building codes, thus reducing exposures to accidents to the general public.

7. Improvements and Access Findings:

ANALYSIS: The proposed parcels will have street frontage along public streets, Centennial Drive and Lacey Boulevard. Any off-site improvements such as curbs, gutters, sidewalks, drive approaches, and transitional paving, when installed by the developer, will be inspected and/or verified to ensure the design, material, and installation of said improvements meet or exceed standards adopted by the City of Hanford. The design of the subdivision and type of improvements will not conflict with easements acquired by the public at large for access through or use of the property within the proposed subdivision.

THEREFORE, BE IT RESOLVED that Tentative Parcel Map No. 2017-01 be approved subject to the following conditions:

ADMINISTRATION DEPARTMENT

Contact the City Attorney: (559) 584-6656

Concerning questions that you may have on the conditions listed below:

Defense and Indemnification Provisions:

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.
2. That the applicant's obligations to defend, indemnify and hold the City, its officials, officers and employees, representatives, agents and attorneys harmless under the provisions of this paragraph shall include, but not be limited to, the cost of preparation of any administrative record by City, staff time, copying costs, court costs, the costs of any judgments or awards against the City for damages, losses, litigation costs, or attorney's fees arising out of a suit or challenge contesting the adequacy of any approval of the environmental document, or any approval related to the Project, and the costs of any settlement representing damages, litigation costs and attorney's fees to be paid to other parties arising out of a suit or challenge contesting the adequacy of the approval of the environmental document or any other approval related to the Project, if the settlement so provides.
3. That the City may, at any time, require the applicant to reimburse City for costs that have been, or which the City reasonably anticipates will be, incurred by the City during the course of any action. Applicant shall reimburse City within thirty (30) days of receipt of an itemized written invoice from City. Failure of the Applicant to timely reimburse the City shall be considered a material violation of the conditions of approval of the Project.
4. That the applicant shall comply with and shall require all contractors to comply with all prevailing wage laws, rules and regulations applicable to the Project. Unless otherwise advised in writing by the City of Hanford, Applicant shall be solely responsible for making any and all decisions regarding whether any portion or aspect of the Project, including,

without limitation, any form of reimbursement by the City of Hanford to the Applicant or any contractor, will require the payment of prevailing wages. Further, Applicant will be solely responsible for the payment of any claims, fines, penalties, reimbursements, payments or any other actions that may be initiated against Applicant or any contractor as a result of failure to pay prevailing wages.

5. That the applicant shall defend, indemnify, and hold harmless the City of Hanford, its officials, officers, employees, representatives, agents and attorneys, from and against any and all claims, damages, losses, judgments, liabilities, expenses and other costs, including, without limitation, litigation costs and attorney's fees, arising out of, resulting from, or in any way in connection with any violation or claim of violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the Project. Applicant's obligation to defend, indemnify and hold the City of Hanford harmless specifically includes, but is not limited to, any suit or administrative action against the City of Hanford which claims a violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the Project.
6. That the applicant obligations to defend, indemnify and hold the City of Hanford, its officials, officers, employees, representatives, agents and attorneys harmless as set forth herein, shall include, but shall not be limited to, staff time, copying costs, court costs, the costs of any judgments or awards against the City of Hanford for damages, losses, litigation costs, or attorney fees arising out of any violation or claim of violation of any prevailing wage law, rule or regulation applicable to any portion or aspect of the Project and costs of any settlement representing damages, litigation costs and attorney's fees to be paid to other parties arising out of any such proceeding or suit.
7. That the City of Hanford may, at any time, require the Applicant to reimburse the City of Hanford for costs that have been, or which the City of Hanford reasonably anticipates will be, incurred by the City of Hanford during the course of any action. Applicant shall reimburse the City of Hanford within thirty (30) days of receipt of an itemized written invoice from the City of Hanford. Failure of the Applicant to timely reimburse the City of Hanford shall be considered a material violation of the conditions of approval of the Project.

PLANNING DEPARTMENT

Contact Associate Planner Gabrielle de Silva (559) 585-2578
concerning questions that you may have on the conditions listed below:

General:

1. That approval of this project does not exempt compliance with all applicable sections of the Uniform Fire and Building Codes, Zoning Ordinance, Public Works Improvement Standards, and other City Ordinances.
2. That all approved proposals of the application be conditions of development if not mentioned herein.
3. That the general design of the parcel map be approved with minor modifications being approved by the Community Development and Public Works Departments.
4. That prior to recording the parcel map, it is to be submitted to the City Engineer and Community Development Department for compliance with the tentative approval.

5. That in accordance with California Government Code Section 66020, the applicant is hereby notified that the 90 day appeal period identified in California Government Code Section 66020 during which you may protest the imposition of the fees, dedications, reservations and other extractions identified in this Tentative Parcel Map No. 2017-01 will begin to run on the date of the approval of this application by the Planning Commission.
6. That the applicant hereby agrees to hold the City of Hanford and all of its departments, officers, agents, and employees free and harmless of and from all claims of any kind or nature arising out of or by reason of the approval of this project.
7. That all conditions cited in the Mitigation, Monitoring, and Reporting Program, attached as **Exhibit B**, shall also become conditions of approval of this Tentative Parcel Map.
8. That the development of Parcel A be limited to developing consistent with the General Plan and Zoning Designation for the parcel, which is R-H High-Density Residential, as amended by General Plan Amendment No. 2017-03 (A) and Rezone No. 2017-01.
9. That the development of the designated remainder be limited to developing consistent to the General Plan and Zoning Designation for the parcel, which is O Office.

BUILDING DIVISION

Contact Building Official: Tom Webb (559) 585-2584
Concerning questions that you may have on the conditions listed below:

1. New lot lines shall not create any violations to current building codes or Municipal Codes.
2. Any future development will be required to meet the building codes at the time of construction.

PUBLIC WORKS DEPARTMENT

Contact Samantha Long, Assistant Engineer at (559) 585-2556
concerning questions that you may have on the conditions listed below:

General Requirements:

1. That the development shall comply with all applicable City of Hanford Standards and Specifications, latest edition. Any deviation from said Standards and Specifications must be approved by the City Engineer prior to construction.
2. That encroachment permits for all work proposed within the public street right-of-way shall be obtained from the Public Works Department prior to beginning construction. For additional information contact the City Engineering Division at (559) 585-2558.
3. That work permitted within the public street right of way is subject to engineering plan review and inspection fees in accordance with City Resolution NO. 92-58-R., or any revision thereof. Subject fees shall be payable prior to approval of improvement plans.

Dedications Requirements:

1. The 12 ½ Avenue street right of way alignment depicted on the tentative map shall also be delineated, dimensioned, and dedicated on the final Parcel Map.

Street Improvements Requirements:

1. That City Standard street frontage improvements, including but not limited to, concrete curbs, gutters, commercial sidewalks, pave-out, and drive approaches provided with ADA access crossing, shall be constructed on Parcel "A" frontages. This improvement requirement may be deferred until development of the Parcel "A" and shall be noted by a statement on the final Parcel Map.

Sewer Service Requirements:

1. That a separate sanitary sewer lateral shall be provided to serve Parcels "A" in conformance with City Standards, unless otherwise determined by the City Engineer. New sewer services shall be bored to the main. This improvement requirement may be deferred until development of the Parcel "A" and shall be noted by a statement on the final Parcel Map.

Storm Drainage Improvements:

1. That a Drainage/Site Improvement Plan be required for each parcel prior to any construction. This improvement requirement maybe deferred until development of parcels & shall be noted by a statement on the final Parcel Map.

Water Service Requirements:

1. That a separate water service assembly shall be provided to serve Parcels "A" in conformance with City Standards, unless otherwise determined by the City Engineer. New water services shall be bored to the main. This improvement requirement may be deferred until development of the parcels and shall be noted by a statement on the final Parcel Map.

City Development Impact Fees:

1. That development is subject to a Police Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
2. That development is subject to a Fire Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
3. That development is subject to a Park Development Impact Fee as required by City Ordinance No. 90-10 and any revisions thereof. Fee payable with each building permit.
4. That development is subject to a Transportation mitigation impact fee as required by City Ordinance No. 90-09 and any revisions thereof. Fee payable with each building permit.
5. That the development is subject to a Wastewater System Development Impact fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable with each building permit.
6. That development is subject to a Water System Development Impact Fee as required by City Ordinance No. 98-14 or any revisions thereof. Fee payable with each building permit.

7. That development is subject to a Refuse and Recycling Development Impact Fee as required by City Ordinance No. 05-16 or any revisions thereof. Fee payable with each building permit.
8. That development is subject to a Storm Drainage Development Impact Fee as required by City Ordinance No. 98-14, and any revisions thereof. Fee payable prior to recording of subdivision final map.
9. That development is subject to a 12th Avenue Sanitary Sewer area of benefit district assessment fee as required by City Ordinance No. 92-03 or any revisions thereof, if applicable. Fee shall be payable prior to recording of final subdivision map.

KINGS COUNTY AREA PUBLIC TRANSIT (KART)

Contact Mark Pedreiro, Facilities and Fleet Specialist at (559) 852-2624
Concerning questions that you may have on the conditions listed below:

1. That KART requires a bus stop at this location. A section of sidewalk seven feet wide from curb to back of sidewalk would be required in order to accommodate a sign, a bench, and four feet of ADA-clearance.
2. That the bus stop be located as shown in attached **Exhibit C**.

EXPIRATION

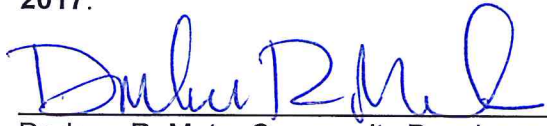
This Tentative Parcel Map becomes null and void after eighteen (18) months has elapsed from the date of approval if the map has not been recorded. The Commission may grant a time extension if a written request and fee is received from the applicant prior to the expiration date. The time extension, if approved, will be subject to the improvement standards and fees in effect at the time the extension for the Tentative Parcel Map is granted.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Hanford by the following vote:

AYES:	Commissioners	HAM, SANCHEZ, GALVAN, PADEN, DOUGLAS PERICO, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

STATE OF CALIFORNIA)
COUNTY OF KINGS)ss
CITY OF HANFORD)

I, **DARLENE R. MATA** Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the **10th** day of **October**, **2017**.



Darlene R. Mata, Community Development Director
Secretary of the Planning Commission

Exhibit A:
Tentative Parcel Map No. 2017-01

Attachment: Exhibit C (3) -Signed Resolution No. 2017-17 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel

P-1008 / IL5707572711 History from 10/06/2017 15:00, 04/20/2017 2:07:22 PM, created by JAL, For Filing

Exhibit B:
Mitigation Monitoring and Reporting Program

**Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11**

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.		
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures	City to require and ensure compliance; developer and future occupants to adhere
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	That the future development of the project site would be required to comply with all statutes and regulations related to solid waste.	City to require; developer to provide

Exhibit C:
KART Bus Stop Location

Attachment: Exhibit C (3) -Signed Resolution No. 2017-17 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel

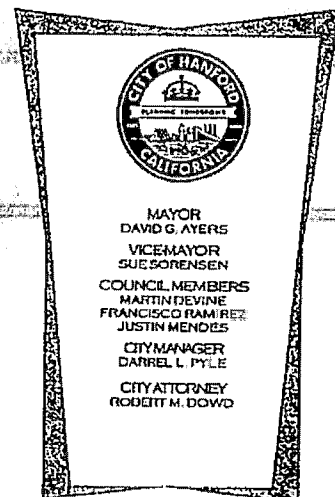
City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET

September 14, 2017

PROJECT REVIEW - CONSULTATION NOTICE

For: General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01,
and Tentative Parcel Map No. 2017-01.



The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01. The project has three components. Tentative Parcel Map No. 2017-01 is a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. General Plan Amendment No. 2017-03 is a request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01 is a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042). No physical development is proposed for the project area at this time. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by October 6, 2017 via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

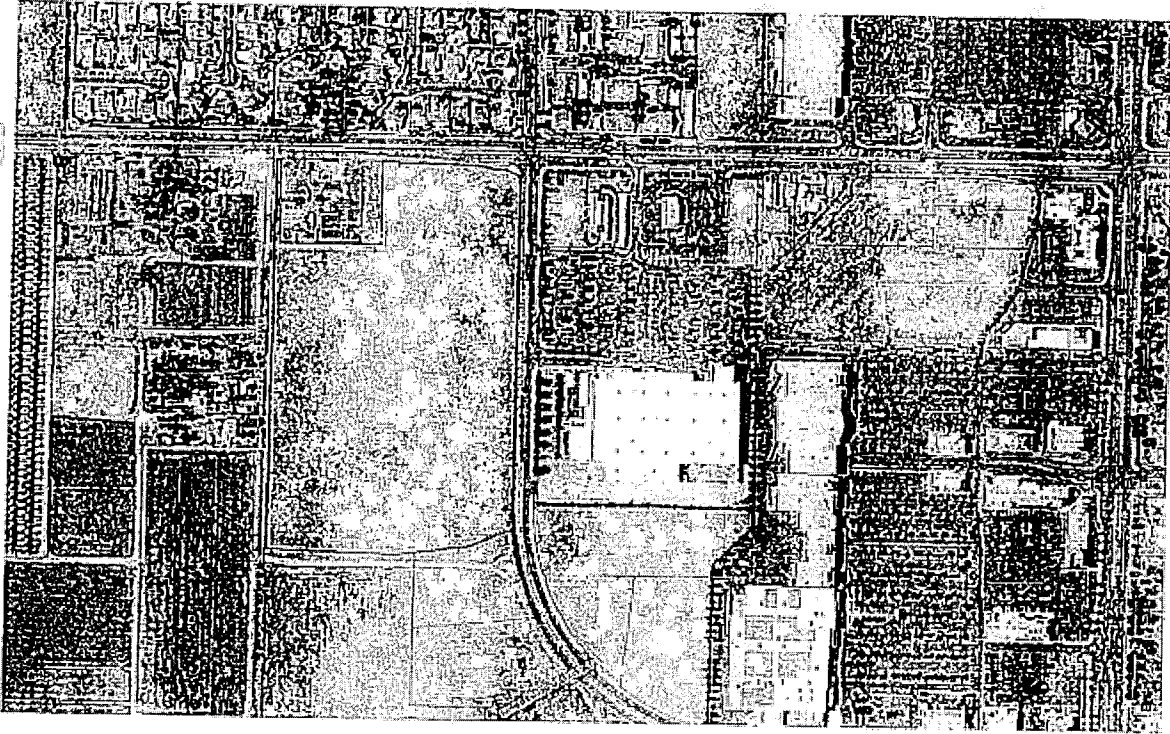
I ☒ do ☐ do not have comments regarding this Project

Mark Bedwine KART 8/21/17
Signature Agency Date

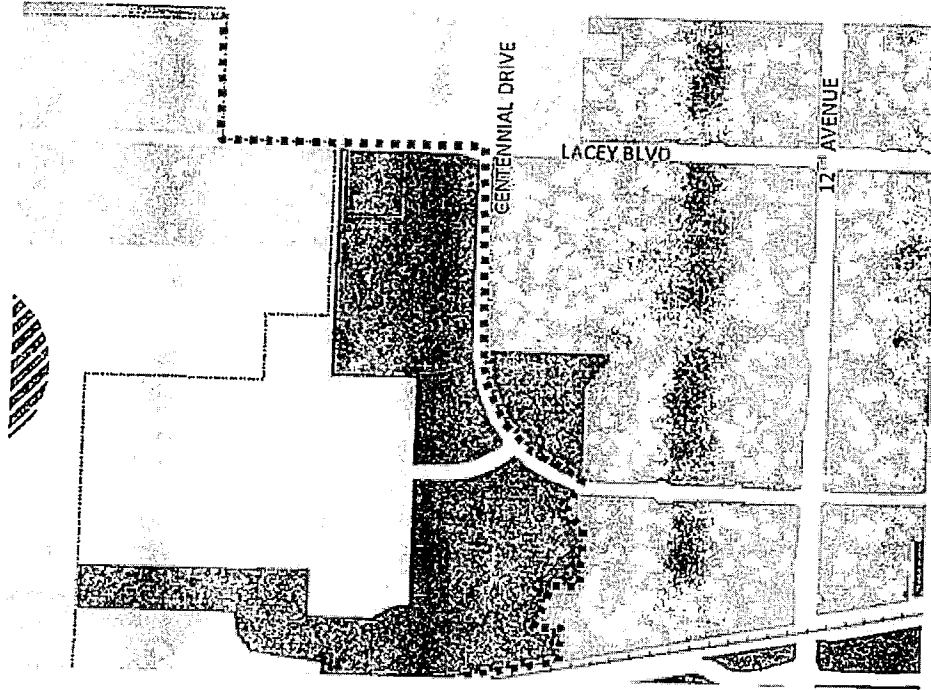
KART WOULD LIKE CONSIDERATION FOR A BUS STOP. A SECTION OF
SIDEWALK 7' WIDE FROM CURB TO BACK OF SIDEWALK. WITH 7' WE CAN
FIT A SIGN + BENCH AND 4' OF ADA CLEARANCE.

Land Use:
Vacant
(Property outlined in red)

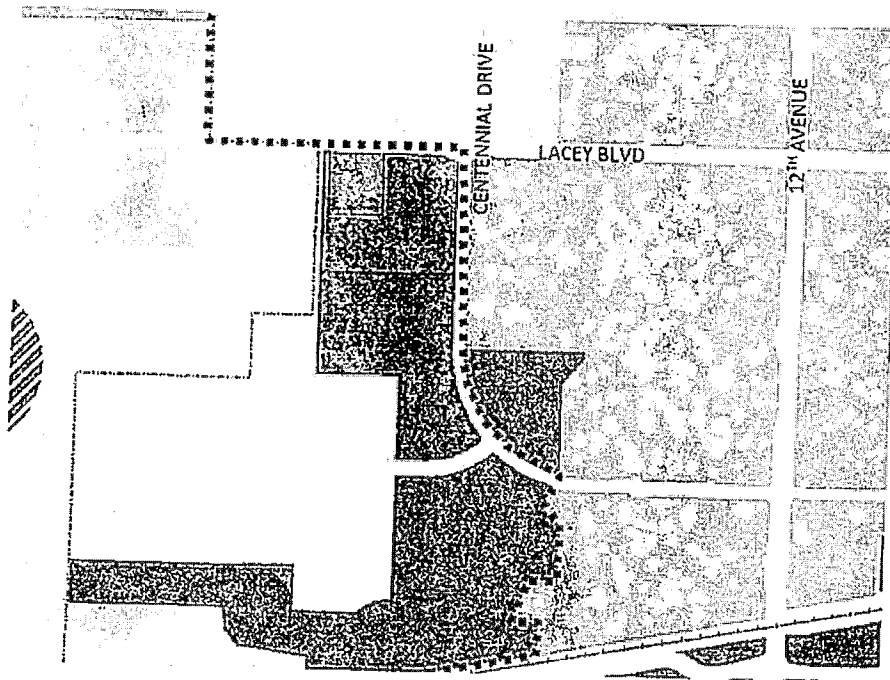
STOP WOULD BE FILLED BY NEW RESIDENTIAL
MICHIGAN STREET ENTRANCE.



General Plan Designation:
Existing: Office
(Property outlined in red)



General Plan Designation:
Proposed: High-Density Residential
(Property outlined in red)



**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
NOTICE OF PUBLIC HEARING**

NOTICE IS HEREBY GIVEN that on Tuesday, October 10, 2017 at 7:00 p.m., a public hearing will be conducted by the Hanford Planning Commission in the Council Chamber of the City of Hanford Civic Auditorium, 400 N. Douty Street, Hanford, California, pertaining to the following:

PROJECT DESCRIPTION AND LOCATION:

TENTATIVE PARCEL MAP NO. 2017-01: a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres.

GENERAL PLAN AMENDMENT NO. 2017-03: A request to change the designation on Parcel A (cited above) from Office to High-Density Residential.

REZONE NO. 2017-01: a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential.

LOCATION: The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. You may review the Mitigated Negative Declaration, Initial Study, proposed mitigation measures, reference material, and any comments received on the Mitigated Negative Declaration at the City of Hanford, 317 N. Douty Street, Hanford, CA 93230.

COMMENT PERIOD: September 15, 2017 – October 6, 2017 [20 day comment period]

PUBLIC COMMENT INVITED: All interested parties are invited to submit written comment on the Mitigated Negative Declaration by October 6, 2017 and/or to appear at the hearing described above to present testimony, in regard to the above-listed request. All comments should be submitted to the City of Hanford, Attention: Gabrielle de Silva, at the above listed address.

If you challenge any action or decision regarding the project described in this notice in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City prior to, or at, the public hearing.

For further information, contact the Hanford Community Development Department at (559) 585-2580 or 317 N. Douty Street, Hanford, California, 93230.

HANFORD COMMUNITY DEVELOPMENT DEPARTMENT

Publish: Friday, September 15, 2017

Attachment: Exhibit D - Mitigated Negative Declaration No. 2017-11 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and

MITIGATED NEGATIVE DECLARATION NO. 2017-11

Project Title: General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01

File Number: GPA 2017-03 (515.0150), RZ 2017-01 (510.0230), and TPM 2017-01 (506.0409)

State Clearinghouse Number: n/a

Lead Agency: City of Hanford

Responsible Agency: N/A

Applicant: Village @ Hanford Square, LLC
(c/o Daniel Bailey)
480 E. Bogert Trail
Palms Springs, CA

Property Owner(s): Hanford Southport, LLC
(c/o Gary Gavin)
14908 Gavan Vista Rd
Poway, CA

Project Description:

TENTATIVE PARCEL MAP NO. 2017-01: a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. **GENERAL PLAN AMENDMENT NO. 2017-03:** A request to change the designation on Parcel A (cited above) from Office to High-Density Residential. **REZONE NO. 2017-01:** a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential.

LOCATION: The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

Attachments:

Initial Study	(X)
Environmental Checklist	(X)
Maps	(X)
Mitigation Measures	(X)
Letters	(X)

Environmental Assessment: The Initial Study for the project is available for public review at the City of Hanford, Community Development Department, 317 N. Douty St., Hanford CA.

Declaration of No Significant Effect: The City of Hanford has completed the preparation of an initial study for the project described above. The initial study did not identify any potentially significant environmental effects that would result from the proposed project. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

- The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The project does not have environmental effects which are individually limited but cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- The environmental effects of the project will not cause substantial adverse effects on human beings, either directly or indirectly.

This Mitigated Negative Declaration has been prepared by the City of Hanford Community Development Department in accordance with the California Environmental Quality Act of 1970, as amended.

Contact Person: Gabrielle de Silva

Phone: (559) 585-2578

Signature: Gabrielle de Silva

Date: September 14, 2017

Review Period: 20 days [September 15, 2017 to October 6, 2017]

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION NO. 2017-11

Prepared For

Village at Hanford Square, LLC (c/o Daniel Bailey)

General Plan Amendment No. 2017-03, Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01

Prepared By

The City of Hanford

September 14, 2017

INITIAL STUDY

INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study and Mitigated Negative Declaration (MND) prepared pursuant to the California Environmental Quality Act (CEQA) for the Project. This MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., and the CEQA Guidelines.

The City of Hanford prepared a General Plan Update and certified a Program level Environmental Impact Report (EIR) on April 18, 2017. The CEQA Guidelines Section 15168 states that subsequent activities must be examined in the light of the program EIR to determine if the later activity would have effects that were not examined in the program EIR. Consistent with 15165, if a project is not otherwise statutorily or categorically exempt from CEQA, an Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, Section 15064, an environmental impact report (EIR) must be prepared if the Initial Study indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and, therefore why it does not require the preparation of an EIR. According to the CEQA Guidelines Section 15070, a negative declaration shall be prepared when either:

- 1) The initial study show there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or
- 2) The Initial Study identified potentially significant effects, but:
 - a) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - b) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If the Initial Study reveals that there may be a significant effect upon the environment, but those effects can be avoided or reduced to a less than significant level with revisions to the project plan and/or mitigation measures, and the applicant agrees to the revision and/or mitigation measures, the lead agency may prepare a mitigated negative declaration.

PROJECT DESCRIPTION:

The project has three components. Tentative Parcel Map No. 2017-01 is a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. General Plan Amendment No. 2017-03 is a request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01 is a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042). No physical development is proposed for the project area at this time. Future development of the project area would be subject to all development regulations and allowed uses of the R-H High-Density Residential District and O-Office District, as they pertain to their respective parcel portions.

ENVIRONMENTAL IMPACTS

No significant adverse environmental impacts have been identified for this project. The City of Hanford Land Use Element, Zoning Ordinance, and Climate Action Plan contain policies and regulations and measures that are designed to mitigate impacts to a level of non-significance. Environmental measures are methods, measures, standard regulations or practices that avoid, reduce, or minimize a project's adverse effects on various environmental resources. Based on the underlying authority, they may be applied before, during, or after construction of the project. Environmental measures are also commonly listed as conditions of approval. The City Municipal Code and other agencies currently contain measures that assist to mitigate environmental impacts. Mitigation measures have been included in the environmental assessment that will mitigate any potential impacts to a level of less than significant.

In addition, a Statement of Overriding Considerations was adopted for Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative). Cultural Resources (program and

cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) for the EIR prepared for the 2035 General Plan Update. The project is being developed consistent with the land use designation that was evaluated in the 2017 General Plan EIR. The General Plan Update and EIR are herein incorporated by reference, including Resolution 17-20-R. Other documents used in the preparation of this environmental assessment are listed as sources and also incorporated by reference.

PROJECT COMPATIBILITY WITH EXISTING ZONES AND PLANS

The proposed General Plan Amendment and Rezone are consistent with the policy of the General Plan and Zoning Ordinance. The change in designation from office to high-density residential on a portion of the property is consistent with the surrounding area.

SUMMARY OF INITIAL STUDY/MITIGATED NEGATIVE DECLARATION IMPACT CONCLUSIONS

An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the projects, General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01, in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the City of Hanford Municipal Code. The IS/MND for the proposed Project is tiered from the 2035 General Plan Update Environmental Impact Report (EIR) (SCH No. 2015041024), certified by the City Council on April 15, 2017, for which a Statement of Overriding Considerations was adopted for Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative), Cultural Resources (program and cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) for the EIR prepared for the 2035 General Plan Update.

The Proposed IS/MND analyzed the Project's potential impacts with regard to the following environmental topical areas: (1) aesthetics, (2) agriculture and forest resources, (3) air quality, (4) biological resources, (5) cultural resources, (6) geology and soils, (7) greenhouse gas emissions, (8) hazards and hazardous materials, (9) hydrology and water quality, (10) land use and planning, (11) mineral resources, (12) noise, (13) population and housing, (14) public services, (15) recreation, (16) transportation/traffic, and (17) utilities and services systems.

The proposed Project, as analyzed in the IS/MND, incorporates all relevant General Plan policies, standards and Mitigation Measures (MMs), as adopted by the 2035 General Plan EIR for purposes of determining environmental impacts of Project implementation. Based on the Project-specific analysis presented in the IS/MND it was determined that the Project in each topical area would have either no impact, a less than significant impact, impacts that could be mitigated to a less than significant level or that project impacts were adequately analyzed in the 2035 General Plan Update EIR. The IS/MND concluded that the proposed Project would have no impact or a less than significant Project-specific impact in the following topical areas: Biological Resources, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, and Population and Housing.

Further, it was concluded that the proposed Project would have less than significant cumulative impacts with mitigation measures. The initial study utilized the full build out of the General Plan Planning Area as the area for consideration of cumulative impacts. Significant and unavoidable impacts to Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative), Cultural Resources (program and cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) were identified with the full build out of the General Plan Planning Area. These impacts were analyzed in the 2035 General Plan EIR and determined to be a significant and unavoidable impact associated with implementation of the 2035 General Plan, of which the Project is a part and consistent with. A Statement of Overriding Considerations for these significant unavoidable impacts was adopted by the City Council as part of the approval of the 2035 General Plan Update. The proposed Project is consistent with and implements the General Plan and would not result in any new impacts that cannot be mitigated to less than significant levels, nor would it increase the severity of any previously identified impacts. Therefore, the Statement of Overriding Considerations is re-affirmed for the proposed Project and a Mitigated Negative Declaration is the recommended appropriate environmental document for the proposed Project, in accordance with CEQA.

CONSULTATION

Pre-consultation was sent to the interested agencies on August 21, 2017. Responses were received from the following:

1. Hanford Elementary School District – Gerry Mulligan
2. Hanford Joint Unified High School District – Cheryl Silva
3. Tachi Yokut Tribe – Shana Powers

SOURCES – hereunto annexed and incorporated by reference

2010 Urban Water Management Plan. (2011, June 11). *City of Hanford* -

California Building Standards Code 2016 (Title 24, California Code Regulations). *Codes*.

City of Hanford 2035 General Plan Update (2017).

City of Hanford General Plan Update, 2035 – Environmental Impact Report. (2017). Hanford, California.

City of Hanford Storm Drainage Water Master Plan (1995, August)

City of Hanford Public Works Construction Standards

City of Hanford Water Master Plan

City of Hanford Waste Water Master Plan

County Important Farmland Data Information. Department of Ag (2012)

Final Staff Report – Climate Change Action Plan: Addressing GHG Emission Impacts under CEQA. (2009, December 17)
San Joaquin Valley Air Pollution Control District Climate Change Action Report.

San Joaquin Valley Air Pollution Control District Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), Revised March 19, 2015.

San Joaquin Valley Air Pollution Control District Small Project Analysis Level (SPAL)

Hanford Municipal Code (Hanford, California). (2017). *Hanford Municipal Code.*

United States Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map for Hanford (Community Panel Number 06031C 0185C, June 16, 2009)

Final Regional Climate Action Plan (May 28, 2014)

Per-Consultation Letters Received:

Consultation from Cheryl Silva of the Hanford Joint Union High School District (August 22, 2017)

Consultation from Shana Powers of the Santa Rosa Rancheria Tachi Yokut Tribe (August 31, 2017)

Consultation from Gerry Mulligan of the Hanford Elementary School District (September 5, 2017)

Description for Rezoning and General Plan amendment

A portion of Parcel A as shown on that certain Parcel Map recorded in Book 19 at Page 100 of Parcel Maps in the Office of the Kings County Recorder, in the City of Hanford, State of California and also being a portion of the NE ¼ of Section 34, T18S, R21E, MDB&M described as follows:

Beginning at the Southwest corner of said Parcel A;

Thence N 0°05'27" W, along the west line of said Parcel A, a distance of 558.15 feet;

Thence N 89°54'05" E a distance of 765.19 feet to a point on the east line of said Parcel A;

Thence S 0°06'11" E, along last said east line, a distance of 377.67 feet;

Thence continuing along said east line, on a tangent curve to the left, concave to the east, with a radius of 802 feet, through a central angle of 5°53'27", an arc length of 82.46 feet, to the southeast corner of said Parcel A;

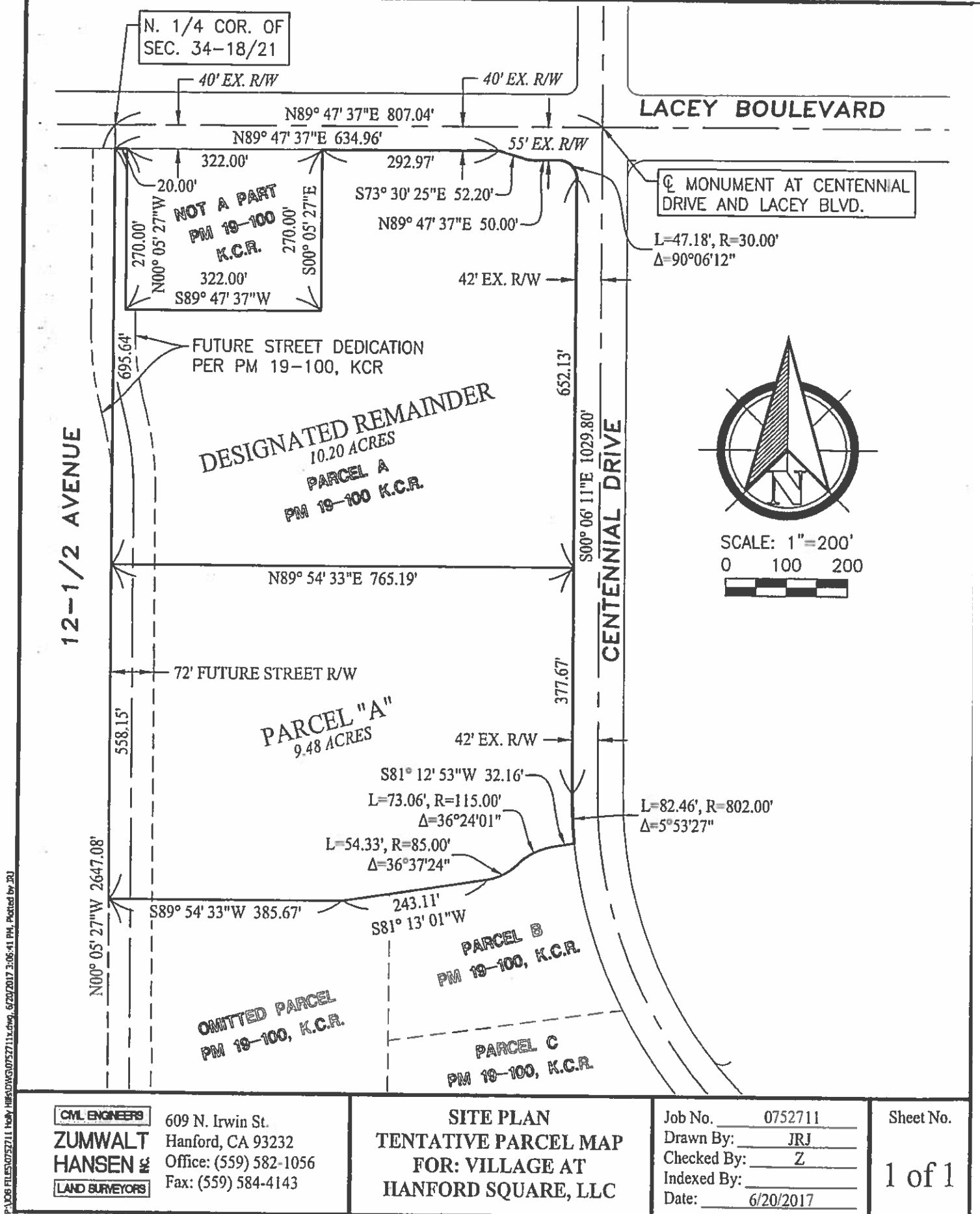
Thence S 81°12'53" W, along the south line of said Parcel A, a distance of 32.16 feet;

Thence continuing along last said south line of Parcel A, along a tangent curve to the left, concave to the south, with a radius of 115 feet, through a central angle of 36°24'01", an arc length of 73.06 feet;

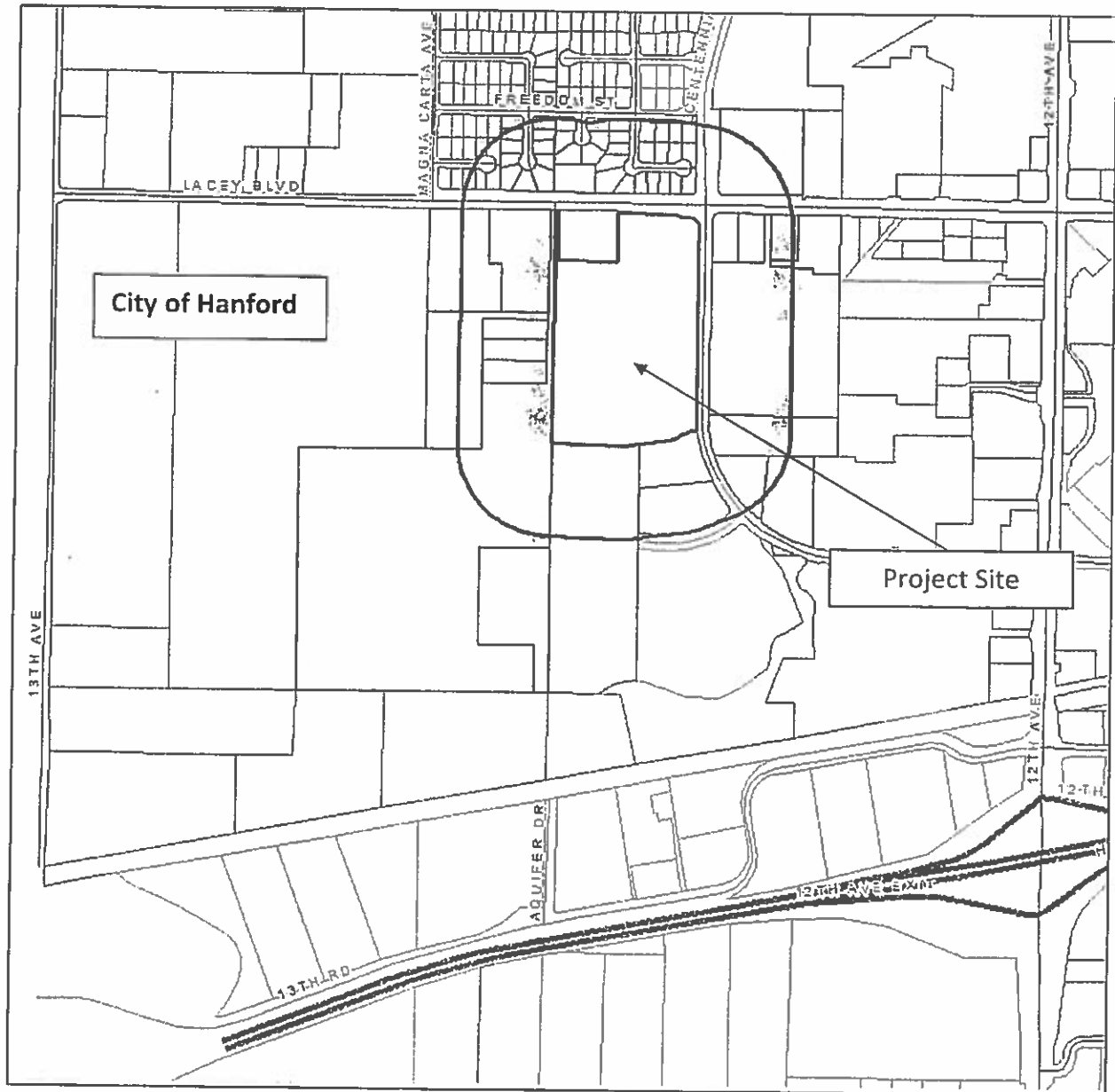
Thence continuing along last said south line of Parcel A, on a reverse tangent curve to the right, concave to the north, with a radius of 85 feet, through a central angle of 36°37'24", an arc length of 54.33 feet;

Thence continuing along last said south line of Parcel A, S 81°13'01" W a distance of 243.11 feet;

Thence continuing along last said south line of Parcel A, S 89°54'33" W, a distance of 385.67 feet to the point of Beginning, containing 9.48 Acres more or less.



Project Location & Mailing List Map
APN: 011-020-042
Southwest Corner of Lacey Blvd and Centennial Dr
Hanford, CA 93230



Legend

 - Properties within a 500 ft radius from the project site

APPENDIX G: Initial Study and Findings

ENVIRONMENTAL ASSESSMENT NO. 2017-11

1. Project Title: General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01.
2. Lead Agency Name and Address: City of Hanford
317 N. Douty Street
Hanford, CA 93230
3. Responsible Agency Name and Address: n/a
4. Contact Person/Phone Number: Gabrielle de Silva
Community Development Department
(559) 585-2578
5. Project Location: The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042);
6. Project Sponsor's Name/Address: Village @ Hanford Square, LLC
(c/o Daniel Bailey)
480 E. Bogert Trail
Palms Springs, CA
7. General Plan Designation: Low-Density Residential
8. Zoning: Proposed Prezone: "R-1-6" Low-Density Residential (currently County "AL-10" Limited Agriculture).
9. Description of the Project: The project has three components. Tentative Parcel Map No. 2017-01 is a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. General Plan Amendment No. 2017-03 is a request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01 is a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042). No physical development is proposed for the project area at this time. Future development of the project area would be subject to all development regulations and allowed uses of the R-H High-Density Residential District and the O Office District, respective to their corresponding parcel portions.

10. Surrounding land uses and setting:

Southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

	Zoning	General Plan Designation	Land Use
North	R-L-5	Low-Density Residential	Residential
East	C-R	Regional Commercial	Vacant and Commercial
South	R-L-5 and R-H	High-Density Residential and Low-Density Residential	Vacant
West	County	Medium-Density Residential and Low-Density Residential	Vacant and Nursery

11. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
n/a

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| ☒ Aesthetics | ☒ Agriculture Resources | ☒ Air Quality |
| ☐ Biological Resources | ☒ Cultural Resources | ☒ Geology/Soils |
| ☒ Green House Gas Emissions | ☒ Hazards & Hazardous Materials | ☒ Hydrology/Water Quality |
| ☐ Land Use/Planning | ☐ Mineral Resources | ☒ Noise |
| ☐ Population/Housing | ☒ Public Services | ☒ Recreation |
| ☒ Transportation/Traffic | ☒ Utilities/Service Systems | ☒ Mandatory Findings of Significance |

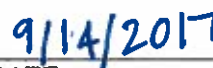
DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project **COULD NOT** have a significant effect on the environment. **A NEGATIVE DECLARATION WILL BE PREPARED.**
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.**
- ☐ I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

FOR: CITY OF HANFORD


 Gabrielle de Silva
 Associate Planner
 City of Hanford


 DATE

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐

ENVIRONMENTAL SETTING:**SCENIC VISTAS AND CORRIDORS**

Views consist primarily of broad panoramas of agricultural land. Most of the land surrounding the northern and western part of the city is characterized by flat, dry valley grasslands scattered throughout as well as grazing and other agricultural uses. The grasslands, grazing land, and large farms create open vistas at the northern and eastern edges of the City.

SCENIC HIGHWAYS

According to the California Scenic Highway Mapping System, there are no adopted Scenic Highways within the planning area. (Caltrans 2015).

VISUAL CHARACTER

Hanford is located in the northern portion of Kings County and has a total area of 16.6 square miles, all of which is flat land not covered by water. The only natural watercourse is Muscle Slough, remnants of which still exist on the City's western edge. The Kings River is about 6.5 miles north of Hanford. The People's Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south.

The Planning Area consists of urban agricultural, and grassland habitat areas located in transitional zone in the Central Valley between the flat valley floor and the Sierra Nevada foothills to the east. Hanford is surrounded by productive agricultural land, much of which is encumbered by Williamson Act contracts that prohibit development.

LIGHT AND GLARE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
The majority of the City includes existing sources of daytime glare and nighttime lighting and illumination. Significance Criteria The Project may result in significant impacts to aesthetics if it substantially affects the view of a scenic corridor, vista or view open to the public, cause's substantial degradation of views from adjacent residences, or results in new night lighting that shines into adjacent residences. Checklist Discussion: a) Less than Significant Impact – Views consist primarily of broad panoramas of agricultural land. Most of the land surrounding the northern and western part of the city is characterized by flat, dry valley grasslands scattered throughout as well as grazing and other agricultural uses. The grasslands, grazing land, and large farms create open vistas at the northern and eastern edges of the City. These projects are along the western edge of the city and an existing developed area; therefore, the project would not have a significant effect on any scenic vista. b) Less than Significant Impact – There are no designated State Scenic Highways, as identified by the California Scenic Highway Mapping System within the City's General Plan Study area. There are also no rock outcroppings within the Study Area. The City does have an ordinance protecting trees in Chapter 12.12 Street Trees and Shrubs of the Municipal Code. The projects would be consistent with the tree ordinance. The projects would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway and impacts would be less than significant. c) Less than Significant Impact with Mitigation Incorporation– Several sections of the Hanford Municipal Code regulate physical development by controlling not only the appearance of new development, but also by controlling the placement of new development with consideration for surrounding uses. The physical development of the project area would be held to appropriate development standards of the Hanford Municipal Code to mitigate impacts to aesthetics. (MM Aesthetics 1) d) Less than Significant Impact with Mitigation Incorporation– The physical development of the project area would be subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards. Additionally, the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulation light power and brightness, shielding, and sensor controls (MM Aesthetics 2) Mitigation Measures: MM Aesthetics 1: that the projects are subject to the appropriate development standards of the Hanford Municipal Code. MM Aesthetics 2: That the projects would be subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare. Conclusion: Impacts to aesthetics are anticipated to be less than significant after mitigation. II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☒	☐	☐

Agriculture and Forestry Resources:

The General Plan EIR analyzed the impacts of the City's urban growth on agricultural land and includes mitigation measures to reduce those impacts, however, impacts to agricultural lands remain significant and unavoidable. A Statement of Overriding Considerations was adopted for the impacts to agricultural lands.

Environmental Setting

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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The City's climate, water availability and proximity to transcontinental transportation routes have made it a premier location for agricultural land development for over a century. Most of the land surrounding the urbanized area of Hanford was converted to agricultural uses over a century ago, leaving very little undisturbed natural landscape.

A majority of Prime Farmland is shown toward the northern and western portions of the study Area. Farmland of Statewide Importance is located on portions of land toward the southern edge of the Study Area. The acreage total for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland within the Study and Planned Areas is categorized as follows:

**Table 4.2-1
Farmland Mapping and Monitoring Program**

Area	Prime Farmland (Acres)	Farmland of Statewide Importance (Acres)	Unique Farmland (Acres)	Total (Acres)
Planned Area	877	1,724	105	2,705
Study Area (Excluding Planned Area)	10,280	7,495	380	18,157
Total (Study Area)	11,157	9,219	485	20,862

There are 3,056 acres of land currently subject to a Williamson Act contract within the Planned Area and 16,299 acres of land currently subject to a Williamson Act contract within the Study Area. There are 335 acres currently under non-renewal and are scheduled to be removed from the provisions of the Williamson Act in the Planned Area.

There are no forest lands found within the Study Area, as defined by Public Resources Code Section 12220 (g), which defines such areas as "land that can support 10% native tree cover of any species, including hardwoods, under natural conditions, and that allow for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits." There is also no "timberland" found in the Study Area, as defined by the Public Resources Code Section 4526, which defines such areas as "land...which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees."

Build-out of the General Plan would result in significant and unavoidable impacts to farmland conversion and conflicts with land under Williamson Act land use contracts. Thus, the overall impact of full-build out of the General Plan would be cumulatively significant and unavoidable.

Significance Criteria

The Project may result in significant impacts to agricultural resources since the project results in the removal of lands designated as prime farmland by the Department of Conservation.

Checklist Discussion:

- No Impact – The project proposed at 206 W. Grangeville is located within an area listed as Urban and Built-Up Land on the Department of Conservation website. The property located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042) is in an area listed as Vacant or Disturbed by the Department of Conservation. Therefore, the project would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural impacts.
- Less than significant impact - The project does not conflict with any agricultural zoning. The properties are not enrolled in a Williamson Act contract.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) No impact – the projects would not conflict with existing zoning for, or cause rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production, as these designations do not exist within the City. There would be no impact. d) No Impact – There is no forest land within the City. The projects would not result in the loss of forest land or conversion of forest land to non-forest use, as these designations do not exist within the City. There would be no impact. e) Less than Significant Impact with Mitigation Measures – The property at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042) is bordered to the west by County property and designated AL-10 for Limited Agriculture (10- acre minimum). Under Chapter 16.40.110 (Right to Farm) of the Hanford Municipal Code, adjacent uses to future development could result in “potential inconveniences and discomforts often associated with agricultural activities and operations, including, but not limit to, equipment and animal noise; farming activities conducted on a 24 hour a day, 7-days a week basis; odors from manure, fertilizers, pesticides, chemicals, or other sources; the aerial and ground application of chemicals and seeds; dust; flies and other insects; and smoke from agriculture operations.” This acknowledgement establishes the right of adjacent landowners to continue to farm and therefore precludes indirect conversion of adjacent farmland, as a result of potentially incompatible land uses as a result of the project. A mitigation of the project will include, that a right-to-farm provision be recorded for Parcel A of the proposed subdivision of APN 011-020-042, in order to mitigate potential impacts to indirect conversion of adjacent farmland.				
Mitigation Measures:				
MM Agriculture 1: That a right-to-farm provision be recorded with the recording of the final subdivision map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.				
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
Air Quality: Climatological/Topological Factors The San Joaquin Valley's topography and meteorology provide ideal conditions for trapping air pollution for long				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
periods of time and producing harmful levels of air pollutants, including ozone and particulate matter. Low precipitation levels, cloudless days, high temperatures, and light winds during the summer in the San Joaquin Valley are conducive to high ozone levels resulting from the photochemical reaction of oxides of nitrogen (NOX) and volatile organic compounds (VOC). Inversion layers in the atmosphere during the winter can trap emissions of directly emitted particulate matter less than 2.5 microns (MN2.5) and PM2.4 precursors (such as NOX and sulfur dioxide [SO2] within the San Joaquin Valley for several days, accumulating to unhealthy levels. The region also houses the State's major arteries for good and people movement, Interstate 5 to the west and State Route 99 through the Central Valley, thereby attracting a large volume of vehicular traffic. Another compounding factor is the region's historically high rate of population growth compared to other regions of California. Increased population typically results in an even greater increase in vehicle activity and more consumer product use, leading to increased emissions of air pollution, including NOX. In fact, mobile sources account for about 80% of the Valley's total NOX emissions inventory. Since NOX is a significant precursor for both ozone and PM2.5, reducing NOX from mobile sources is critical for progressing the Valley towards attainment of ozone and PM2.4 standards. The geography of mountainous areas to the east, west, and south, in combination with long summers and relatively short winters, contributes to local climate episodes that prevent the dispersion of pollutants. Transport, as affected by wind flows and inversions, also plays a role in the creation of air pollution. The climate of the SJV is modified by topography. This creates climatic conditions that are particularly conducive to air pollution formation. The SJV is surrounded by mountains on three sides and open to the Sacramento Valley and the San Francisco Bay Area to the north. Hanford is located in the southern end of the San Joaquin Valley Air Basin. San Joaquin Valley Air Basin The SJVAB is in the southern half of California's Central Valley and is approximately 250-miles long and averages 35-miles wide. The San Joaquin Valley is bordered by the Sierra Nevada Mountains to the east, the Coast Ranges to the west, and the Tehachapi mountains to the south. There is a slight downward elevation gradient from Bakersfield in the southeast end to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. The bowl shaped topography inhibits movement of pollutants out of the Valley. The SJV is in a Mediterranean Climate Zone. Mediterranean Climates Zones occur on the west coast and are influenced by a subtropical high-pressure cell most of the year. Mediterranean Climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100 degrees Fahrenheit in the Valley. The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the Valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface. Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversion (1,500 to 3,000 square feet). Winter-time high pressure events can often last many weeks with surface temperatures often lowering into the 30s degrees F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few 100 feet. Wind Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and transporting the pollution to other locations. The region's topographic features restrict air movement and channel the air mass toward the southeastern end of the Valley. The Coastal				

	Potentially Significant Impact	Significant	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	
Range is a barrier to air movement to the west and the high Sierra Nevada range is a significant barrier to the east. A secondary, but significant, summer wind pattern is from the southeasterly direction and can be associated with nighttime drainage winds, prefrontal conditions, and summer monsoons.						
San Joaquin Valley Air Basin Monitoring						
The SJVAB consists of eight counties, from San Joaquin County to the north to Kern County in the South. The closest monitoring station to the Study Area is located at Hanford's South Irwin Street Monitoring Station. The station monitors particulates, ozone, carbon monoxide, and nitrogen dioxide.						
The SJVAB is nonattainment for ozone (1 hour and 8 hour) and particulate matter. In accordance with the Federal Clean Air Act (FCAA), EPA uses the design value at the time of standard promulgation to assign nonattainment areas to one of several classes that reflect the severity of the nonattainment problem.						
The SJVAB was reclassified from a "serious" nonattainment area for the 8-hour ozone standard to "extreme" effective June 4, 2010.						
Maximum Pollutant Levels at Hanford's South Irwin Street Monitoring Station						
Pollutant	Time Avg.	2012 Max.	2013 Max.	2014 Max.	National Standards	State Standards
Ozone (O3)	1 hour	0.109 ppm	0.104 ppm	0.108 ppm	NA	0.009 ppm
Ozone (O3)	8 hour	0.094 ppm	0.098 ppm	0.0904 ppm	0.075 ppm	0.070 ppm
Carbon Monoxide (CO)	8 hour	0.033 ppm	*	*	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO2)	1 hour	0.056 ppm	0.058 ppm	0.050 ppm	100 ppm	0.18 ppm
Nitrogen Dioxide (NO2)	Annual Average	0.009 ppm	0.010 ppm	0.010 ppm	0.053 ppm	0.030 ppm
Particulates (PM 10)	24 hour	128.0 µg/m3	177.0 µg/m3	131.3 µg/m3	150 µg/m3	50 µg/m3
Particulates (PM 10)	Federal Annual Arithmetic Mean	40.3 µg/m3	50.3 µg/m3	47.8 µg/m3	NA µg/m3	20 µg/m3
Particulates (PM 2.5)	24 hour	64 µg/m3	128.7 µg/m3	96.7 µg/m3	35 µg/m3	NA
Particulates (PM 10)	Federal Annual Arithmetic Mean	14.8 µg/m3	18.1 µg/m3	17.4 µg/m3	12 µg/m3	12 µg/m3
Notes:						
NA = Not Applicable (there is no standard for this pollutant)						
* = There was insufficient data available to determine the value						
ppm = parts per million						
µg/m3 = microgram per cubic meter						
Attainment Status						
Air quality impacts from proposed projects within Hanford are controlled through policies and provisions of the San Joaquin Valley Air Pollution Control District (SJVAPCD). In order to demonstrate that a project would not cause						

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact																										
further air quality degradation in either of the SJVAPCD's plan to improve air quality within the air basin or federal requirements to meet certain air quality compliance goals, each project should also demonstrate consistency with the SJVAPCD's adopted Air Quality Attainment Plans (AQAP) for ozone and PM10. The SJVAPCD is required to submit a "Rate of Progress" document to ARB that demonstrates past and planned project toward reaching attainment for all criteria pollutants. The CCAA requires air pollution control districts with severe or extreme air quality problems to provide a 5% reduction in non-attainment emissions per year. The Air Quality Attainment Plans prepared for the SJV by the SJVAPCD complies with this requirement. Air pollution sources associated with stationary sources are regulated through the permitting authority of the SJVAPCD under the New and Modified Stationary Review Rule (SJVAPCD Rule 2201). Owners of any new or modified equipment that emits, reduces, or controls air contaminants, except those specifically exempted by the SJVAPCD, are required to apply for an Authority to Construct and Permit to Operate (SJVAPCD Rule 2010). Additionally, best available control technology is required on specific types of stationary equipment and are required to offset both stationary source emission increases along with increases in cargo carrier emissions if the specified threshold levels are exceeded (SJVAPCD Rule 2201, 4.7.1). Through this mechanism, all stationary sources within the Study Area would be subject to the standards of the SJVAPCD to ensure that new developments do not result in net increases in stationary sources of criteria air pollutants. Existing Air Quality Air pollutant emissions generated from projects constructed under the implementation of the General Plan would be required to adhere to SJVAPCD rules and regulations and therefore, would not exceed SJVAPCD thresholds. Odor The SJVAPCD has identified some common types of facilities that have been known to produce odors in the SJVAB. The types of facilities that are known to produce odors are shown below along with a reasonable distance from the source within which, the degree of odors could possibly be significant. Information presented in the table will be used as a screening level of analysis for potential odor sources for new development as a result of implementation of the General Plan. <table><tr><td>Type of Facility</td><td>Distance</td></tr><tr><td>Wastewater Treatment Facility</td><td>2 miles</td></tr><tr><td>Sanitary Landfill</td><td>1 mile</td></tr><tr><td>Transfer Station</td><td>1 mile</td></tr><tr><td>Composting Facility</td><td>1 mile</td></tr><tr><td>Petroleum Refinery</td><td>2 mile</td></tr><tr><td>Asphalt Batch Plant</td><td>1 mile</td></tr><tr><td>Chemical Manufacturing</td><td>1 mile</td></tr><tr><td>Fiberglass Manufacturing</td><td>1 mile</td></tr><tr><td>Painting/Coating Operation (e.g., auto body shops)</td><td>1 mile</td></tr><tr><td>Food Processing Facility</td><td>1 mile</td></tr><tr><td>Feed Lot/Dairy</td><td>1 mile</td></tr><tr><td>Rendering Plant</td><td>1 mile</td></tr></table> Asbestos New development's construction phase may cause asbestos to become airborne due to construction activities. In order to control naturally-occurring asbestos dust, new development can use some of the following control actions to reduce the release of airborne asbestos fibers: - Water wetting or road surfaces; - Rinse vehicles and equipment;					Type of Facility	Distance	Wastewater Treatment Facility	2 miles	Sanitary Landfill	1 mile	Transfer Station	1 mile	Composting Facility	1 mile	Petroleum Refinery	2 mile	Asphalt Batch Plant	1 mile	Chemical Manufacturing	1 mile	Fiberglass Manufacturing	1 mile	Painting/Coating Operation (e.g., auto body shops)	1 mile	Food Processing Facility	1 mile	Feed Lot/Dairy	1 mile	Rendering Plant	1 mile
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	Potentially Significant Impact	Significant	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact	
- Wet loads of excavated materials; and - Cover loads of excavated materials						
Project Impacts						
<i>The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.</i>						
The SJVAB often exceeds the State and national ozone stands and if the new development as a result of the General Plan Update emits a substantial quantity of ozone precursors, it may contribute to an exceedance of the ozone standard. The SJVAB is also in nonattainment for State PM10 air quality standards and in nonattainment for State and federal PM2.5 air quality standards. Therefore, substantial project emissions may contribute to an exceedance for these pollutants.						
District Rule 2201, the New and Modified Stationary Source Review (NSR), is a major component of the SJVAPCD's attainment strategy as it relates to growth. It applies to new and modified stationary sources of air pollution. The SJVAPCD's attainment plans demonstrate that project-specific emissions below the SJVAPCD's offset thresholds would have a less-than-significant impact on air quality. Thus the SJVAPCD concludes that use of the NSR Offset thresholds as the consistency in significance determinations within the environmental review process and is applicable to both stationary and non-stationary emission sources.						
Project Type	Pollutant/Precursor Emission (tons/year)					
	CO	NOX	ROG	SOX	PM10	PM2.5
Construction Emissions	100	10	10	27	15	15
Operational Emissions (Permitted Equipment and Activities)	100	10	10	27	15	15
Operational Emissions (Non-Permitted Equipment and Activities)	100	10	10	27	15	15
Short-term (construction) emissions						
Construction-related impacts are expected to be temporary in nature and can generally be reduced to a less-than-significant level through the use of mitigation measures and through compliance with applicable existing City, county, State and SJVAPCD regulations for reducing construction-related emissions. The SJVAPCD's Regulation VIII is applied to all construction sites and would constitute sufficient measures to reduce air quality impacts to a level considered less than significant.						
Long-term (operational) emissions						
Operational emissions are emitted from two main sources:						
1) small, distributed sources known as area sources and						
2) motor vehicles known as mobile sources.						
All new development and infrastructure projects would be subject to SJVAPCD guidelines and regulations, including Rule 9510 (indirect source review) and Regulation VIII (Fugitive Dust Prohibitions). Existing businesses and new projects that are large employers (over 100 employees) would be subject to Rule 9410 (Employer Based Trip Reduction). Individual projects would require a project-level analysis to determine necessary mitigation strategies. As appropriate, the City of Hanford would require the implementation of the above-notated mitigation strategy intended to avoid or reduce the significant impacts identified.						
Short-term (construction) emissions						
Fugitive dust control rules:						

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
- Rule 8011 – Fugitive dust administrative requirements for control of fine particulate matter - Rule 8021 – Fugitive dust requirements for the control of fine particulate matter from construction, demolition, excavation, extraction, and earthmoving activities. - Rule 8071 – Fugitive dust requirements for the control of fine particulate matter from vehicle and/or requirement parking, shipping, receiving, transfer, fueling, and service areas one acre or larger Further, the new development should include the following local municipal code requirements: - Water sprays or chemical suppressants must be applied to all unpaved roads to control fugitive emissions - All access roads and parking areas must be covered with asphalt-concrete paving Compliance with Regulation VIII under the SJVAPCD for all construction sites would constitute sufficient measures to reduce PM10 impacts to a level considered less than significant Compliance with Regulation VIII under the SJVAPCD for all construction sites would constitute sufficient measures to reduce PM10 impacts to a level considered less than significant. The following measures from the Guide for Assessing and Mitigation Air Quality Impacts are required to be implemented at construction sites for all new development built during the planning cycle of the General Plan Update: - All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover. - All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. - All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. - With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demotion. - When materials are transported offsite, all materials shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained. - All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. - Following the addition of materials to, or the removal of materials from, the surface of storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. - Within urban areas, track out shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday. Long-Term (operational) emissions Long-term emissions from new development are generated by mobile source (vehicle) emissions and area sources such as water heaters and lawn maintenance equipment. Future development projects in the City of Hanford would be subject to the SJVAPCD's Indirect Source Review (ISR) program. The purpose of the SJVAPCD's ISR Program is to reduce emissions of NOX and PM10 from new development projects. Further, all new developments and infrastructure projects would be				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
subject to SJVAPCD guidelines and regulations, including the ISR rule and Regulation VIII. Existing businesses and new projects that are large employers (over 100 employees) would be subject to Rule 9410 (Employer based trip reduction). <i>The project would not expose sensitive receptors to substantial pollutant concentrations.</i> Sensitive receptors are those individuals who are sensitive to air pollution, which may include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. The Air District considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. The six criteria pollutants include ozone, CO, NO₂, SO₂, particulate matter, and Pb. Of the six pollutants, particle pollution and ground-level ozone are the most widespread health threats. The SJVAPCD has determined that any project would perform an ambient air quality analysis when construction activities or operational activities exceed the 100 pound per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures. Exempt small development projects include: - Residential projects with 50 dwelling units or less - Commercial projects with 2,000 square feet or less - Light industrial projects with 25,000 square feet or less - Heavy Industrial projects with 100,000 square feet or less - Medical Office projects with 20,000 square feet or less - General Office projects with 39,000 square feet or less - Educational projects with 9,000 square feet or less - Government projects with 10,000 square feet or less - Recreational projects with 20,000 square feet or less - Transportation or Transit projects with construction exhaust emissions of 2 tons of NO_x or PM₁₀ or less Checklist Discussion a) Less than Significant with Mitigation Incorporation- The project does not disrupt implementation of the San Joaquin Valley Unified Air Pollution Control District's Air Quality Plan. The physical development of the project would be subject to the SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD. b) Less than Significant with Mitigation Incorporation - The project would not obstruct implementation of an air quality plan; however, temporary air quality impacts could result from construction activities. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. The project would not create a significant impact over the current levels of ozone and PM₁₀ or result in a violation of any applicable air quality standards. The project is not anticipated to conflict with the attainment plans adopted by the SJVUAPCD. With these mitigation measures, the project will have a less than significant impact. c) Less than Significant Impact With Mitigation Incorporation – The San Joaquin Valley is a region that is already at non-attainment for air quality. The project does not disrupt implementation of the San Joaquin Valley Unified Air Pollution Control District's Air Quality Plan. The physical development of the project would be subject to the SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD. The project would not obstruct				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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d) Less than Significant Impact - There are no known pollutant concentrations that would be generated by the future development of a high-density residential or office project that would expose sensitive receptors to substantial pollutant concentrations. The nearest potential sensitive receptors are directly to the north and south, where residential development is located, however, since there are not known pollutant concentrations to be emitted from the project, the project impact is considered less than significant				
e) Less than Significant Impact - When developed, the project will include uses typical of a residential development. No objectionable odors are anticipated to occur as part of the project. No objectionable odors are anticipated to occur as part of the project.				
Mitigation Measures: MM Air Quality 1: That the physical development of the site would be subject to the SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD. MM Air Quality 2: That the project would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. Conclusion: Less than Significant with Mitigation Incorporation -The project will not create or result in any significant air quality impacts, with the incorporation of the rules and regulations of the SJVUAPCD for dust control measures. Source(s): Hanford General Plan (2017), General Plan Environmental Impact Report (2017), San Joaquin Valley Air Pollution Control District, California Air Resources Board 2008, Ambient Air Quality Standards (4/1/2008) http://www.arb.ca.agc;				
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh,	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Environmental Setting

Natural Communities

The natural communities tracked by the California Natural Diversity Database in the Study Area and surrounding vicinity include Valley Sacaton Grassland and Valley Sink Scrub.

Valley Sacaton Grassland is mid-height to three feet tussock-forming grassland dominated by alkali sacaton. The community is fine textured and poorly drained on usually alkaline soils with generally a seasonally high water table or are overflowed during winter flooding. This community was formerly extensive in the Tulare Lake Basin.

There are two patches of riparian woodlands identified by the State Dept. of Conservation mapping program that are within the study area (City of Hanford). Riparian woodlands are one of the richest wildlife habitats in the State; however, much has been severely degraded. Less than 1% of the Central Valley's riparian vegetation is in a natural, high-quality condition. Riparian woodlands in the study area are located on the west side of 12th Avenue between Houston and Iona Avenues, and along the west side of 13th Avenue, north of Iona Avenue. They are 30 and 14 acres in size, respectively. Valley oak woodland provides habitat components such as food, cover, nesting sites, and dispersal habitat for a wide variety of wildlife. The large oak trees present in this vegetation community provide nesting opportunities for many birds of prey. Typical wildlife species in this vegetation community include California ground squirrel, western fence lizard, western scrub jay, California quail, northern flicker, northern mockingbird, mourning dove, American kestrel, and red-tailed hawk.

Vegetation within the City of Hanford consists primarily of agricultural crops with little remaining non-agricultural vegetation. Agricultural crops consist of orchard, vineyard, annual dryland and irrigated grain crops, irrigated row and field crops, and some rice production. A good portion of the study area consists of urban development, but an almost equal portion of the study area is agricultural development.

Waters/Wetlands

Queries of the National Wetland Inventory and National Hydrology Dataset reveal the presence of numerous wetlands and waters within the Study Area. The largest of the water bodies are holding ponds off of Iona Avenue and South 11th Avenue. The system is artificially flooded and manmade. Other wetland and water features are reported including emergent wetlands, freshwater wetlands, freshwater ponds, canals and ditches, and blue-line stream courses.

The only natural watercourse is Mussel Slough, remnants of which still exist on the City's western edge. The People's

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south and portions of it still exist north of Grangeville Boulevard and west of the Santa Fe Railroad. The Sand and Lone Oak sloughs once traversed the city north and south, and remnants still remain in the southern half of the City south of SR 198. The Kings River is about 4 miles north of Hanford. Wildlife Corridors Wildlife corridors are areas of habitat that connect two or more habitat patches that would otherwise be fragmented or isolated from one another. Isolated "islands" of wildlife habitat have been created by the fragmentation of open space areas due to urbanization and other anthropogenic disturbance. Certain wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas in the absence of habitat linkages due to the loss of gene flow required to maintain genetic diversity. Within the urbanized areas of the Study Area, wildlife corridors are largely limited to linear water features, such as canals, water and flood control conveyance structures, and remnant natural ways. Surrounding the Study Area, agricultural fields and sparsely located and fragmented patches of lands containing non-agricultural vegetation located amongst the agricultural fields extend for many miles in all directions. Wildlife movement is largely uninhibited in this open space area of the Study Area outside of, and surrounding, the urbanized areas. Standards of Significance The project would have a significant effect on biological resources if it would: 1. Interfere substantially with the movement of any resident or migratory fish or wildlife species. 2. Substantially diminish habitat for fish, wildlife or plants. 3. Substantially affect a rare, threatened, or endangered species of animal or plant or the habitat of a rare, threatened or endangered species. Checklist Discussion a) Less than significant impact – the conversion to urban development was evaluated under the General Plan EIR. b) No Impact – the site does not contain any riparian habitat or other sensitive natural community. c) No Impact – the site is not identified as a federally protected wetland. d) Less than significant impact - The project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. There is not natural habitat remains within the project area. e) No Impacts - The project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation ordinance or policy; there is not an adopted ordinance protecting biological resources. f) Less than Significant Impact – the project pertains to land that has no value as natural habitat; therefore, the plan does not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Conclusion: The site is within an urban area of the City and contains no natural, undisturbed areas for habitat. The project would have a less than significant cumulative impact for biological resources. Source(s): Hanford General Plan (2017), General Plan Environmental Impact Report (2017)				
V. CULTURAL RESOURCES -- Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Public Resources Code 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Public Resources Code 15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Ethnographic Setting

Hanford is situated between the former "delta" formed by the Kaweah River to the south and the Kings River to the north. Yokuts lived in villages consisting of wood frame huts covered with large tule mats. The Hanford-Lemoore region on the south side of the Kings River was home to the Nutunutu Yokuts. Across the Kings River and north of the Nutunutu, were the Wimilche people. Only one village for the Wimilche and two for the Nutunutu have been described. The Wimilche village of Ugonia was located north of the Kings River, 7 miles below Laton. The Nutunutu village of Cheou was across the river and directly west of Ugonia. Kadistin, the other Nutunutu village of Cheou was across the river and directly west of Ugonia. Kadistin, the other Nutunutu village, was at old Kingston on the south bank of the Kings River downstream from Laton. The better known Tachi Yokuts occupied the north and west shores of Tulare Lake.

The Yokuts subsistence economy emphasized fishing; hunting waterfowl; and collecting shellfish, roots, and seeds. Tules were abundant in the sloughs and their prodigious use in constructing shelters, boats, and as a food source reflected their significance in Yokuts life.

The dead were buried in a cemetery separate from the village with head facing west or northwest. Cremation was most common for the occasional individual who died away from home or in the event that the deceased was a shaman or medicine man. Among the Tachi, anyone of higher social status was cremated.

The 1833 epidemic, brought south from Oregon by a party of trappers, decimated an estimated 75% of California's native people. Entire communities were wiped out, leaving few native people to consult during the early 1900s when anthropologists were recording the recollections of elderly survivors of what has been billed as a last attempt to reconstruct the lifeways of the native people before White contact.

In 1851, the tribes gave up their lands for reservations. However, such a treaty was never ratified by Congress. The remnant of native people in the southern San Joaquin Valley was placed at the Tejon

Reservation at the foot of the Tehachapis and at the Fresno reservation at Madera. However, Tejon was later abandoned in favor of a reservation on the Tule River. Many of the Tule river residents were Tachi for whom a settlement was established near Lemoore.

By 1970, some 325 people identifying themselves as Yokuts lived on the 54,000-acre Tule River Reservation. Many of the residents were employed in the lumber industry or as laborers on farms. About one-third of the population of the Tule River Reservation lived on the much smaller Santa Rosa Reservation. Santa Rosa families would follow seasonal agricultural work.

Pioneer Settlement Period

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Early development and success of the community was dictated by the railroad. Southern Pacific established a depot early in 1877 in what would become Hanford. In 1877, when the Southern Pacific Railway laid lines from Goshen to Coalinga, their path crossed through a Chinese shepherd's camp. This camp reportedly was the beginning of the City of Hanford. Hanford was named for James Madison Hanford, an auditor of the railroad, who also took a lively interest in the sale of town lots which began on January 17, 1877. Within a short time the settlement grew to a town, and, with the powerful backing of the railway interests, Hanford ultimately became the center of trade for the region. In McKenney's Pacific Coast Directory, San Francisco, 1886-1887, Hanford was described as having a post, express and telegraph office, located along the Southern Pacific Railroad Company's Goshen Division, 254 miles from San Francisco, and 22 miles from Visalia. At the time, the community numbered 1,000 inhabitants and was located in the heart of the "famous Mussel Slough country," a region of rich top soils and important agricultural zone. Hanford was the principal depot for the local wheat industry and had several flouring mills along with schools, churches, and hotels. Through the early pioneer years, a series of devastating fires dampened the growth of Hanford. On July 12, 1887, a fire destroyed most of the downtown business district. On June 19, 1891, another fire destroyed portions of the downtown business district. The fires of early 1890s spurred new development using fireproof materials. National Register of Historic Places Hanford has three buildings listed on the NRHP. They are the Hanford Carnegie Library, the Kings County Courthouse, and the Taoist Temple. All three buildings are also listed on the California Register of Historic Places. Hanford Carnegie Library The Hanford Carnegie Library, now the Hanford Carnegie Museum, was built in 1905 as one of the many Carnegie libraries that were funded by steel magnate, Andrew Carnegie. The library was replaced by a new structure at a different location in 1968. The old library was subsequently renovated and reopened as the Hanford Carnegie Museum in 1974. The building is of Romanesque Revival architecture, with displays of furniture and photos describing the history of the Hanford area. Kings County Courthouse The 1986 Kings County Courthouse was erected after Kings County was formed. The building served as the county's courthouse until 1976 when it was replaced by the new Kings County Government Center on West Lacey Boulevard. The building was listed on the National Register of Historic Places in 1978. Taoist Temple The Taoist Temple at 12 China Alley dates from 1893. It was listed on the NRHP in 1972. It is historically significant as a surviving authentic structure from Hanford's Chinatown. China Alley served the second largest population of Chinese in the U.S., behind San Francisco. While many urban Chinatowns continue to thrive, most rural Chinatowns have declined; Hanford's China Alley is unique for its retention of many original features. China Alley's survival is largely because many of its buildings are owned by a single third-generation family corporation that has, through the years, exhibited concern for the site's future. National Register of Historic Places – Eligible Resources There are a number of resources within Hanford that contribute to its unique culture, yet are not officially listed as historic resources, including the following: - Clark Center for Japanese and Art and Culture, 15770 10th Avenue - Temple Theater, 514 Visalia Street - Fox Theater				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
- Kings Art Center, 605 N. Douty Street - Hanford Civic Auditorium, 400 N. Douty Street - Hanford Veteran's Memorial Building Paleontological Resources A paleontological resources report was not prepared for the General Plan, as there are recent paleontological resources reports for areas within the vicinity. The geology of the area includes the Modesto Formation, Tulare Lakebeds, and Quaternary alluvium. Between overlies sediments of the late-Pleistocene to early-Holocene Modesto Formation. From Hanford south to approximately Delano, Tulare Lakebed deposits are exposed at or near the surface. Consultation During pre-consultation, the City received a letter from Shana Powers, Cultural Specialist II for the Tachi Yokut Tribe, indicating the following: Based upon the cultural sensitivity of the area, the Tribe has concerns that burials and cultural resources will be disturbed during ground disturbing activities if this parcel is developed. If the area is developed, the Tribe would like to be retained to provide Native American Monitoring and then provide a cultural presentation for the construction staff prior to ground disturbing activities. In order to address the concerns of the Tachi Yokut Tribe, the City is requiring the following as mitigation measures: • That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. (this condition applies as a mitigation measure to all projects that require an initial study). As a project-specific mitigation measure, the City is requiring: • That the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring to continue until released by the Tachi Tribal Cultural Department. • That a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities. Thresholds of significance The project would have a significant impact on cultural resources if it would: - Cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5 - Cause a substantial adverse change in the significance of an archeological resource, pursuant to Section 15064.5; - Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or - Disturb any human remains, including those interred outside of formal cemeteries • That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Significance Criteria The project may have a significant impact on cultural resources if it causes substantial adverse changes in the significance of a historical or archaeological resource as set forth by the California Register of Historic Places and Section 106 of the National Historic Preservation Act; directly or indirectly destroys a unique paleontological resource or site.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Checklist Discussion				
a) Less than Significant Impact - The project would not cause a substantial adverse change in the significance of a historical resource as defined in 15604.5 of the CEQA Guidelines, as the site is not registered as a historical resource. b) Less than Significant Impact with Mitigation Measures – Due to the pre-consultation received from the Tachi Yokut Tribe, the lead agency is aware, that there is the possibility that cultural resources will be disturbed during ground disturbing activities if/when the parcel is physically developed. As mitigation, the Tachi Yokut tribe has requested the following: • That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. • That the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring to continue until released by the Tachi Tribal Cultural Department. • That a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities. c) Less than Significant Impact - The project will not directly or indirectly destroy any unique paleontological resource or site, as the site has not been identified as containing unique paleontological resource nor unique geological feature. d) See B. Mitigation Measures - MM Cultural Resources 1: That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. - MM Cultural Resources 2: That the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring to continue until released by the Tachi Tribal Cultural Department. - MM Cultural Resources 3: That a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities. Conclusion: The incorporation of mitigation measures requested from the Tachi Yokut Tribe will reduce the impacts of development on Cultural Resources. Source(s): Hanford General Plan (2017), California Health and Safety Code, Public Resources Code, consultation letter sent in accordance with Public Resources Code, Section 21080.3.1(b).				
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☒	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
42.				
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Environmental Setting

Geology

The topography of the City is relatively flat with a gradual slope generally from east to west. The City is located at 249 feet above mean sea level (msl).

The soil is defined as alluvial fan surfaces that are mantled with very deep, well-drained, saline-alkali soils. An alluvial fan is a fan-shaped alluvial deposit formed by a stream where its velocity is abruptly decreased.

Soil

The City of Hanford consists of the following soil types: 1) Cajon sandy loam, 2) Excelsior sandy loam, 3) Garces loam, 4) Kimberlina fine sandy loam, saline alkali 5) Kimberlina fine sand loam, sandy substratum, 6) Kimberlina salie alkali-Garces complex 7) Nord fine sandy loam, 8) Nord fine sandy loam, saline alkali, 9) Nord complex, 10) Wasco sandy loam (0-5% slopes), and 11) Whitewolf coarse sandy loam. Each of these soil types is not subject to annual flooding or ponding, and for the most part has a very low to medium surface runoff class, and is well drained. A runoff class indicates the potential for a soil to become saturated when excess storm water begins to flow at the ground surface.

Seismicity

The greatest potential for seismic activity in the City is posed by the San Andreas Fault, which is located approximately 46.5 miles southwest of the western boundary of the Study Area. The White Wolf Fault, located near Arvin and Bakersfield to the southwest in Kern County, which has the potential to cause seismic hazards for the County to a much lesser degree than the San Andreas Fault.

Fault Rapture

Kings County doesn't have any major fault system within its boundaries.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Strong Seismic Ground Shaking Kings County has not experienced any damaging earthquake equal or greater than Richter Magnitude 6.0 over the last 200 years. The Uniform Building Code has four seismic zones in the US ranging from I to IV, the higher the number, the higher the earthquake danger. All of California lies within Seismic Zone III or IV, Kings County is within Zone III, which equates to the potential to experience 0.3 meters/second squared ground acceleration, which would result in very strong to severe perceived shaking and moderate to heavy potential. Liquefaction Liquefaction occurs when saturated, loose materials are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. For liquefaction to occur, surface and near-surface soil must be saturated and be relatively loose. Liquefaction more often occurs in areas underlain by young alluvium where the groundwater table is higher than 50 ft. below ground surface. In the City, the range is generally between 120 ft to 160 feet below ground surface, therefore, the potential for liquefaction is not very probable. Soil Erosion Soil erosion, which can be caused by wind and water runoff, is a type of soil degradation. The potential for erosion to occur is affected by the soil's properties. The soil in the City and surrounding study area is generally sandy loams, fine sandy loams, and loams. The area's erodibility factor ranges from 0.19 to 0.38 depending on the soil type and percentage of organic matter. Based on this range, the soils in the study area have medium susceptibility to sheet and rill erosion by rainfall. Lateral Spreading (Landslides) Lateral spreading is large horizontal ground displacements due to earthquake-induced liquefaction. Lateral spreading also refers to landslides that commonly form on gentle slopes that have rapid, fluid-like movement. Lateral spreading generally occurs on 0.3 to 5% slopes underlain by loose sand and shallow groundwater. Subsidence Land subsidence is the gradual settling or sudden sinking of the ground surface due to movement of the ground materials. It is generally caused by three distinct water-related causes: 1) compression of layers of clay and silt within an aquifer, 2) oxidation and drainage of organic soils, 3) dissolution and collapse of susceptible rocks. Subsidence is occurring within the San Joaquin Valley. The primary causes for subsidence in the SJV are groundwater-level decline (due to overdraft) and subsequent aquifer compaction and hydrocompaction of moisture-deficient deposits above the water table. Collapsible Soil Collapsible soils consist of loose, dry, low-density materials that collapse and compact under the addition of water or excessive loading. These soils are found in areas of young alluvial fans, debris flow sediments, and loess deposits. Since the City and surrounding area includes soils that are derived from alluvial fans, there is the potential for collapsible soils. Expansive Soil Expansive soils are fine-grained soils that can undergo a significant increase in volume with an increase in water content, as well as a significant decrease in volume with a decrease in water content. The City and surrounding area's soils contain percentages of clay that generally range between 7-27%. When a soil has 35% or more clay content, it is considered a clayey soil. Since the soil types in the Study Area generally do not contain 35% clay content, the potential for expansive soils within the City and surrounding is low. Septic Systems The City does not have septic requirements for septic systems within the City. Significance Criteria The project may result in significant earth impacts if it causes substantial erosion or siltation, exposes people to geologic hazards or risk from faults, landslides or unstable soil conditions. Grading that disturbs large amounts of land				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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or sensitive grading areas (such as slopes in excess of 20%) may cause substantial erosion or siltation.

Checklist Discussion

a) Less than Significant Impact with Mitigation Incorporation -

- i. No Impact - No portion of the project area is located within an earthquake fault zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act and therefore, development would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known earthquake fault.
- ii. **Less than Significant Impact with Mitigation Measures** – Compliance with applicable City General Plan policies, as well as the California Building Code would reduce the potential to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking to a less-than-significant level.
- iii. **Less than Significant Impact with Mitigation Measures** – The potential for liquefaction in the project area is low. There is a minute possibility that a rain event coupled with a concurrent seismic event may create a condition where liquefaction could occur. Compliance with applicable City General Plan policies, as well as the California Building Code would reduce the potential to expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving strong seismic ground shaking to a less-than-significant level.
- iv. **Less than Significant with Mitigation Measures** – the entire City is located within an area of low landslide incidence, but, there is still a possibility that landslides could occur within the City, as a result of erosion, slope weakening through saturation, or stresses by earthquakes that make slopes fail. Geotechnical and soil studies that identify potential hazards, including landslides, would be required prior to grading activities as part of the plan check and development review process for the physical development of the area. Such technical studies would provide structural design, as needed, pursuant to the California Building Code requirements to reduce hazards to people and structures as a result of landslides.

- b) **Less than Significant Impact with Mitigation Measures** – development would result in construction-related ground disturbance as a result of grading and excavation where topsoil is exposed, moved, and/or stockpiled. Such construction-related ground disturbance could loosen soil and remove vegetation, which could lead to exposed or stockpiled soils made susceptible to peak storm water runoff flows and wind forces. Such disturbances could result in substantial soil erosion or topsoil, which is a potentially significant impact. Adherence to the Hanford Municipal Code Chapter 15.52 Flood Damage Prevention Regulation, and the California Building Code, along with the plan check and development review process, would assist the development of property erosion controls during operation of future development to a less than significant impact.

c) Less than Significant Impact with Mitigation Measures: See a.

- d) Less than Significant Impact – Expansive soils are fine-grained soils that can undergo a significant increase in volume with an increase in water content, as well as a significant decrease in volume with a decrease in water content. The City and surrounding area's soils contain percentages of clay that generally range between 7-27%. When a soil has 35% or more clay content, it is considered a clayey soil. Since the soil types in the Study Area generally do not contain 35% clay content, the potential for expansive soils within the City and surrounding is low.

- e) No impact- The City does not have septic requirements for septic systems within the City. Septic is not proposed.

Mitigation Measures:

MM Geology 1: That the physical development of the project comply with the applicable General Plan policies as well as the California Building Code.

MM Geology 2: That a geotechnical and soil studies be prepared as a requirement of the physical development of the project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
MM Geology 3: that the physical development of the project comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.				
Conclusion The project will not result in significant impacts to geophysical conditions with mitigation measures in place, therefore the impact is considered less than significant, cumulatively.				
Source(s): General Plan and General Plan EIR (2017);				
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
Environmental Setting Kings County and the City of Hanford Climate change regulations require the City to take action to reduce emissions under its jurisdiction and influence. The countywide Regional Climate Action Plan (CAP) is a separate action through KCAG that was adopted by the City on May 27, 2014. The Kings County Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the San Joaquin Valley Blueprint are also incorporate policy into the General Plan. this strategy of integrating regional planning documents help Hanford identify land use, transportation, and related policy measures and investments that could reduce GHGs from passenger cars and light-duty trucks, as part of the development of a SCS in compliance with Senate Bill 375. Commercial and residential space heating and cooling comprise a large share of direct energy use in Kings County. Other major energy users include agricultural production and industrial facilities. In Kings County, automobiles and commercial vehicles are the largest energy consumers in the transportation sector.				
Global Climate Change Climate change is a change in the average weather of the Earth that may be measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historic records of temperature changes occurring in the past, such as during previous ice ages. The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHG needed to stabilize global temperatures and climate change impacts. The IPCC predicted that global mean temperature change from 1990 to 2100, given six scenarios, could range from 1.1 degrees Celsius to 6.4 degrees C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios.				
Increased Temperatures and Extreme Heat events Climate change is expected to lead to an increase in ambient average air temperatures with greater increases expected in summer than in winter months. Larger temperature increases are anticipated in inland communities, as compared to the CA coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Increased temperatures also pose a risk to human health when coupled with high concentrations of ground-level ozone and other air pollutants, which may lead to				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
increased rates of asthma and other pulmonary diseases. Other impacts related to increased temperatures and heat waves include: - Increased urban "heat island" effect – urban heat islands are especially dangerous because they are both hotter during the day and do not cool down at night, increasing the risk of heat-related illness - Reduced freezing events –reduced freezes could lead to increase incidence of disease as vectors and pathogens do not die off. In addition, fewer events of freezing would impact CA's food production and indirectly the food supply in Kings County. - Increased energy demand for air conditioning and refrigeration Greenhouse Gases Gases that trap heat in the Earth's atmosphere are called greenhouse gases. Some of the solar radiation that enters Earth's atmosphere is absorbed by the Earth's surface, and some is reflected back toward space. of the radiation reflected back toward space, GHG's will absorb a part. As a result, radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere. Some levels of GHGs are essential for maintaining temperatures supportive of life on Earth. Without naturally-occurring GHGs, the Earth's surface would be about 61 degrees cooler. This phenomenon is known as the greenhouse effect. Many scientists believe that emissions from human activities – such as electricity generation, vehicle emissions, and farming and forestry practices have elevated GHGs in the atmosphere beyond naturally-occurring concentrations, contributing to global climate change. The six primary GHGs are: - Carbon dioxide (CO₂), emitted when solid waste, fossil fuels (oil, natural gas, and coal) and wood and wood products are burned - Methane (CH₄), produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion. - Nitrous oxide (N₂O), typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning - Hydrofluorocarbons (HFCs), primarily used as refrigerants - Perfluorocarbons (PFCs), originally introduced as alternatives to ozone depleting substances and typically emitted as by-products of industrial and manufacturing processes - Sulfur hexafluoride (SF₆), primarily used in electrical transmission and distribution systems There are currently no State regulations in CA that establish ambient air quality standards for GHGs. However, the State of CA has passed legislation directing the CA Air Resources Board to develop actions to reduce GHG emissions. Significance Criteria The project would have a significant impact on GHG emissions if it would: - Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or - Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs Checklist Discussion - Less than Significant Impact - The project complies with the General Plan policy, which includes emission reductions that mitigate GHG emission generation to a less than significant level. - Less than Significant Impact – The project is consistent with the policies of the General Plan, which consists of numerous land uses and goals and policies to provide for a more walk able community in the Hanford area. The goals and policies of the General Plan are intended to assist in reducing operational emissions. In addition, the General Plan policy meet 10 of the 12 Smart Growth Principles cited in the San Joaquin Valley Blueprint. Conclusion				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
The project is consistent with the General Plan, which provides policy to mitigate impacts of GHG to a less than significant level.				
Source(s): General Plan Update (2017), General Plan Update EIR (2017), San Joaquin Valley Air Pollution Control District, Final Regional Climate Action Plan				
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐
Environmental Setting				
Hazardous material are substances that, because of physical or chemical properties, quantity, concentration, or other characteristics may either cause an increase in mortality or an increase in serious, irreversible, or incapacitating illness or pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications and, to a limited extent, in residential areas.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Large quantities of hazardous materials are transported along State Route 198, 43, and freight rail lines that pass through Hanford, making it susceptible to hazardous spills, releases, or accidents. Pursuant to AB 2948, Kings County adopted the <i>County Hazardous Waste Management Plan</i>. Under state law, all industries and agricultural operations that store or handle specific quantities of hazardous materials must provide the County with a hazardous materials business plan detailing the location and quantities of their hazardous materials. Brownfields A brownfield site is land previously used for industrial purposes or some commercial uses that may be contaminated by low concentrations of hazardous waste or pollution, and has the potential to be reused once it is cleaned up. the City has one brownfield site, located south of Third Street, north of Davis Street, west of the BNSF railroad tracks, and east of 11th Avenue. Airport Hazards Hanford Municipal Airport – a general aviation facility serving Kings County and the surrounding communities of Hanford, Armona, and Lemoore in south-central CA. Emergency Response Kings County's Office of Emergency Management (OEM) is the County's emergency management agency, responsible for coordinating multi-agency responses to complex, large-scale emergencies and disasters within Kings County. OEM develops and maintain the Emergency Operations Plan (EOP), which serves as a guideline for who will do what, as well as when, with what resources, and by what authority- before, during, and immediately after an emergency. Significance Criteria The project may result in significant hazards if it does any one of the following: 1. Create a public health hazard 2. Involve the use or production, disposal or upset of materials which pose a hazard to people in the area or interferes with an emergency response plan 3. Violates applicable laws intended to protect human health and safety or would expose workers to conditions that do not meet health standards. Checklist Discussion a) Less than Significant Impact with Mitigation – any new development proposed in the area would be required to comply with applicable federal, state, and local regulations related to hazardous materials. Required compliance with these regulations would ensure impacts related to transport, use and disposal of hazardous materials would be less than significant. b) See a. c) Less than Significant Impact- there is a school within a ¼ mile radius of the project site; however, the General Plan restricts land uses around schools, such as industrials uses, that could result in emitted hazardous emissions or handled hazardous or acutely hazardous materials, substances, or wastes within ¼ mile of an existing or proposed school that would result in significant adverse impacts to school sites. d) No Impact – the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 e) No Impact -The project site is not located within two miles of a public airport/airstrip therefore there is no impact. f) No Impact -The project site is not located within two miles of a private airport/airstrip therefore there is no impact.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Less than Significant Impact - development has the potential to strain the emergency response and recovery capabilities of federal, state, and local government. Compliance with the General Plan policies to ensure adequate emergency response and maintain current plans reduces the impact of development. This plan is consistent with the policy of the General Plan, therefore, impacts are considered less than significant.				
h) Less than Significant Impact- The City of Hanford is located within a zone considered by CAL FIRE to have low to no potential for wildland fires, therefore, the impact is considered less than significant.				
Mitigation Measures: MM Hazards 1: New development proposed in the area must comply with applicable federal, state, and local regulations related to hazardous materials. Conclusion The impact from hazards and hazardous materials are expected to be less than significant. Source: 2017 General Plan and General Plan EIR, State of California Hazardous Waste and Substance List				
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

Climate

The City is located in the southwest portion of the Central Valley of CA and the City's climate is semi-arid. Semi-arid climates in CA tend to have precipitation patterns closer to Mediterranean climates with wet winters. The Central Valley has greater temperature extremes than coastal areas because it is less affected by the moderating influence of the Pacific Ocean. Most of the rainfall in Hanford occurs in the winter months as the Gulf Stream shifts southward from northern latitudes in the wintertime. However, because of the inland location and "rainshadow effect" caused by the coastal mountain ranges, Hanford typically gets less rainfall during the winter than coastal areas to the west. The rainshadow effect refers to a reduction of precipitation commonly found on the leeward side of a mountain. Average precipitation is about 8 inches.

Surface Water Resources

Tulare Lake Basin

The City and surrounding area is located in the Central Valley's Tulare Lake Basin. This Basin covers 10.5 million acres and encompasses the drainage area of the Central Valley south of the San Joaquin River. Surface water from this basin only drains into the San Joaquin River in years of extreme rainfall. The Tulare Lake Basin is within the jurisdiction of the Central Valley Regional Water Quality Control Board.

South Valley Floor Watershed

The Study Area is located in the South Valley Floor Watershed, which is the largest watershed in the Tulare Lake Basin at about 8,235 square miles (5.3 million acres). A large portion of the surface water supply in the watershed comes from imported water, including water supplied through the San Luis Canal/CA Aqueduct System, Friant-Kern Canal, and Delta-Mendota Canal. Agriculture is the primary land use type in the watershed, encompassing approximately 67% of the total land area. Open space is secondary at 25% of the total land area and urban land uses represents about 6%.

Local

Most of the water surface features in the City and surrounding nearby areas are manmade conveyance structures for stormwater control. The only natural watercourse is Mussel Slough, remnants of which still exist on the City's western edge. The People's Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south and portions of it still exist north of Grangeville Boulevard and east of the Santa Fe Railroad. The Sand and Lone Oak sloughs once traversed the city north and south, and remnants still remain in the southern half of the City south of State Route 198. The Kings River is about 4 miles north of Hanford.

Surface Water Quality

There are no surface water bodies within the vicinity of the City that are listed as impaired per the US Environmental

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Protection Agency 2010 CA List of Water Quality Limited Segments.				
Groundwater Resources				
Regional				
The City and surrounding area is located in the Tulare Lake Hydrologic Region, San Joaquin Valley Groundwater Basin, Tulare Lake Subbasin.				
Local				
The City exclusively uses groundwater for its potable water supply. The City's municipal water system extracts its water supply from underground aquifers via 14 active groundwater wells with depths that range from 1300 to 1700 feet below ground surface (bgs). In cooperation with the Peoples Ditch Company and the Kings County Water District, excess Kings River water and stormwater flows are conveyed to 125 acres of drainage and slough basins located throughout the City to help replenish groundwater. The basins account for approximately 568 acre-feet of available water retention and the City is planning to add approximately 317 acre feet of additional basins located along major drainage channels within the City for groundwater recharge as well as flood protection.				
Groundwater Quality				
Groundwater quality in the Tulare Lake Subbasin ranges from calcium bicarbonate in type in the northern portion to a sodium bicarbonate type in the lakebed. Total dissolved solids in the Subbasin typically range from 200 to 600 milligrams per liter and can be as high as 40,000 mg/L in shallow groundwater with drainage problems. the City reports electrical conductivity in 14 wells ranging from 560 micromhos per centimeter to 1,100 microhos per centimeter. There are also areas of shallow, saline groundwater in the southern portion of the Subbasin, localized areas of high arsenic and the City reports odors caused by the presence of hydrogen sulfide.				
The EPA and State Water Resource Control Board have set the arsenic standard for drinking water at 0.01 parts per million and, in order to meet these standards, the City now drills wells up to 1,500 feet deep.				
Floodplains				
Only 48.6 acres are located within the 100-year floodplain. This accounts for 0.003% of the total area in the Planned Area of the City.				
Significance Criteria				
The project may result in significant impacts if it would violate any water quality standards or waste discharge requirements, substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or substantially increase the rate of surface runoff; exceed the existing drainage system.				
Checklist Discussion				
a) Less than Significant Impact with Mitigation Measures –				
- Construction: potential impacts on water quality arise from erosion and sedimentation are expected to be localized and temporary during construction of new development. All new development that disturb more than one acre are required to comply with the General Permit Order No. 2012-0006-DWQ during construction. Proponents of new development would have to develop and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
- Operation: New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit as outlined in the Stormwater Management Plan as well as the City's grading plan and site development requirements. New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in that runoff to the maximum extent practical. The City Building Division would review and approve grading plans and site development requirements for the new development, when a physical project is proposed. b) Less than Significant Impact –The current and future efforts of the City and Kings County Water District coupled with the requirement to comply with the Sustainable groundwater management act through the Groundwater Sustainability Plan process ensures that future development as an implementation of the General Plan would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. c) See a. d) Less than Significant Impact with Mitigation Measures – with the approval of grading plans and site development requirements by the City Building Division that incorporates BMPs and design standards, new development operations would not substantial increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. e) Less than Significant Impact with Mitigation Measures and impact fee payment – new development would be required to undergo a site development requirements approval process with the City Building Division that would include developing necessary stormwater drainage improvements to sufficiently capture and treat polluted runoff. New development would also be required to pay a stormwater system development fee. This development fee is required for all new development in order to pay the cost of capital improvements for the City of Hanford stormwater system. f) See a. g) No Impact. – the project site is not located within a flood zone as shown in the Flood Insurance Rate Map for Hanford (Panel 06031C 0185C, June 16, 2009) therefore there is no impact. h) See g. i) See g. j) No impact – the project site is not located by the ocean. Therefore, there is no risk that new development would be inundated by tsunami. A mudflow is a flow of soil or fine-grained sediment mixed with water down a steep unstable slope. The project area is relatively flat and does not contain slopes steep enough to cause mudflow. The project would not be downgrade from aboveground water storage tanks. Mitigation Measures: Conclusion: MM Hydrology 1: All new development that disturb more than one acre are required to comply with the General Permit Order No. 2012-0006-DWQ during construction. Proponents of new development would have to develop and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs. MM Hydrology 2: New development would be required to implement appropriate minimum control measures (MCMs)				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements. MM Hydrology 3: New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards. MM Hydrology 4: New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical. Less than Significant Impact with Mitigation Measures – With the incorporation of mitigation measures, the impacts to hydrology and water quality are considered less than significant. Source: 2017 General Plan, 2017 General Plan Update, Hanford Storm Water Master Plan, State of California Department of Water Resources				
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
Environmental Setting The City is predominantly surrounded by agricultural land uses and is characterized as a low rise community dominated by low-density, single-family housing along with some limited pockets of multi-family housing, low-intensity commercial uses, and several industrial areas. The City's older urban development lies north of the Union Pacific railroad tracks and south of Grangeville Boulevard, while the newly urbanized areas are north of Grangeville Boulevard. The majority of land within the City's planned area consists of agricultural, open space, and single-family residential uses. Significance Criteria The project may result in significant impacts if it physically divides an established community, conflicts with existing off-site land uses, causes substantial adverse change in the types or intensity of land use patterns or conflicts with any applicable land use plan, policy or regulation. Checklist Discussion a) Less than significant impact – the project proposes a designation change from office to high-density residential on a portion of a vacant lot. The conversion to high-density residential does not propose physically dividing and established community, as the project pertains to a vacant lot. b) Less than significant impact- The project is consistent with the policy in the General Plan and will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigation and environmental effect. c) No Impact – The City is not included in any habitat conservation plan or natural community conservation plan, nor are there plans to be involved.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Conclusion The project is being developed consistent with the General Plan, specifically the Land Use Element and will not have significant impacts to Land Use and Planning.				
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
Environmental Setting Oil and Gas The planning area is not found within a Division of Oil, Gas, and Geothermal Resources recognized oil field and does not contain any areas that have been designated for mineral recovery by the Kings County General Plan. Sand and Gravel The only mineral resources that could occur within the vicinity of the City are sand and gravel operations for road and building construction, but there are currently no significant deposits and no active mines. Significance Criteria The project would create significant impacts to mineral resources if there was a loss of availability of a known mineral resource. Checklist Discussion - No Impact – No portion of the vicinity of the City is located within the boundaries of a DOGGR-recognized oil field. There are currently no identified MRZ designated areas, no known significant sand and gravel deposits and no active mines within the vicinity of the City. - No Impact – no portion of the City or nearby vicinity is designated for mineral resources or zoned for mineral resources. Therefore, the project would not result in the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. Conclusion There will be no impact to mineral resources.				
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
groundborne vibration or groundborne noise levels?				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and has been cited as being a health problem, not just in terms of actual physiological damages such as hearing impairment, but also in terms of inhibiting general wellbeing and contributing to stress and annoyance. Vehicular traffic noise is the dominant source in most areas, but aircraft and rail activities are also significant sources of environmental noise in the local areas surrounding these operations. Sources of noise within the City include mobile and stationary sources.

Highways and Roadways

Existing noise levels in the City are primarily generated by transportation noise sources. Highway and roadway traffic noise levels are generally dependent upon three primary factors, which include the traffic volume, traffic speed, and percent of heavy vehicles on the roadway.

Railroad

Local railroad lines include an east-west Union Pacific Railroad (UP) line and a north-south Burlington Northern Santa Fe (BNSF) line. The east-west UP tracks are currently used by the San Joaquin Valley Railroad (SJVR), which operates two trains of approximately 5 to 10 cars per day, five days per week, at approximately 10 to 20 miles per hour. The BNSF is located in the central portion of the City in a heavy commercial/industrial area. The BNSF line carries eight Amtrak passenger trains and 18 to 22 freight trains per day. Most north-south rail traffic moves through the county at approximately 50 mph.

As of early 2014, the CA High Speed Rail Authority has been moving forward on an alignment for the HST that would run through the far easterly portion of the planning area.

Airport

Hanford Municipal Airport is a general aviation facility serving Kings County and the surrounding Communities of Hanford, Armona, and Lemoore in south-central CA. The Hanford Municipal Airport Master Plan identified existing and future year noise contours as a result of airport operations.

Stationary Noise Sources

Stationary noise sources include commercial operations, agricultural production, school playgrounds, generators, and lawn maintenance equipment.

The following operations have been identified as major stationary noise sources in and around Hanford

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
- Del Monte Foods - Penny-Newman Milling Company - Kings Waste and Recycling Authority Solid Waste Disposal Site - Agricultural production - Kings Speedway				
Significance Criteria Impacts from the project would be considered significant if they would result in significant noise or exposure of persons to or generation of noise levels in excess of standards established in the Hanford General Plan.				
Checklist Discussion				
a) Less than Significant with Mitigation Incorporation – the project would not result in exposure of persons to or generation of noise levels in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies. Short-term noise-related impacts would be temporary in nature, require compliance with applicable regulations, and policies of the General Plan further ensure that construction-related impacts would be attenuated to the greatest extent feasible.				
b) Less than Significant. - Ground vibration generated by common construction equipment would be 75 VdB or less at a distance of 100 feet or more. Given that the physical development of the parcel would be located on a vacant parcel in a moderately developed area, the nearest offsite structures to the new development site would be located in excess of 100 ft from construction activities. As a result, predicted vibration levels at the nearest offsite structures would not exceed vibration levels greater than 75 VdB.				
c) Less than Significant – full build out of the General Plan would possibly result in a maximum increase of 2 decibels when compared to existing conditions. According to the Caltrans Technical Noise Supplement, the average healthy ear can barely perceive noise level changes of 3 dBA. As a result, it is anticipated that full buildout of the General Plan, including development of this site, would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.				
d) Less than Significant with Mitigation Incorporation - A temporary increase in ambient noise would occur in association with construction activities. Construction noise is short term and will occur for limited times. As a mitigation measure, construction would be limited to the hours of 7 a.m. to 10 p.m.				
e) Less than Significant Impact - The project is approximately 2.5 miles away from airport and will not be impacted by the public airport.				
f) No Impact - The project is not located within the vicinity of a private airstrip, there is no impact.				
Conclusion The project would create temporary construction noise, but the impact of noise will be mitigated to a point that is considered less than significant with required conditions of the development of the property.				
Mitigation Measures: MM Noise 1: Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible. MM Noise 2: Construction is limited to the hours of 7 a.m. to 10 p.m. Source: 2017 General Plan Update, 2017 General Plan Update EIR				
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Setting

Population

The estimated population on January 1, 2013, was 55,122. It is estimated that the General Plan Update could result in a population increase of 47,367 people in 2035 for an estimated total population of 102,489.

Housing

In 2013, there were 17,867 housing units in the Study Area. It is estimated that the implementation of the General Plan could result in 15,633 additional housing units in 2035 for an estimated total number of 33,520 housing units.

Employment

In 2014, there were 20,900 jobs in the planning area. It is estimated that the implementation of the General Plan could result in 33,308 additional jobs in 2035 for an estimated total number of 54,208 jobs.

Jobs-Housing Balance

Jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. SCAG uses the jobs-housing balance as a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area.

Significance Criteria

The project may result in significant impact if it induces substantial growth, displaces a large number of people, or contributes to a job housing imbalance.

Checklist Discussion

- Less than significant impact – The project is a request to change the designation on a portion of property, totaling 9.49 from office to high-density residential. The change from office to high-density residential has the potential to induce population growth in the area by approximately 855 persons (based on the maximum dwelling units per acre for high-density residential, 29, multiplied by the average household size, 3.11 persons per unit). This project is considered an implementation of the General Plan, for which a Statement of Overriding Considerations was adopted, due to substantial population growth.
- No Impact - The project will not result in displacement of housing. The property is currently vacant.
- No Impact - The project will not result in displacement of people.

Conclusion

Less than significant impact - The project will not result in a significant impact to population and housing.

Source: 2017 General Plan Update, 2017 General Plan Update EIR

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES --				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☒	☐	☐
Police protection?	☐	☒	☐	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☒	☐	☐
Other public facilities?	☐	☐	☒	☐

Environmental Setting

The City of Hanford currently has two fire stations located within the north central and south central portions of the Study Area. These two stations protect approximately 16.5 square miles, Station 1 is located at 350 W. Grangeville Blvd and covers the city limits north of SR 198 and station 2 is located at 10533 Houston Avenue and covers the city limits south of SR 198. In addition, two properties have been purchase for future fire stations. The City currently owns sites at Centennial Drive and Berkshire Lane and Florinda Street and 9 ¼ Avenue, which have been planned for future fire stations. The Hanford Fire Department provides fires, rescue, hazardous materials response, and serves as a first responder for emergency medical service calls in the City. the HFD is also capable of responding to other situations such as high and low angle rescues, confined space emergencies, vehicle accidents, public assists, state-wide mutual aid responses and disaster management.

Police Protection

City residents receive police protection services from the Hanford Police Department, which currently operates out of a single station located at 425 N. Irwin Street. The City's recent growing problem that requires the need of police services includes gag and drug issues. The HPD's actual average response times are 6:30 minutes for Priority I incidents with an average of 32 Priority I incidents per day and a response time of 17:19 minutes for all other incidents with an average of 144 incidents per day. However, a response time of less than 2:30 minutes is a goal for the HPD to maintain in the future.

Schools

The City currently includes six elementary school districts and one high school district within the Study Area. These districts do not include the religiously affiliated private schools or charter schools located in the study area. The Hanford Elementary School District consists of 11 elementary and junior high schools that are all located in the study area.

Pioneer Union Elementary School District consists of two elementary schools and one junior high school that are all located in the study area.

The Hanford Joint Union High School District consists of four comprehensive high schools.

Parks

See Environmental Setting for Recreation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Other Public Services Library Services The current library is a branch of the Kings County Library. Consultation Preconsultation was mailed to the various agencies on August 21, 2017. The lead agency received a response from Gerry Mulligan of the Hanford Elementary School District stating the following: I received the Tentative Tract Parcel Map No. 2017-01 and have concerns. The children living in the proposed project area in grades 1-6 would be in the Simas Elementary School area of attendance and children in grades 7-8 would be in the Woodrow Wilson Junior High School area of attendance. Student enrollment at current Hanford Elementary School District schools is over capacity. The District must build additional schools if new residential development continues. The District currently has no future school sites. While we do approve of Tentative Tract Parcel Map No. 2017-01, we respectfully request the City of Hanford to consider schools in the approval of future development. Analysis: No physical development of the site as office or high-density residential is being proposed at this time. The City's role in development and managing school sites and programs is limited. The various school districts truly govern where a new school site would be located and when it would be necessary to construct or expand facilities in order to adequately accommodate population growth. Elected governing school boards are responsible for budgeting and decision-making and the State Department of Education establishes school site and construction standards. The General Plan provides policy which focus on collaboration with school districts in determining new school locations and utilizing school facilities for general public needs. School districts would be able to utilize the General Plan along with other plans, standards, and codes to establish new school sites and to make decisions on school amenities and cohesiveness with the surrounding area. Further, a) Notwithstanding Section 65858, or Division 13 (commencing with Section 21000) of the Public Resources Code, or any other provision of state or local law, the following provisions shall be the exclusive methods of considering and mitigating impacts on school facilities that occur or might occur as a result of any legislative or adjudicative act, or both, by any state or local agency involving, but not limited to, the planning, use, or development of real property or any change of governmental organization or reorganization, as defined in Section 56021 or 56073: (1) Section 17620 of the Education Code. (2) Chapter 4.7 (commencing with <u>Section 65970</u>) of Division 1 of Title 7. (b) The provisions of this chapter are hereby deemed to provide full and complete school facilities mitigation and, notwithstanding Section 65858, or Division 13 (commencing with <u>Section 21000</u>) of the <u>Public Resources Code</u>, or any other provision of state or local law, a state or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property or any change in governmental organization or reorganization, as defined in Section 56021 or 56073, on the basis that school facilities are inadequate. Significance Criteria The project may result in significant public service impacts if it substantially and adversely alters the delivery or provision of fire protection, police protection, schools, facilitates maintenance and other government services. Checklist Discussion a) (FIRE) Less than Significant Impact with Mitigation Measures (Payment of Impact Fees) – the increase in population as a result of a physical project for the area will increase demands on the HFD to provide fire protection and emergency services. The physical development of the project will be subject to Fire Impact fees in order to mitigate the effect of the project on Fire services.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) (POLICE) Less than Significant Impact with Mitigation Measures (Payment of Impact Fees) – the increase in population as a result of a physical project for the area will increase demands on the HPD to provide law enforcement services. The physical development of the project will be subject to Police Impact fees in order to mitigate the effect of the project on Police services. c) (SCHOOLS) Less than Significant Impact - The City's role in development and managing school sites and programs is limited. The various school districts truly govern where a new school site would be located and when it would be necessary to construct or expand facilities in order to adequately accommodate population growth. Elected governing school boards are responsible for budgeting and decision-making and the State Department of Education establishes school site and construction standards. The General Plan provides policy which focus on collaboration with school districts in determining new school locations and utilizing school facilities for general public needs. School districts would be able to utilize the General Plan along with other plans, standards, and codes to establish new school sites and to make decisions on school amenities and cohesiveness with the surrounding area. d) (PARKS) Less than Significant Impact with Mitigation Measures – See Recreation. e) (OTHER) Less than significant impact – Libraries – there is not a requirement or standard for the number or size of a library based on a city's population. Policies encourage residents to utilize the library's resources. Therefore, a significant impact is not anticipated. Mitigation Measures: MM Public Services 1: That the physical development of the project will be subject to Fire Impact Fees. MM Public Services 2: That the physical development of the project will be subject to Police Impact fees. Conclusion The project can be served by existing public services. Impact fees will be required of physical development. Sources: 2017 General Plan and General Plan Update				
XV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☒	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☒	☐	☐
Environmental Setting School Parks All school sites have limited public access since their primary purpose is to support the educational mission of the school districts that control their use. There are 16 school sites within the City. the school facilities include athletic fields, conference rooms, gymnasiums, auditoriums, and swimming pools, which are open to the public after hours, during the summer, and on weekends for recreational use. Indoor facilities The Hanford Parks and Recreation Department also provides a wide array of programs for City residents. The				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Recreation Department is responsible for coordinating activities for the entire family including special classes, youth programs, and older adult activities, sports for youth and adults, as well as community events. These activities are conducted in a variety of indoor rec. facilities. City of Hanford Parkland Standard Combining the City's 188 acres of parkland and 100 acres of school parks, the City has a total of 288 acres of developed parkland that go toward meeting the parkland standard. This does not include regional parks outside the planning area, greenways, private parks, or indoor recreation facilities. Based on the 2013 estimated population of 55,860 for the City of Hanford, the Study Area has approximately 5.2 acres of parkland for every 1,000 residents in the City. Significance Criteria The project may create impacts if it creates demand for new expanded parks and recreation facilities or substantially alters existing facilities. Checklist Criteria a) Less than Significant Impact with Mitigation Measures – The City would be able to utilize the Quimby Act and AB 1600 as a funding mechanism for parkland acquisition along with the General Plan Update and Park Master Plan for guidance and priorities. As permitted in the Quimby Act, local jurisdictions can require the dedication of land for parks and or the payment of in-lieu fees for purchase of parkland. The physical development of the project site would be subject to park impact fees. b) Less than Significant Impact with Mitigation Measures – there is not a physical development proposed at this time. Future development of the project area as high-density residential would have the potential to increase the population in the area. An increase in population would necessitate the need to require/construct expansion of existing recreation facilities. The City would be able to utilize the Quimby Act and AB 1600 as a funding mechanism for parkland acquisition along with the General Plan Update and Park Master Plan for guidance and priorities. As permitted in the Quimby Act, local jurisdictions can require the dedication of land for parks and or the payment of in-lieu fees for purchase of parkland. The physical development of the project site would be subject to park impact fees. Mitigation Measures MM Recreation 1: that the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees. Conclusion: The project would have a less than significant impact on recreation with the incorporation of mitigation measures. Source: 2017 General Plan, 2017 General Plan EIR				
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
standards established by the county congestion management agency for designated roads of highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐
Environmental Setting Existing Functional Roadway Classification System State Freeways and Highways There are two State Facilities serving the Study Area, namely SR-198 and -43. Arterial Roads Hanford's arterial street pattern is generally one-mile spacing between the existing arterials. Collector Streets Similar to some arterials, collector streets have evolved from heavy use as opposed to formal development standards. Local Streets Local street provide access to individual homes and businesses. Local streets have on lane in each direction. Local streets connect single-family homes and other uses not appropriate adjacent to major roadways, to the arterial-collector network. Existing Intersections All of the study intersections are operating at acceptable levels of LOS. Existing Roadway Segments Results of the analysis of existing roadway segments show that all of the study roadway segments are currently operating at acceptable LOS. Bicycle Facilities The 2011 Kings County Regional Bicycle Plan contains the specific "Bicycle Plan for the City of Hanford." The General Plan and the Bicycle Plan promote the establishment of a shared use roadway system, but encourages newly developing areas to provide for bicycle facilities along major roadways and off-road systems as part of open space and recreation amenities. The 2011 Regional Bicycle Master Plan then goes on to state Policy CI 8.4 of the 2002 General Plan: Bicycle lanes should be established where feasible along Major and Minor Collectors in newly developing areas. A bicycle route system should be identified which serves the existing developed City. This route system may not utilize Arterials or Collectors where travel ways are constrained, but rather parallel streets with less traffic. Where bicycle lanes are proposed they should be considered a shared facility with vehicular traffic on the street.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Mass Transit Kings Area Rural Transit Kings County Area Public Transit Agency (KCAPTA) is an intra-governmental agency with representatives from Avenal, Kings County, Hanford and Lemoore, and is responsible for the operation of the Kings Area Rural Transit (KART). KART offers scheduled daily bus service from Hanford to Armona, Lemoore, the Lemoore Naval Air Station, Visalia, Corcoran, Stratford, Kettleman City and Avenal. KART Dial-A-Ride Service Dial-A-Ride is an origin-to-destination service available to eligible residents of Hanford, Lemoore, Armona and Avenal. Park-and-Ride lots Park-and-Ride lots provide a meeting place where drivers can safely park and join carpools or vanpools or utilize existing public transit. Park-and-Ride lots are generally located near community entrances, near major highways or local arterial where conveniently scheduled transit service is provided. Hanford has one Park-and-Ride facility located at the northeastern entrance of the City at 10th Avenue and SR 43. KART-Vanpool Program KART defines vanpooling as 7 to 15 persons who commute together in a van-type vehicle and who share the operating expenses. The KART Vanpool Program provides passengers with reliable transportation to and from work. The vanpool program is not only to provide safe travel to work but to provide alternative transportation options, which would ultimately reduce the amount of vehicles on the road. Rail Service Amtrak Passenger Service Amtrak provides passenger rail service from Hanford station to the San Francisco Bay Area and Sacramento, and service to Southern CA by a combination of rail and bus. Freight service is available from both the BNSF Railway and the San Joaquin Valley Railroad. The Amtrak San Joaquin passenger train provides regularly scheduled intercity passenger rail service to Kings County. Stops are made daily at the Hanford and Corcoran stations for each northbound and southbound trains. Stops along the San Joaquin line also include Bakersfield, Wasco, Fresno, Madera, Merced, Turlock, Modesto, Stockton, Antioch, Martinez, Richmond, Emeryville, and Oakland, with connecting bus service to LA, Sacramento, SF, and many other points in Northern and Southern CA. Passengers can transfer to Amtrak Coast Starlight, which continues north to Portland and Seattle. High Speed Rail In November 2008, Proposition 1A, a High Speed Rail bond, was passed by California voters. In 2009, the US Department of Transportation through the American Recovery and Reinvestment Act program, announced the allocation of \$8 billion to high speed rail projects throughout the US. Of that amount, \$2.24 billion was allocated to California High Speed Rail. In November 2013, the California High Speed Rail Commission identified the preferred route through the Planning Area. The selected route, which runs along the eastern edge of Hanford, roughly follows a north-south route near the hgi voltage power lines between 7th and 8th Avenues. Freight Service Almost 87% of the total freight tonnage is moved out of the Valley by truck, while rail account for 11%. BNSF and SJVR railroads provide freight service to the Hanford Area. The BNSF mainline is double-tracked through the entire Planning Area. Over time, it is expected that the number of trains using the system will increase as demand for rail service increases. The BNSF railroad currently operates between 50 and 60 trains per day on the system. Consultation During Pre-Consultation, the City received the following comment from Cheryl Silva with the Hanford Joint Union High School District, "The proposed zoning change would significantly impact the intersection of 13th and Lacey Blvd. This is currently controlled by a 4-way stop sign and only one of two ways to get to Sierra Pacific High School and College				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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of the Sequoias. Additional housing (high density) would negatively impact our path to schools." In response, the Utilities and Engineering Director, John Doyel indicated that the intersection is controlled by the County and is currently approved for a traffic signal to be constructed in 2018.

Significance Criteria

The project may result in significant transportation/circulation impact if it does the following:

1. Cause an increase in traffic which is substantial in relation to the existing traffic loads and capacity of the road system that are inconsistent with adopted standards.
2. Creates traffic conditions which expose people to traffic hazards.
3. Substantially interferes or prevents emergency access to the site or surrounding properties.
4. Conflicts with adopted policies or plans for alternative transportation.

Checklist Discussion

- a) Less than Significant Impact – there currently is not a physical project for the development proposed. In the future, the site would be able to be utilized for office uses on the northern portion of the site, and high-density residential uses on the southern portion of the site. Any future development of the vacant parcel would be required to comply with all applicable plans, ordinances and policies for circulation system effectiveness. The Public Works Engineering division will place conditions of approval on all future development to ensure circulation effectiveness in accordance with City standards.
- b) See a.
- c) Less than Significant - The proposed project will not create a change in air traffic patterns nor increase traffic levels or change in location that result in substantial safety risks. The project is located approximately 2.5 miles northwest from the nearest municipal airport.
- d) Less than Significant Impact- there currently is not a physical project for the development proposed. In the future, the site would be able to be utilized for office uses on the northern portion of the site, and high-density residential uses on the southern portion of the site. Any future development of the vacant parcel would be required to comply with all applicable standards of the Public Works Engineering Division to ensure hazards due to design are not incorporated into the development.
- e) Less than Significant Impact – new development as a result of the project would enhance the capacity of the roadway system by upgrading roadways and intersections if necessary. The physical development of the project would be evaluated for emergency access and conditions to address emergency access would be provided if necessary.
- f) See a.

Conclusion

There currently is not a physical project for the development proposed. In the future, the site would be able to be utilized for office uses on the northern portion of the site, and high-density residential uses on the southern portion of the site. Any future development of the vacant parcel would be required to comply with all applicable plans, ordinances and policies for circulation system effectiveness.

Source: City of Hanford General Plan and EIR 2017, City of Hanford Municipal Code

XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:

a) Exceed wastewater treatment requirements of the	☐	☐	☒	☐
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
applicable Regional Water Quality Control Board?				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☒	☐	☐

Environmental Setting

Wastewater

The City's wastewater system provides for treatment, disposal, and reuse of effluent, which meets all of the state's discharge requirements for the entire City of Hanford (City). The wastewater system consists of a treatment plant and 21 sanitary sewer lift stations located throughout the City. The treatment facility has a capacity of 8.0 million gallons per day and is located south of Houston Avenue and east of 11th Avenue.

While the City is constantly working to improve and provide adequate services to the population demand, the Irwin Street trunk main has become a priority issue for the City's wastewater system. The Irwin Street trunk main is located south of the Downtown East Precise Plan area and may eventually be undergoing capacity issues. Sections of the trunk line are in poor condition, with adverse grades, inadequate pipe sizing, and near full capacity.

The City's wastewater system has also pursued water conservation strategies to ensure long-term reuse of treated disinfected wastewater for agricultural purposes and to recharge groundwater supplies for agriculture. By doing so, the City accomplishes two important water conservation efforts: 1) the additional supply for the City extends the surface water irrigation season and 2) reduces the need for agricultural pumping of groundwater in an area known to be low in groundwater.

Water Supply

The City's water system is a groundwater system. The City is located within the Tulare Lake Hydrologic Region. Within that region, the City is located within the Tulare Lake Groundwater Subbasin, which transmits, filters, and stores water from the main San Joaquin Valley Groundwater Basin.

The City's groundwater system consists of 13 supply wells, one standby well, three elevated storage tanks (all three of which have abandoned), one existing 0.5 million gallon ground-level storage tank at the Industrial Park, 3.5 million

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
gallon ground-level storage tanks, and a piping network for distributing the water throughout the City (2 million gallon storage tank at Grangeville and Centennial Drive facility and 1 million gallon storage tank at the Fargo Avenue facility). No surface water is used by the water system as groundwater is contained in both an unconfined and confined aquifer lying beneath the City. Currently, the City maintains 206 miles of main lines and 15,870 service connections, which includes 8-inch to 30-inch pipes with 12-inch mains laid out on an approximately 1-mile grid. Water is pumped from 13 deep wells. The well depth is determined by the water quality, but typically, is drilled to a minimum depth of 1,500 feet and below the Corcoran clay layer. The City's groundwater supply is recharged by rain and snowfall in the Sierra Nevada range and, to a lesser degree, from rainfall on the Valley floor. In addition, the City, along with the Peoples Ditch Company and the Kings County Water District, deliver excess water flows from the Kings River and storm water runoff into the drainage and slough basins located throughout the City. This, as well as percolation from storm water basins, local waterways, and agricultural irrigation, help to replenish the City's groundwater in surplus years. Storm Water Drainage The City is predominantly located within a 500-year Flood Zone as demined by FEMA Flood Insurance Maps. Areas subject to the 500-year flood zone have a moderate to low risk of flooding. There are two major irrigation ditches that flow through the City. Lakeside Ditch, which is operated and maintained by the Lakeside Water District, and the Peoples Ditch, which is operated and maintained by the Peoples Ditch Company. The Existing drainage infrastructure within the boundaries covered by the City's Storm Water Management Program includes natural drainage channels, retention basins, natural vegetation, piping, and pump stations. There are numerous areas where storm drainage is controlled via drainage inlets and underground structures. The storm drainage system consists of 30 pump stations, 57 miles of pipeline ranging in size from 6-inch through 60-inch , and 220 acres of drainage basins and drainage ditches. The storm drainage system removes rainfall from surface streets and disposes the accumulated stormwater in drainage basins. The City, in cooperation with the People's Ditch Company and the Kings County Water District, delivers excess water flows from the Kings River, along with storm water runoff, into the 125 acres of drainage and slough basins located throughout the City to help replenish the groundwater. Some of this acreage is located within the City's park facilities. Solid Waste Disposal The City's solid waste and recycling services are provided by the Kings Waste Recycling Authority (KWRA). The current KWRA facility is located at 7803 Hanford-Armona Road, southeast of the City near SR 43 and 198 and operates as a solid waste disposal and recycling facility. The responsibilities of the KWRA include the siting, permitting, financing, construction, and operation of landfills, as well as a Material Recovery Plan and Transfer Station. The KWRA also ensures all activities and waste diversion goals required by the State at the closure, post-closure monitoring, and liabilities of all identified former landfills in Kings County. The KWRA is the leading contributor to helping the City meet the State's recycling goals. Refuse from both municipal and commercial haulers is sorted at the KWRA facility to recover a variety of recyclable materials. Once waste is separated from recyclable materials, it is then hauled by transfer trucks from the Material Recovery Facility to the State-permitted 320-acre Chemical Waste Management Landfill site in Kettleman Hills. The landfills at the Kettleman Hills Facility are designed for municipal solid waste, which encompasses household and commercial trash. The facility is permitted to receive a maximum of 2,000 tons of municipal solid waste per day. The City has instituted a greenwaste collection mixed recycle collection program for single-family residential customers. Dry Utilities Gas and Electric Service The City's main electricity providers are Pacific Gas and Electric Company and Southern California Edison Company. Within the Study Area, PG&E provides power to sites south of Iona Avenue and north of Flint Avenue via 12 kv and 70kv lines. SCE supplies power to sites north of Iona Avenue and south of Flint Avenue via 12 kv and 66kv lines.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Communication Systems AT&T and Comcast are currently available in Hanford. AT&T provides telephone services that include ISDN and all other necessary high-technological services. Many cellular and long-distance services are also available. Comcast, Dish Network, and Direct TV provide television services as well as internet access. Thresholds of Significance The project may result in significant impacts on utilities and service systems if it substantially and adversely alters the delivery of utilities or substantially increases the demand for utilities. Checklist Discussion a) Less than significant - the City's Wastewater Treatment Facility is currently up-to-date with all wastewater treatment requirements set forth by the Central Valley Regional Water Quality Control Board. The City's WWTF would continue to comply with the requirements set forth by the Central Valley Regional Water Quality Control Board, as required by law. b) Less than Significant – there are no concrete plans being proposed for the development of the parcel into office and high-density residential, however, under the General Plan Update it was determined that planned improvements and expansion development through various goals and policies will assist in providing wastewater services to the study area, as development continues. The current capacity of the WWTF is designed to accommodate 8 mgd, which is expected to provide adequate services to population growth for the foreseeable future. c) Less than Significant – The project is a request to change the designation on a portion of a parcel from office to high-density residential. There are no concrete plans being proposed for the development of the parcel into office and high-density residential. At the time of development, the project would be reviewed by the Public Works Department to ensure stormwater drainage is adequately addressed. d) Less than Significant with Mitigation Measures - there are no concrete plans being proposed for the development of the parcel into office and high-density residential. Future population growth in the area would create an increase in water usage. Water supply demand was addressed under the Urban Water Management Plan, which concluded that the Tulare Lake Groundwater subbasin would continue to reliably supply water to meet the City's projected water demands through the year 2035. This would be made possible through the implementation of water conservation goals and policies established in the General Plan Update. e) No Impact. The project will not require a determination by a wastewater agency. f) Less than Significant – the City of Hanford will provide for solid waste collection and disposal for the proposed project site, when developed. The City has achieved a 50% diversion rate from the landfill and has incorporated a green waste program and recycling at the Materials Recycling Facility. g) Less than Significant impact with Mitigation Measures – that the future of the project site be required to comply with all statutes and regulations related to solid waste. Mitigation Measure: Mitigation Measure Utilities 1: That any future development would be required to implement water conservation measures. Mitigation Measure Utilities 2: that the future of the project site be required to comply with all statutes and regulations related to solid waste. Conclusion Less than Significant Impact with Mitigation Incorporation - Impacts to utilities and services are considered less than significant with compliance with all statutes and regulations related to water usage and solid waste. Source: 2017 General Plan and General Plan EIR, State of California Department of Water Resources, Cal Recycle 2015				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐
a) Less than Significant - Based on the analysis provided in the initial study, the project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals. b) Less than Significant with Mitigation Incorporation- Based on the analysis provided, the project would not result in any significant cumulative impacts relative to other current projects, or the effects of probable future projects. c) Less than Significant with Mitigation Incorporation - Based on the analysis provided, the project will not have environmental effects that will cause substantial adverse effects on human beings.				


 Gabrielle de Silva
 Associate Planner

9/14/2017
 Date
 September 14, 2017

This section addresses the project's potential to contribute to cumulative impacts in the region, CEQA Guidelines Section 15355 defines cumulative impacts as two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects.

Cumulative Setting

The cumulative setting for the proposed project area includes previously-approved project, Site Plan Review No. 2015-05, a request to construction 210 multi-family units.

Impact Analysis

Aesthetics

Less than Significant with Mitigation Incorporation - Impacts to aesthetics are anticipated to be less than significant with mitigation measures for light sources from new projects including this project, and past projects.

Agriculture and Forest Resources

Less than Significant- the proposed project and previously-approved Site Plan 2016-05 are not in an area designated as prime farmland. Therefore, impacts to agriculture are not cumulatively considerable. Additionally, a right to farm disclosure must be recorded on properties within 1 mile of agricultural operations, which are permitted in the County.

Air Quality

Less than Significant with Mitigation Incorporation -The project will not create or result in any significant air quality impacts. Effects to air quality from this project will be mitigated with standards from the SJVAPCD for dust control.

Biological Resources

Less than Significant – the project area and surrounding project area contains no natural and undisturbed areas that may be considered habitat.

Cultural Resources

Less than Significant with Mitigation Incorporation – through consultation with the Tachi Yokut Tribe, it is anticipated the project and surrounding project area may contain culturally-sensitive materials. The effect of this project (when a physical project is proposed) and future development of the previously-approved plan would be mitigated by measures to address the discovery of sensitive materials.

Geology and Soils

Less than Impact with Mitigation Measures - The effect of this project (when a physical project is proposed) and future development of the previously-approved plan on geology and soils would be mitigated by compliance with the CBC, a geotechnical and soil studies (if required), and compliance with the Municipal Code Section 15.52.

Greenhouse Gas Emissions

Less than Significant with Mitigation Measures – the projects (planned and future) would contribute to GHG emissions, which is inherently a cumulative issue. The emissions during construction would be short-term as a result of fossil fuel burning construction equipment. Since the impacts are short-term and the contribution to GHG emissions would be minor compared to the State's GHG emission target of 427 MMTCO₂ eq by 2020, the construction-related GHG emissions of the project would be considered less than significant.

The operational emission from the projects (planned and future) would be indirect emissions from electricity usage. Compliance with current building code standards will assist in the reduction of energy use. The emissions are considered less than significant.

Hazards and Hazardous Materials

Less than Significant – The projects (proposed and planned) are not expected to have a significant impact as a result of hazards or hazardous materials, as the project area plans office and high-density residential land uses, which typically do not generate/use hazardous materials.

Hydrology/Water Quality

Less than Significant with Mitigation Incorporation – this project and past projects have been developed in accordance with City requirements specific to hydrology and water quality. Mitigations have been required on a project by project basis.

Land Use Planning and Population

Less than Significant -The projects are being developed consistent with the General Plan policy. This project and existing projects in the area have been developed consistent with the General Plan.

Mineral Resources

No Impact - there are no known mineral resources in the City.

Noise

Less than Significant with Mitigation Incorporation- this project and future existing projects within the area are required to meet the decibel requirement prescribed by the General Plan for Noise. Construction-related noise would be mitigated through the limitation of hours construction is permitted (between 7 a.m. and 10 p.m.).

Population and Housing

Less than Significant - The future development of residences has the potential to impact population and induce growth into the area, which is considered an implementation of the General Plan.

Public Services

Less than Significant with Payment of Impact Fees to Mitigate Effect -The project any proposed development is subject to impact fees to reduce impacts to public service.

Recreation

Less than Significant with Payment of Impact Fees to Mitigate Effect - development of residences will impact recreation facilities, however, the impact will be mitigated through the payment of park impact fees.

Transportation/Traffic

Less than Significant with Payment of Impact Fees and Future Road Improvements to Mitigate Effect – Traffic improvements in the area will result in a LOS D or above in year 2035, with the proposed future develop of the project site and surrounding planned projects. The circulation pattern in the vicinity has been designed to accommodate future build out in the area in accordance with the Circulation Element. The project will have a less than significant cumulative impact on traffic and circulation conditions through appropriate project design and payment of traffic impact fees, as required.

Utilities and Service Systems

Less than Significant with Mitigation Incorporation – Impacts to utilities and services are considered less than significant with compliance with existing State and local water conservation measures. This project and future projects in the area have been accounted for and can be served by the City's utilities and service systems.

**Tentative Parcel Map No. 2017-01, General Plan Amendment No. 2017-03 (A), and Rezone No. 2017-01
Mitigation Measures
Mitigated Negative Declaration 2017-11**

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the physical development of the site (when proposed) be subject to the applicable development standards of the Hanford Municipal Code.	Developer to provide; City to require on site plan and building permits
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the physical development of the project site would be subject to the applicable provisions of the Hanford Municipal Code, such as section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare	Developer to provide; City to require on site plan and building permits
AGRICULTURE			
MM Agriculture 1.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	That a right-to-farm provision be recorded with the recording of the final parcel map to insure that future residents of the homes in the project are aware of the adjacent agricultural uses and their right to continue to operate.	City to require; Developer to disclose
AIR QUALITY			
MM Air Quality 1:	Project could potentially	The physical development of the project would be subject to the	Developer to file

	conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state ambient air quality standard?	SJVAPCD Indirect Source Review (Rule 9510) if more than 50 residential units were proposed in the project area. The applicant would be required to obtain permits demonstrating compliance with Rule 9510 or payment of mitigation fees to the SJVAPCD.	application with San Joaquin Valley Air Pollution Control District
MM Air Quality 2:	The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	The physical development of the project site would be required to utilize effective dust control measures on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially cause a substantial adverse change in the significance of an archeological resource pursuant to Public Resources Code 15064.5? The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1) that a Burial Treatment Plan be entered into by the applicant/property owner prior to any earth disturbing activities. 2) that the Tachi Tribe have a Native American monitor on-site during tree removal and/or other ground disturbing activities; including, but not limited to, grading, trenching, etc. Monitoring shall continue until released by the Tachi Tribal Cultural Department. 3) that a cultural presentation be given to the developer and all contractors and sub-contractors prior to any ground disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			

MM Geology 1:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - strong seismic ground shaking; - seismic-related ground failure, including liquefaction.	That the physical development of the project site comply with the applicable General Plan policies, as well as the California Building Code.	City of Hanford must ensure conditions are set forth to mitigate impacts; Developer to comply with standards
MM Geology 2:	That the project may expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving: - landslides.	That a geotechnical and soil studies be prepared as a requirement of the physical development of the project site (as determined by the Building Official)	Building Official to require; developer to conduct study
MM Geology 3:	That the project could result in substantial soil erosion or the loss of topsoil?	That the physical development of the project site shall comply with the Hanford Municipal Code Section 15.52 Flood Damage Prevention Regulation and the California Building Code, along with the plan check and development review process.	City to require; developer to comply
HAZARDS AND HAZARDOUS MATERIALS			
MM Hazards 1	That the project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	The physical development of the project site would be required to comply with applicable federal, state, and local regulations related to hazardous materials.	Developer
HYDROLOGY AND WATER QUALITY			
MM Hydrology 1 & 2	The project could potentially violate water quality standards or	1) All new development that disturbs more than one acre is required to comply with the General Permit Order No. 2012-006-DWQ during construction. Proponents of new development would have to develop	City to require; Developer to provide

	waste discharge requirements. That the project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	and implement a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving off-site and into receiving waters; eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; and inspect all BMPs; 2) New development would be required to implement appropriate minimum control measures (MCMs) and design standards in compliance with Phase II General Permit, as outlined in the Stormwater Management Plan, as well as the City's grading plan and site development requirements.	
MM Hydrology 3	The project could potentially substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	New development must submit grading plans. Site development must comply with the requirements of the City Building Division and incorporate best management practices/design standards.	City to require; Developer to provide
MM Hydrology 4	Otherwise substantially degrade water quality?	New development would have to incorporate best management practices and adhere to design standards to maximize the reduction of pollutant loadings in runoff to the maximum extent practical.	
NOISE			
MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	Comply with applicable regulations and policies of the General Plan to ensure that construction-related impacts would be attenuated to the greatest extent feasible.	Residents and developer; Police to enforce

	agencies?		
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That when a physical project is proposed, construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
PUBLIC FACILITIES			
MM Public Facilities 1:	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Fire)	The project will be subject to fire impact fees.	Developer to pay
MM Public Facilities 2	The project may result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities. (Police)	The project will be subject to police impact fees.	Developer to pay
RECREATION			
MM Recreation 1	The project could potentially increase the use of existing neighborhood and regional parks or other recreational facilities such	That the physical development of the project would require dedication of land for parks and/or the payment of park in-lieu fees.	City to require; developer to provide or pay

	that substantial physical deterioration of the facility would occur or be accelerated? That the project includes recreational facilities or requires the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.	
UTILITIES AND SERVICE SYSTEMS		
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	Any future development of the project site would be required to implement water conservation measures
MM Utilities 2:	Would the project comply with federal, state, and local statutes related to solid waste?	City to require and ensure compliance; developer and future occupants to adhere
		City to require; developer to provide

Pre-Consultation Received:

Cheryl Silva

Hanford Joint Union High School District

Attachment: Exhibit D - Mitigated Negative Declaration No. 2017-11 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and

Gabrielle deSilva

From: Gabrielle deSilva
Sent: Tuesday, August 22, 2017 2:40 PM
To: 'Silva, Cheryl'
Cc: William Fishbough; Renee Creech
Subject: RE: Traffic Impact @ 13th and Lacey Blvd.

Follow Up Flag: Follow up
Flag Status: Flagged

Please see the response below from our Utilities and Engineering Director, John Doyel.

Gabrielle de Silva
 Associate Planner
 City of Hanford
 317 N. Douty Street
 Hanford, CA 93230
 Direct: (559)585-2578
 E-mail: gdesilva@cityofhanfordca.com
 TDD/TYY, Dial 711

From: John Doyel
Sent: Tuesday, August 22, 2017 2:38 PM
To: Gabrielle deSilva; Samantha Long
Subject: RE: Traffic Impact @ 13th and Lacey Blvd.

That intersection is controlled by the County and is currently approved for a traffic signal to be constructed in 2018.



Johnathan Doyel, PE/PLS
 Utilities and Engineering Director
 City of Hanford
 900 S. 10th Avenue
 Hanford, CA 93230
 Ph: 559-585-2571
 Fax: 559-583-1529

From: Silva, Cheryl [<mailto:chsilva@hjuhsd.k12.ca.us>]
Sent: Tuesday, August 22, 2017 2:04 PM
To: Gabrielle deSilva
Cc: William Fishbough; Renee Creech
Subject: Traffic Impact @ 13th and Lacey Blvd.

Hi Gabrielle,

The proposed zoning change would significantly impact the intersection of 13th and Lacey Blvd. This is currently controlled by a 4-way stop sign and only one of two ways to get to Sierra Pacific High School and College of the Sequoias. Additional housing (high density) would negatively impact our path to schools.

Thank you,
Cheryl Silva

--

Cheryl Silva, Assistant Superintendent
823 W. Lacey Blvd.
Hanford, CA 93230
(559) 583-5901 ext 3116
fax (559) 583-5931

Pre-Consultation Received:

Shana Powers

Tachi Yokut Tribe

Attachment: Exhibit D - Mitigated Negative Declaration No. 2017-11 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and

Diana Black

From: Shana Powers <SPowers@tachi-yokut-nsn.gov>
Sent: Thursday, August 31, 2017 1:19 PM
To: Diana Black
Cc: Robert G. Jeff; Greg Cuara; Hector Franco
Subject: RE: Pre-consultation Notices: GPA 2017-03 and GPA 2017-04, RZ 2017-02, AND SPR 2017-11

Dear Diana,

Thank you for your follow-up. Based upon the cultural sensitivity of the area, the Tribe has concerns that burials and cultural resources will be disturbed during ground disturbing activities if this parcel is developed. If the area is developed, the Tribe would like to be retained to provide Native American Monitoring and the provide a cultural presentation for the construction staff prior to ground disturbing activities.

Sincerely,

Shana Powers
 Cultural Specialist II
SPowers@tachi-yokut-nsn.gov
 Office: (559)924-1278 Ext: 4013
 Cell: (559)997-9919

From: Diana Black [mailto:DBlack@cityofhanfordca.com]
Sent: Tuesday, August 22, 2017 3:10 PM
To: Shana Powers
Subject: RE: Pre-consultation Notices: GPA 2017-03 and GPA 2017-04, RZ 2017-02, AND SPR 2017-11

Hello, Shana:

Thank you for your quick reply. You indicated that you do have comments regarding GPA 2017-03, but I didn't see any comments attached or included. I thought I would check with you to be sure I didn't miss something.

Diana Black
 Development Services Technician
 Community Development Department
 317 N. Douty Street
 Hanford, CA 93230
 (559) 585-4768
 FAX: (559) 583-1633
 TDD/TYY, Dial 711

From: Shana Powers [mailto:SPowers@tachi-yokut-nsn.gov]
Sent: Tuesday, August 22, 2017 1:44 PM
To: Diana Black <DBlack@cityofhanfordca.com>
Cc: Hector Franco <HFranco@tachi-yokut-nsn.gov>; Greg Cuara <GCuara@tachi-yokut-nsn.gov>; Robert G. Jeff <RJeff@tachi-yokut-nsn.gov>
Subject: RE: Pre-consultation Notices: GPA 2017-03 and GPA 2017-04, RZ 2017-02, AND SPR 2017-11

Pre-Consultation Received:

Gerry Mulligan

Hanford Elementary School District

Attachment: Exhibit D - Mitigated Negative Declaration No. 2017-11 (General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and

Hanford Elementary School District

September 5, 2017



714 N. White Street
P.O. Box 1067
Hanford, CA 93232

(559) 585-3600

Superintendent
Joy C. Gabler

Governing Board
Robert "Bobby" Garcia
Jeff Garner
Lupe Hernandez
Timothy L. Revious
Greg Strickland

Gabrielle de Silva
Community Development Department
City of Hanford
317 N. Douty Street
Hanford, CA 93230

Dear Ms. de Silva,

I received the Tentative Tract Parcel Map No. 2017-01 and have concerns. The children living in the proposed project area in grades 1 – 6 would be in the Simas Elementary School area of attendance and children in grades 7 - 8 would be in the Woodrow Wilson Junior High School area of attendance.

Student enrollment at current Hanford Elementary School District schools is over capacity. The District must build additional schools if new residential development continues. The District currently has no future school sites. While we do approve the Tentative Tract Parcel Map No. 2017-01, we respectfully request the City of Hanford to consider schools in the approval of future development.

If you have questions, please don't hesitate to call me at (559) 585-3628.

Sincerely,

Gerry Mulligan,
Director of Facilities and District Operations

GM:jb

City of **HANFORD**
 CALIFORNIA 93230
 CITY OFFICES 317 NORTH DOUTY STREET



MAYOR
 DAVID G. AYERS
 VICEMAYOR
 SUE SORENSEN
 COUNCIL MEMBERS
 MARTIN DEVINE
 FRANCISCO RAMIREZ
 JUSTIN MENDES
 CITY MANAGER
 DARREL L. PYLE
 CITY ATTORNEY
 ROBERT M. DOWD

August 21, 2017

PROJECT REVIEW – PRE-CONSULTATION NOTICE

For: General Plan Amendment No. 2017-03, Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01

The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03, Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01, filed by Village at Hanford Square, LLC. Tentative Parcel Map Waiver No. 2017-01: a request to divide a parcel into one parcel (Parcel A) and a designated remainder. See attached plan. General Plan Amendment No. 2017-03: A request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01: a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

The proposal is being forwarded to the responsible and interested agencies and individuals for early consultation. The City is in the process of preparing an Initial Study to identify what, if any, significant impacts need to be analyzed in conjunction with this project. Any assistance you can give in this effort would be appreciated.

It is requested that your comments, if any, be transmitted to this office by September 8, 2017 at 5:00 p.m. Comments can be mailed to the address above or emailed to gdesilva@cityofhanfordca.com. If you have any questions or concerns regarding this project, please call Gabrielle de Silva at (559)585-2578.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

I ☒ do ☐ do not have comments regarding this Project

RECEIVED

AUG 30 2017

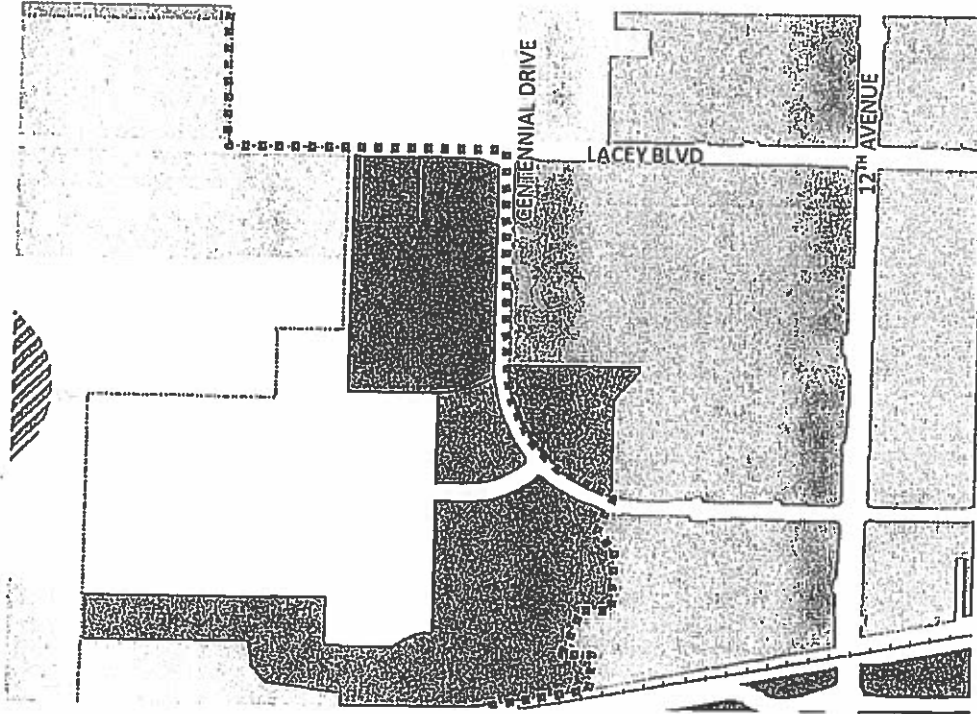
FISCAL SERVICES

[Signature]
 Signature

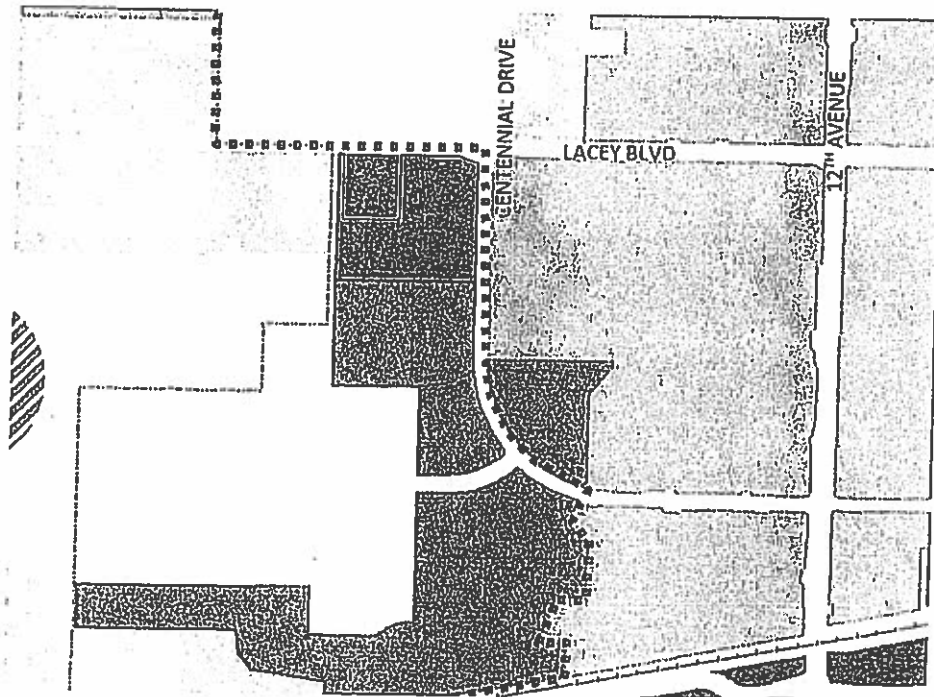
HESD
 Agency

8/1/17
 Date

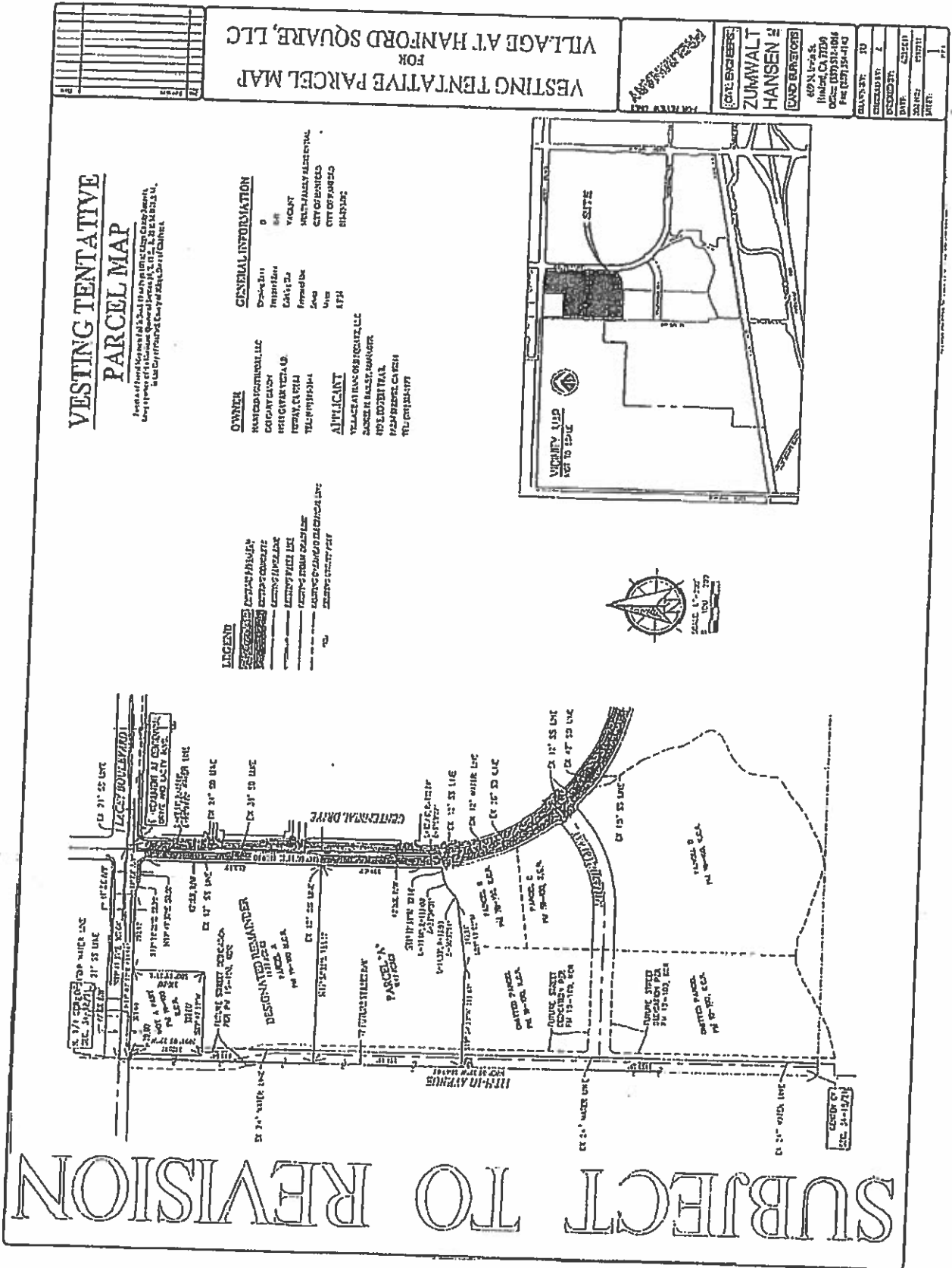
General Plan Designation:
Existing: Office
(Property outlined in red)



General Plan Designation:
Proposed: High-Density Residential
(Property outlined in red)



Tentative Parcel Map No. 2017-01



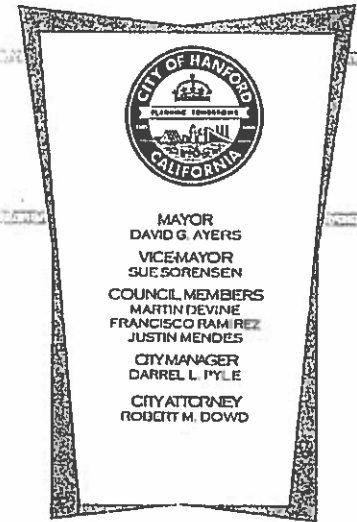
City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET

September 14, 2017

PROJECT REVIEW - CONSULTATION NOTICE

For: General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01,
and Tentative Parcel Map No. 2017-01.



The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (A), Rezone No. 2017-01, and Tentative Parcel Map No. 2017-01. The project has three components. Tentative Parcel Map No. 2017-01 is a request to divide the parcel located at APN 011-020-042 into one parcel, totaling 9.48 acres (Parcel A), and a designated remainder, totaling 10.2 acres. General Plan Amendment No. 2017-03 is a request to change the designation on Parcel A (cited above) from Office to High-Density Residential. Rezone No. 2017-01 is a request to change the zoning designation on Parcel A (cited above) property from O Office to R-H High Density Residential. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042). No physical development is proposed for the project area at this time. The project is located at the southwest intersection of Centennial Drive and Lacey Boulevard (APN 011-020-042).

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by October 6, 2017 via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

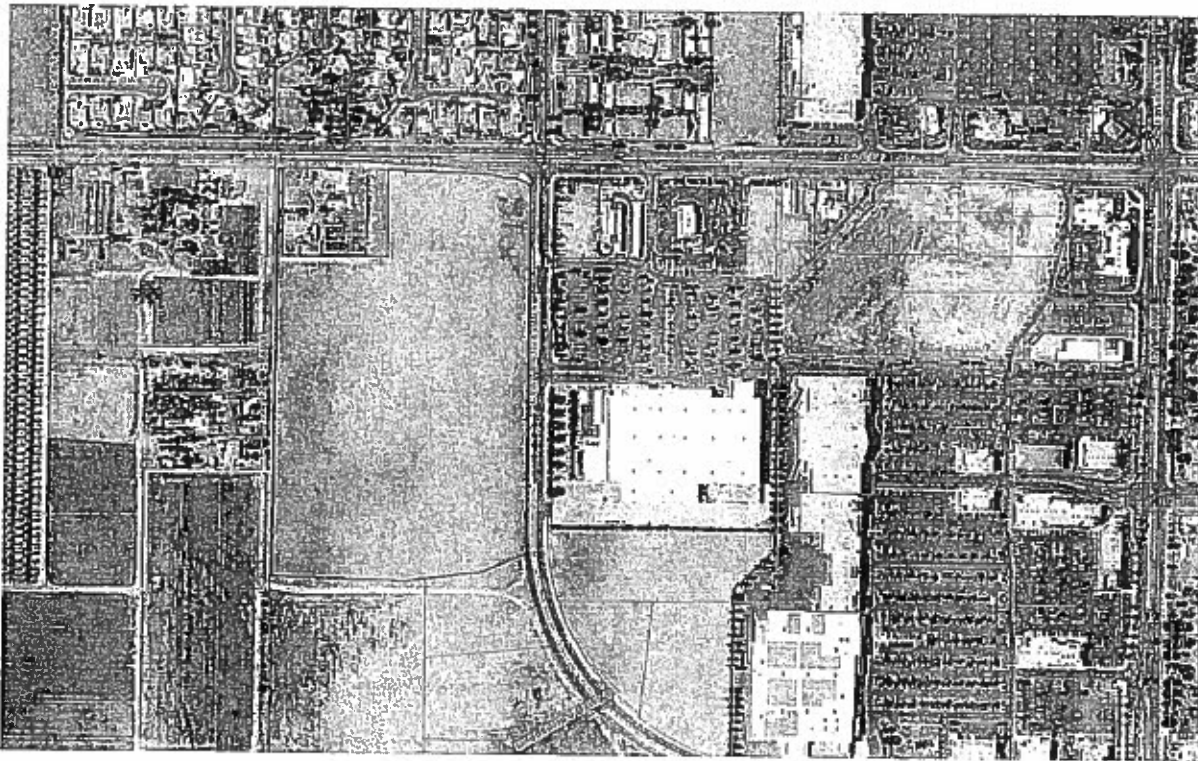
Gabrielle de Silva, Associate Planner

I ☒ do ☐ do not have comments regarding this Project

Mark Padvin KART 8/21/17
Signature Agency Date

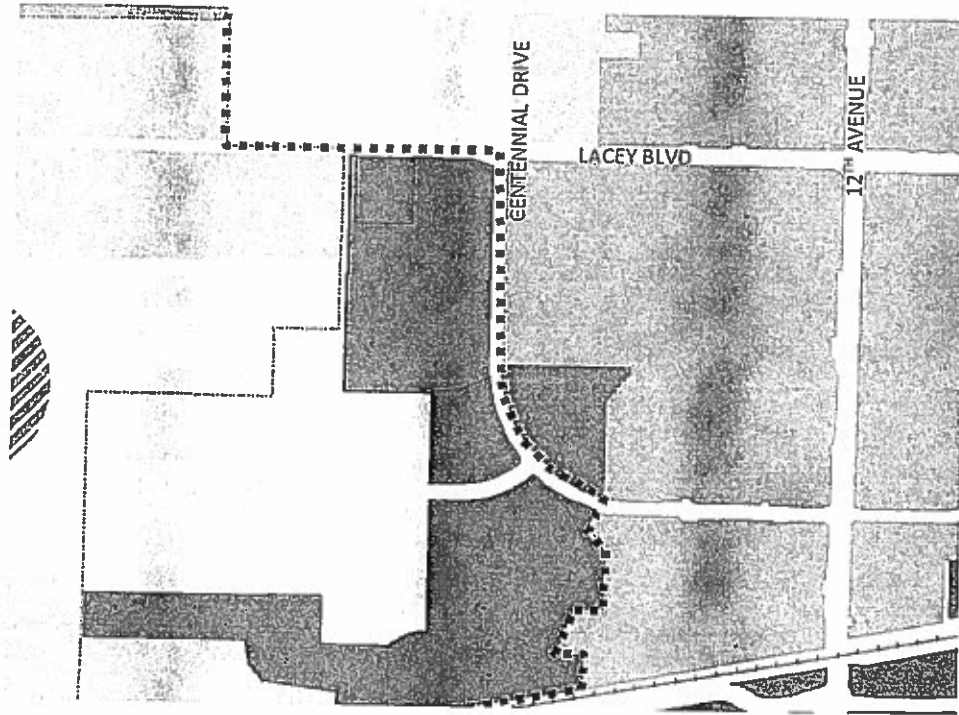
KART WOULD LIKE CONSIDERATION FOR A BUS STOP. A SECTION OF
SIDEWALK 7' WIDE FROM CURB TO BACK OF SIDEWALK. WITH 7' WE CAN
FIT A SIGN + BENCH AND 4' OF ADA CLEARANCE.

Land Use:
Vacant
(Property outlined in red)

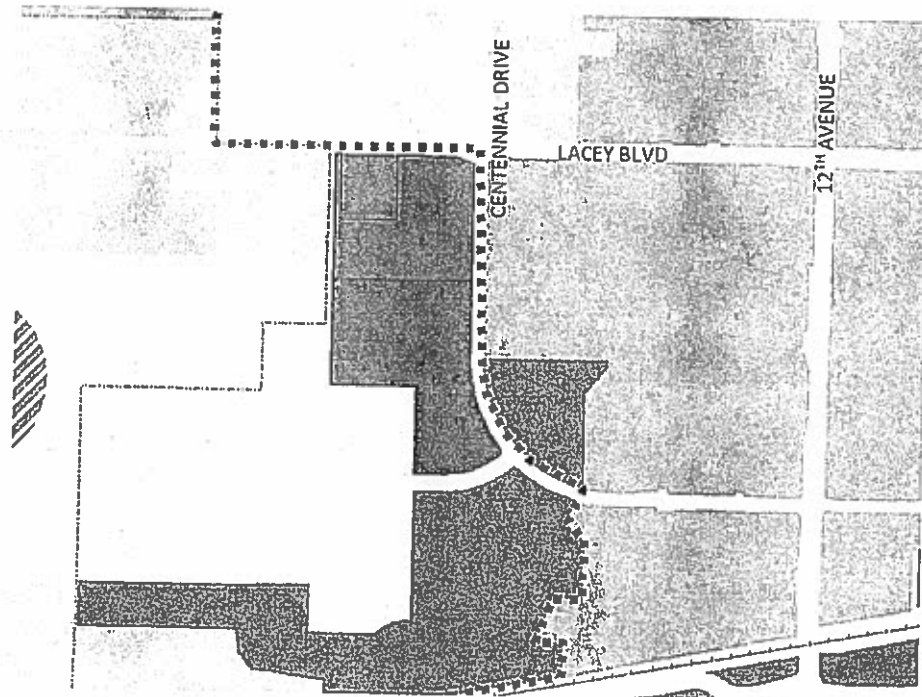


STOP WOULD BE FLAGGED BY NEW RESIDENTIAL
NEIGHBORHOOD STREET ENTRANCE.

General Plan Designation:
Existing: Office
(Property outlined in red)



General Plan Designation:
Proposed: High-Density Residential
(Property outlined in red)





AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: B
--------------------------------	--------------------------

SUBJECT:

General Plan Amendment No. 2017-03 (B): a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02: a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11: a request to convert an existing single-family residential home to a professional office. Mitigated Negative Declaration No. 2017-12: a request to certify that the project would not have a significant impact on the environment with the incorporation of mitigation measures. The project is located at the northwest corner of Grangeville Boulevard and Leoni Drive, 206 W. Grangeville Boulevard (APN 009-282-003).

See City Council Staff Report attached.

FISCAL IMPACT:

ATTACHMENTS:

City Council Staff Report - GPA 2017-03 (B)
 Resolution No. 17-54-R
 Ordinance No. 17-21
 Resolution No. 17-58-R
 Exhibit A - Site Plan Review No. 2017-11
 Exhibit B (1) - Reso 2017-18
 Exhibit B (2) - Reso 2017-19
 Exhibit B (3) - Reso 2017-20
 Exhibit C - Kart Comments
 Exhibit D - Mitigated Negative Dec. 2017-12

**CITY OF HANFORD CITY COUNCIL
STAFF REPORT**

MEETING DATE: Tuesday, November 7, 2017

PROJECT: **GENERAL PLAN AMENDMENT NO. 2017-03 (B):** a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential.

REZONE NO. 2017-02: a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential.

SITE PLAN REVIEW NO. 2017-11: A request to convert an existing single-family residential home to a professional office.

MITIGATED NEGATIVE DECLARATION NO. 2017-12: a request to certify that the project would not have a significant impact on the environment with the incorporation of mitigation measures.

LOCATION: The project is located at the northwest corner of Grangeville Boulevard and Leoni Drive, 206 W. Grangeville Boulevard (APN 008-282-003).

PROJECT PLANNER: Gabrielle de Silva, Assistant Planner

STAFF RECOMMENDATION

Staff recommends that the City Council:

1. Certify Mitigated Negative Declaration No. 2017-12 for the project.
2. Adopt Resolution No. 17-54-R, approving General Plan Amendment No. 2017-03 (B).
3. Introduce and waive the first reading of Ordinance 17-21 for Rezone No. 2017-02.
4. Adopt Resolution No. 17-58-R, approving Site Plan Review No. 2017-11.

RECOMMENDED MOTION

Take the following action:

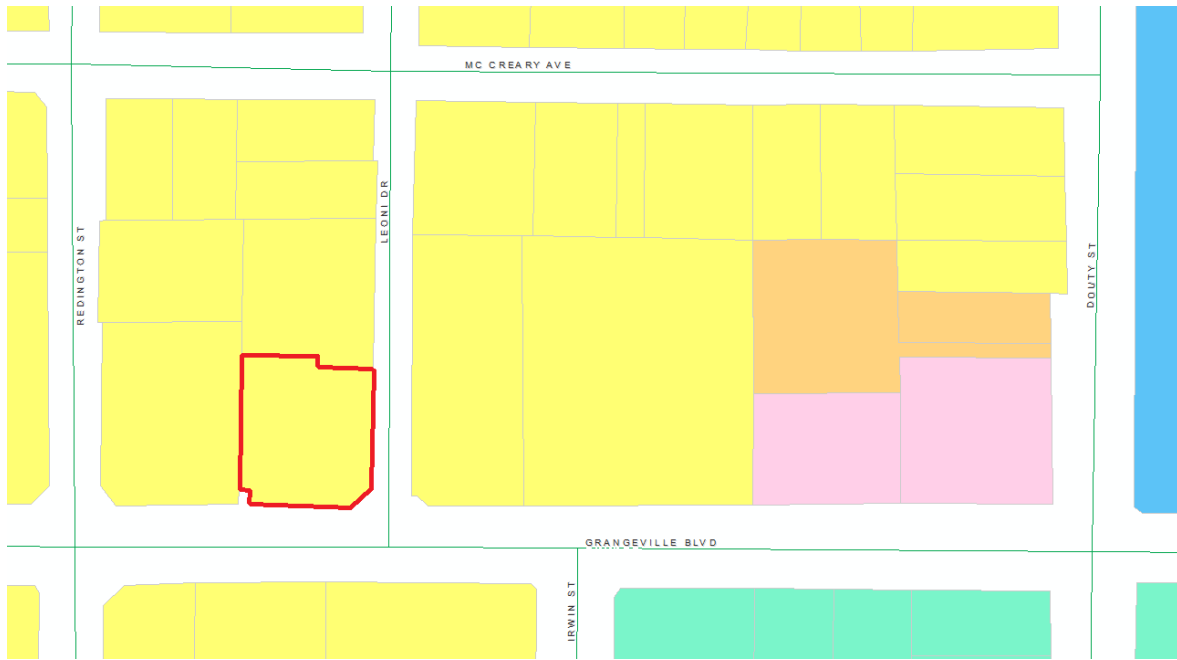
1. I move to certify Mitigated Negative Declaration No. 2017-12 for the project.
2. I move to adopt Resolution No. 17-54-R, approving General Plan Amendment No. 2017-03 (B).
3. I move to introduce and waive the first reading of Ordinance 17-21 for Rezone No. 2017-02.

4. I move to adopt Resolution No. 17-58-R, approving Site Plan Review No. 2017-11.

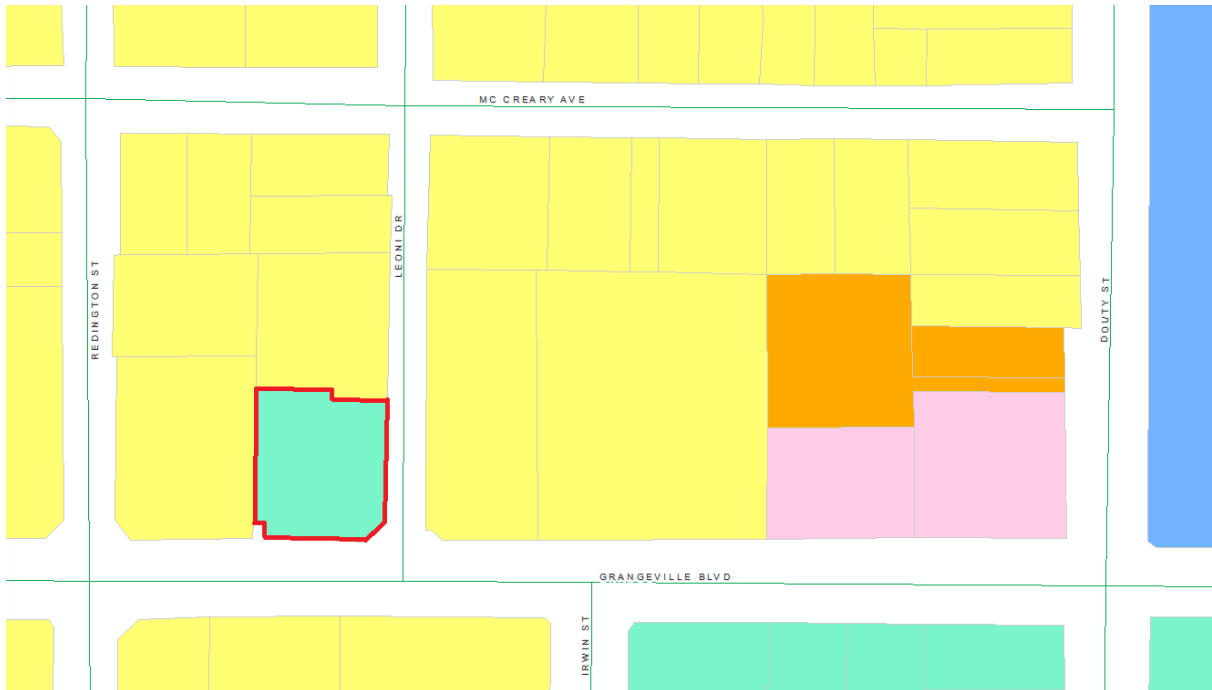
PROJECT DESCRIPTION

General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. See below.

General Plan Designation:
Existing

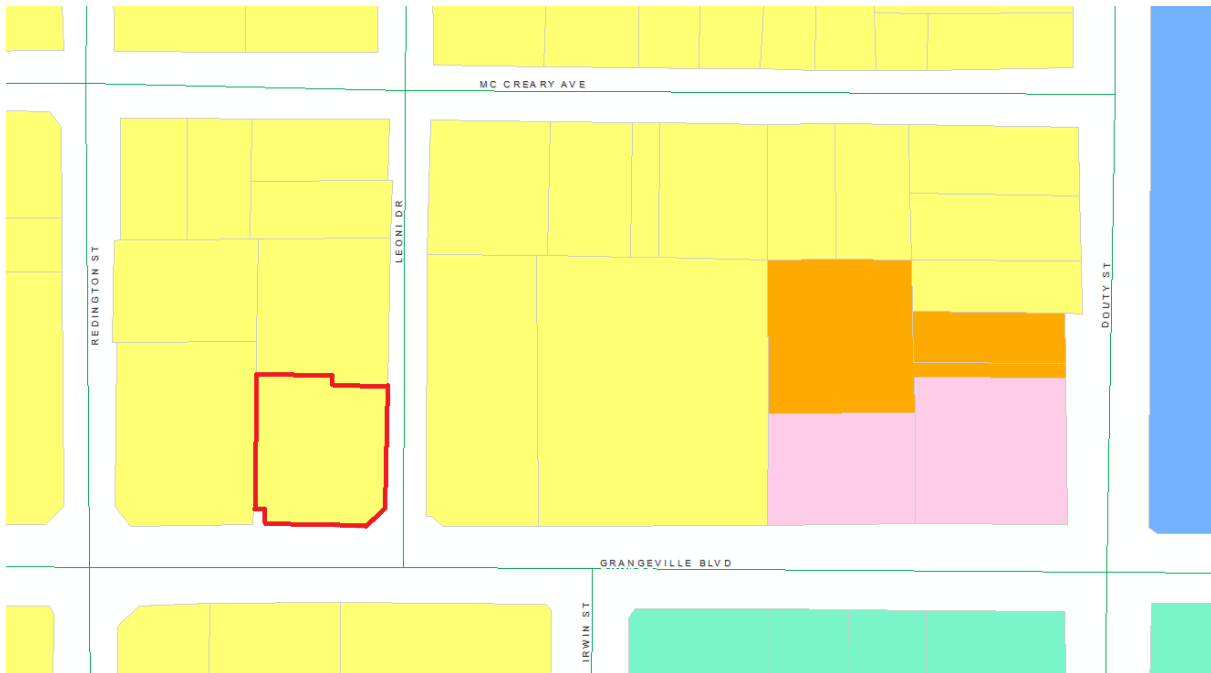


General Plan Designation:
Proposed under GPA 2017-03 (B): Office Residential

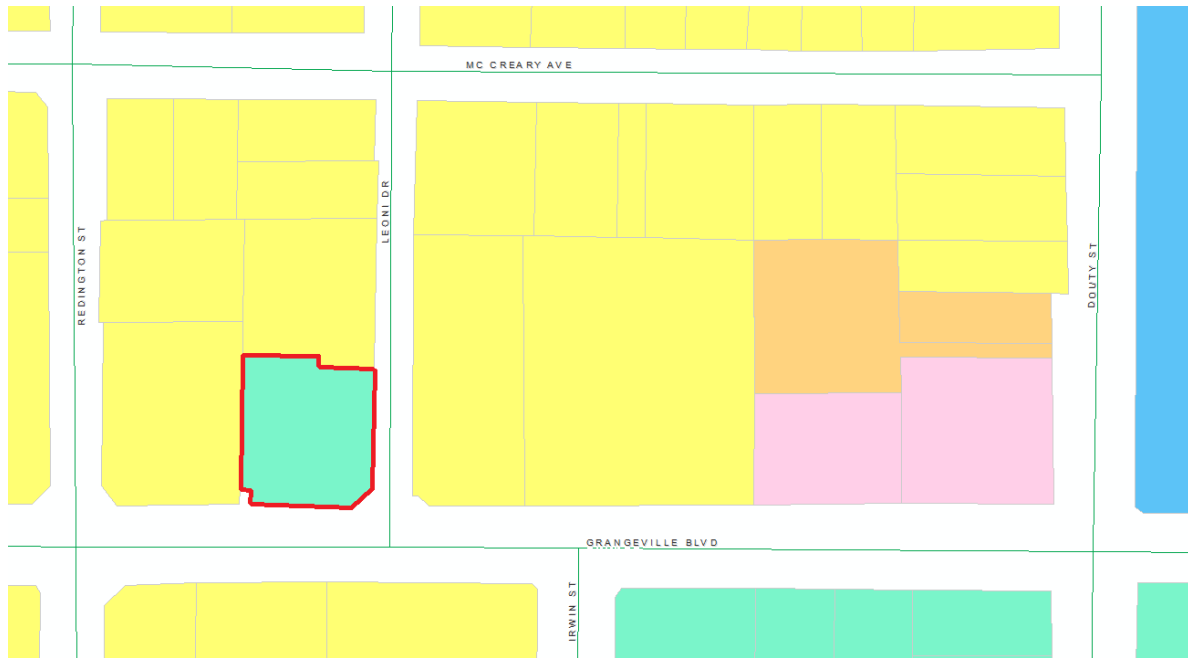


Rezoning No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. See below.

Zoning Designation:
Existing: R-L-5



Zoning Designation:
Proposed under Rezone 2017-02: O-R



Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office.

See Site Plan Review No. 2017-11, attached as **Exhibit A**.

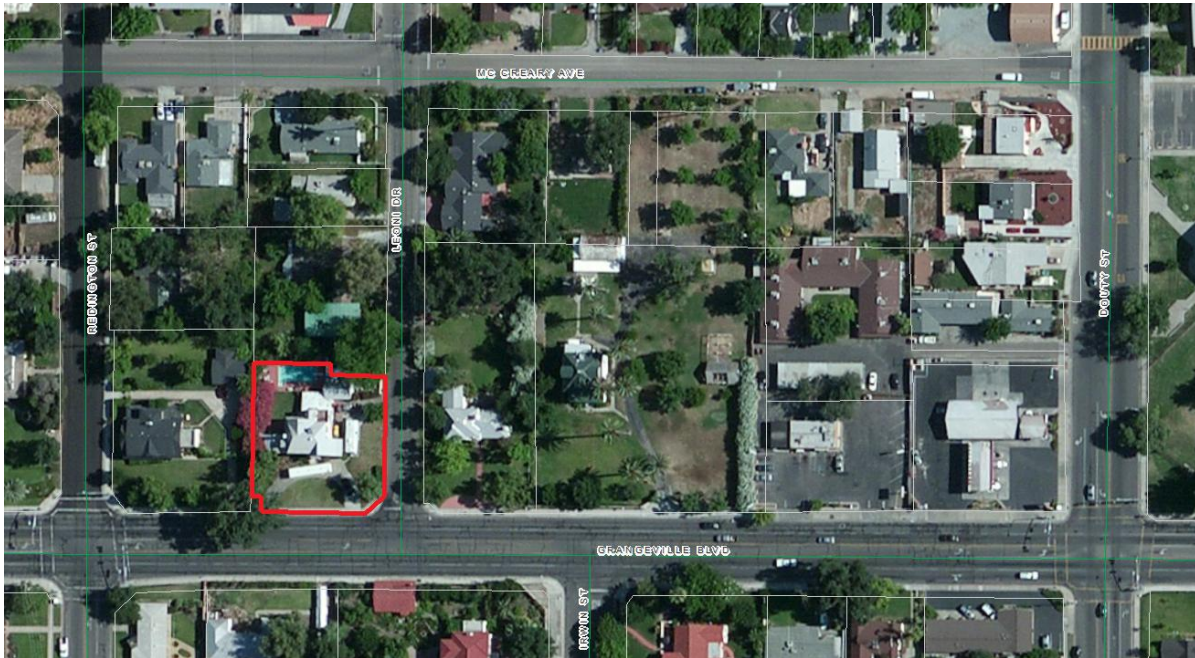
BACKGROUND

The project site is a 19,250-foot parcel with a single-family residence onsite. The project is located at the northwest corner of Grangeville Boulevard and Leoni Drive, 206 W. Grangeville Boulevard (APN 008-282-003). The property is currently designated Low-Density Residential by the General Plan and is zoned R-L-5 Low-Density Residential.

Surrounding land uses are as follows:

	Zoning	General Plan Designation	Land Use
North	R-L-5	Low-Density Residential	Residential
East	R-L-5	Low-Density Residential	Residential
South	R-L-5	Low -Density Residential	Residential
West	R-L-5	Low-Density Residential	Residential

Land Use
Parcel outlined in red



Planning Commission:

The project was presented to the Planning Commission at their regularly scheduled meeting on October 10, 2017.

Public comment for the item included the following:

Favor

- Dan Conner, applicant for the project, London Properties
 - o Mr. Conner provided the following information, that the property had previously been considered unsightly, it had been vandalized, and foreclosed twice
 - o Stated that the surrounding neighbors are supportive of the project
 - o No changes to the exterior proposed

Commissioner comments closing public comment:

- Commissioner Paden and Sanchez provided comments in support of the project.

The Commissioners voted 7, 0 to recommend all items for approval to the City Council.

Copies of the signed Planning Commission resolutions are attached as **Exhibit B**.

PROJECT EVALUATION

General Plan Amendment No. 2017-03 (B)

General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential.

The applicant is requesting to change the designation of the parcel from Low-Density Residential to Office Residential, in order to permit the location of a real-estate office in a single-family residential home, to be converted under Site Plan Review No. 2017-11.

According to the General Plan, the Office Residential designation is an area, where older homes, some of which are in the process of converting from conventional single-family units to offices, are located. Many of these structures are large and have stunning architectural features.

The property in question is a large single-family home, which was constructed in 1931. Below is an image of the single-family dwelling obtained from Google Maps.



Policy L79 Purpose of Office Residential Land Use Designation: Establish the Office Residential land use designation to preserve and enhance existing residential structures by allowing them to convert to offices, bed-and-breakfast inns, or a combination of office and residential units.

Analysis: The applicant purchased the single-family home with the intent to convert the structure into a real estate office. The proposed use of the building as an office is consistent with Policy L79.

Policy L80 Location of Office Residential Land Use Designations: The Office Residential land use designation shall be located near the Downtown Mixed Use designation or other areas that have concentrations of historic or heritage residential dwellings. General locations include houses along Grangeville Boulevard, between 10th and 11th Avenues, Redington, Irwin, and Douth Streets between Ninth Street/Dewey Street, and Ninth Street between Brown Street and 10th Avenue.

Analysis: This project is located along Grangeville Boulevard, which has concentrations of historic and heritage residential dwellings. The property in question has a residence which features historic architectural details and was constructed in 1931. Surrounding Office Residential properties feature converted residences with similar character and constructed in the same time period.

Policy L81 Design of Office Conversions: Ensure that the houses converted to non-residential uses maintain the residential character of the neighborhood by minimizing changes to landscaped front yards and exterior building elevations, by not allowing new on-site parking in front yards, and by allowing only low-profile signage for businesses.

Policy L82 Design of Conversions Historic Character Ensure that the historic architectural character is maintained when a house is converted to non-residential uses.

Analysis: The conversion of the residential dwelling to office, as proposed under Site Plan Review No. 2017-11, involves minor changes to the site. The exterior of the building is proposed to remain the same. Conditions of approval of the site plan include the following:

- That in accordance with Section 17.30.100 Conversion to non-residential uses, no exterior alterations or additions shall be permitted that significantly alter the original architectural style of the building.
- Exterior alterations or additions to buildings shall be minimized to the extent possible.

Rezone No. 2017-02

Rezone No. 2017-02 is a request to change the designation on the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential.

17.06.060 Zone Changes. Changes to the zoning map shall be approved by ordinance of the City Council, in accordance with Chapter 17.86. Section 17.86 of the Municipal Code describes the process for consideration of a Rezone. The reviewing authority is required to make the required findings below:

1. That the amendment is internally consistent with the goals, objectives, and policies of the general plan and the Municipal Code.
2. The amendment would not be detrimental to the public health, safety, or welfare of the community.

3. The amendment would maintain the appropriate balance of land uses within the City.
4. The anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

An analysis of the required findings appears below.

Site Plan Review No. 2017-11

A site plan review is generally an administrative application; however, when accompanied by additional projects requiring approval from the Planning Commission and/or City Council, the project is forwarded with the proposal.

Site Plan Review No. 2017-11 is a request to convert the existing residence located at 206 W. Grangeville Boulevard to an office.

See Site Plan Review No. 2017-11, attached as **Exhibit A**.

Analysis

The project meets the requirements of the O-R Office Residential Zone District.

Permitted Uses (17.30.020)

The use of a professional or commercial office is a permitted use in the O-R Office Residential Zone District.

Lot Area (17.30.030)

The lot is 19,250 square feet, which meets and exceeds the minimum 5,000 square feet lot size of the O-R Office-Residential Zone.

Building Setback Areas (17.30.070)

The structure meets the required setbacks of the O-R Office Residential Zone District, which are as follows for a two-story structure:

Front: 15 feet

Rear: 25 feet

Interior Side: 5 feet

Street Side: 10 feet

Conversion to Non-Residential Use (17.30.100)

When an existing building which has been used as a residence is converted to a non-residential use, the following standards apply:

- No exterior alterations or additions shall be permitted that significantly alter the original architectural style of the building.
- Exterior alterations or additions to buildings shall be minimized to the extent possible.

The above appear as conditions of approval of Site Plan Review No. 2017-11.

Off-Street Parking (17.30.140 and 17.54)

The applicant provides 12 parking stalls onsite, which satisfies the parking ratio required by the Hanford Municipal Code for all office uses, which is 1 space per 250 square feet.

Calculation: 2,900 square feet of office space ÷ 250 = 11.6 stalls

In accordance with Section 17.54.040 C, if, in the application of the requirements of this section (17.54), a fractional number is obtained, one parking space shall be provided for a fraction of one-half or more, and no parking space shall be required for a fraction of less than one-half. Therefore, 12 parking stalls would be required to satisfy the off-street parking requirement.

Landscaping (17.30.160)

The applicant provides landscape which satisfies the conditions of the Code. In accordance with the Hanford Municipal Code, except for driveways and approved parking areas, all yard areas and setback areas visible from the street(s) shall be landscaped with live plant materials and ornamentation common to the Hanford area or up to 100 percent of the yard area and setback area may be landscaped with artificial turf and other permeable surfaces.

Additionally, in the O-R District, the parking area must have one tree placed at every four lineal parking spaces. The applicant's proposal satisfies this condition.

FINDINGS FOR APPROVAL

General Plan Amendment No. 2017-03 (B)

In accordance with Section 17.88.040 of the Hanford Municipal Code, before a general plan amendment may be approved, all of the following findings shall be made by the reviewing authority:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (B) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with Policy L79, L80, L81, and L82.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments.

Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program and in the conditions of approval for Site Plan Review No. 2017-11.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from Low-Density Residential to Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with offices. Office and residential are compatible uses. Both generate minimal noise, congestion, and traffic.

Rezone No. 2017-02

In accordance with the Hanford Municipal Code Section 17.86.030, before a zone change may be approved, all of the following findings shall be made by the reviewing authority:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-02 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistent with Policy L79, L80, L81, and L82. The development proposed under Site Plan Review No. 2017-11 is consistent with the applicable development requirements of the Hanford Municipal Code.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the

number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from R-L-5 Low-Density Residential to O-R Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with offices. Office and residential are compatible uses. Both generate minimal noise, congestion, and traffic.

CONSULTATION

Pre-Consultation

In accordance with Section 15603(g) of the California Environmental Quality Act (CEQA) Guidelines, the project proposal was forwarded to the responsible and interested agencies for early consultation on August 22, 2017. No responses were received.

CONSULTATION

In accordance with Section 15073 of the California Environmental Quality Act Guidelines, a notice of intent to adopt a mitigated negative declaration was sent to the concerned agencies on September 14, 2017. Comments were received from the following agencies:

Responses to comments are addressed within the initial study and are as follows:

1. Kings County Area Public Transit Agency (KART) – Mark Pedriro

During normal consultation, Mark Pedriro with Kings County Area Public Transit provided the following:

KART would like consideration for a future bus stop. If sidewalk improvements are made, please consider a section of sidewalk seven feet wide from curb to back of sidewalk for a sign and possible bench.

Analysis: The project has been conditioned to include the request.

See KART consultation comments received, attached as **Exhibit C**.

ENVIRONMENTAL ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA), General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11 were evaluated in an Environmental Assessment/Initial Study. Based on the review, it was determined that the proposed project would not result in a significant adverse impact on the environment with the incorporation of mitigation measures, therefore Mitigated Negative Declaration No. 2017-12 has been prepared, attached as **Exhibit D**.

PUBLIC COMMENTS

Notice of Intent to Adopt a Mitigated Negative Declaration was published in the newspaper on September 15, 2017 and mailed to property within 500 feet of the project site on September 14, 2017. The environmental document was made available for a comment period of 20 days, September 15 – October 6, 2017. During that period, no public comments were received.

Notice of the public hearing before the City of Hanford City Council was published on October 27, 2017 and mailed to property owners within a 500 ft. radius on October 26, 2017. No additional public comments have been received as of the date of preparation of this report.

STAFF RECOMMENDATION

Staff recommends that the City Council:

1. Certify Mitigated Negative Declaration No. 2017-12 for the project.
2. Adopt Resolution No. 17-54-R, approving General Plan Amendment No. 2017-03 (B).
3. Introduce and waive the first reading of Ordinance 17-21 for Rezone No. 2017-02.
4. Adopt Resolution No. 17-58-R, approving Site Plan Review No. 2017-11.

Applicant and Property Owner

David J. Conner (c/o London Properties)
6442 N. Manoa Avenue
Fresno, CA 93704

RESOLUTION NO. 17-54-R

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD APPROVING AN AMENDMENT TO THE LAND USE ELEMENT OF THE GENERAL PLAN. GENERAL PLAN AMENDMENT NO. 2017-03 (B): A REQUEST TO CHANGE THE DESIGNATION FOR THE PROPERTY LOCATED AT 206 W. GRANGEVILLE FROM LOW-DENSITY RESIDENTIAL TO OFFICE RESIDENTIAL.

At a regular meeting of the City Council of the City of Hanford, duly called to order and held on November 7, 2017, at 7:00 p.m., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, General Plan Amendment No. 2017-03 (B) proposes to amend the land use designation of certain real property as follows:

General Plan Amendment No. 2017-03 (B)

0.58 acres located at 206 W. Grangeville Boulevard, APN 008-282-003, from Low-Density Residential to Office Residential, as shown in attached **Exhibit A**;

WHEREAS, the proposed general plan amendment was presented to the Planning Commission of the City of Hanford; and

WHEREAS, the City of Hanford Planning Commission, at its regularly scheduled meeting on October 10, 2017, held a public hearing and received testimony and evidence for and against the proposed general plan amendments. After closing the public hearing, the Planning Commission, by resolution, recommended that the City Council of the City of Hanford approve General Plan Amendment No. 2017-03 (B); and

WHEREAS, the City Council of the City of Hanford, at its regularly scheduled meeting on November 7, 2017, held a public hearing and received testimony and evidence regarding proposed General Plan Amendment No. 2017-03 (B); and

WHEREAS, the City Council of the City of Hanford considered the evidence presented in the staff report and testimony presented during the public hearing; and

WHEREAS, the City Council of the City of Hanford finds that no significant environmental impacts would result from the proposed project with the incorporation of mitigations, as presented in the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**; and

WHEREAS, Mitigated Negative Declaration No. 2017-12 was prepared and adopted; and,

WHEREAS, on the basis of the application for the amendment to the general plan, the documentation and information provided in the staff report, and the evidence and testimony submitted at the public hearing, the City Council of the City of Hanford hereby makes the following findings in accordance with Section 17.88.040 of the Hanford Municipal Code:

General Plan Amendment No. 2017-03 (B)

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (B) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with Policy L79, L80, L81, and L82.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program and in the conditions of approval for Site Plan Review No. 2017-11.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from Low-Density Residential to Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with offices. Office and residential are compatible uses. Both generate minimal noise, congestion, and traffic.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Hanford hereby approves General Plan Amendment No. 2017-03 (B). Passed and adopted at a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

 DAVID G. AYERS
 MAYOR of the City of Hanford

Attest:

 JENNIFER GOMEZ
 CITY CLERK

STATE OF CALIFORNIA)
 COUNTY OF KINGS) ss
 CITY OF HANFORD)

I, Jennifer Gomez, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the __ day of _____, 2017.

Date: _____

 City Clerk

Exhibit A
General Plan Amendment No. 2017-03 (B)

General Plan Designation:
Existing



General Plan Designation:
Proposed under GPA 2017-03 (B): Office Residential

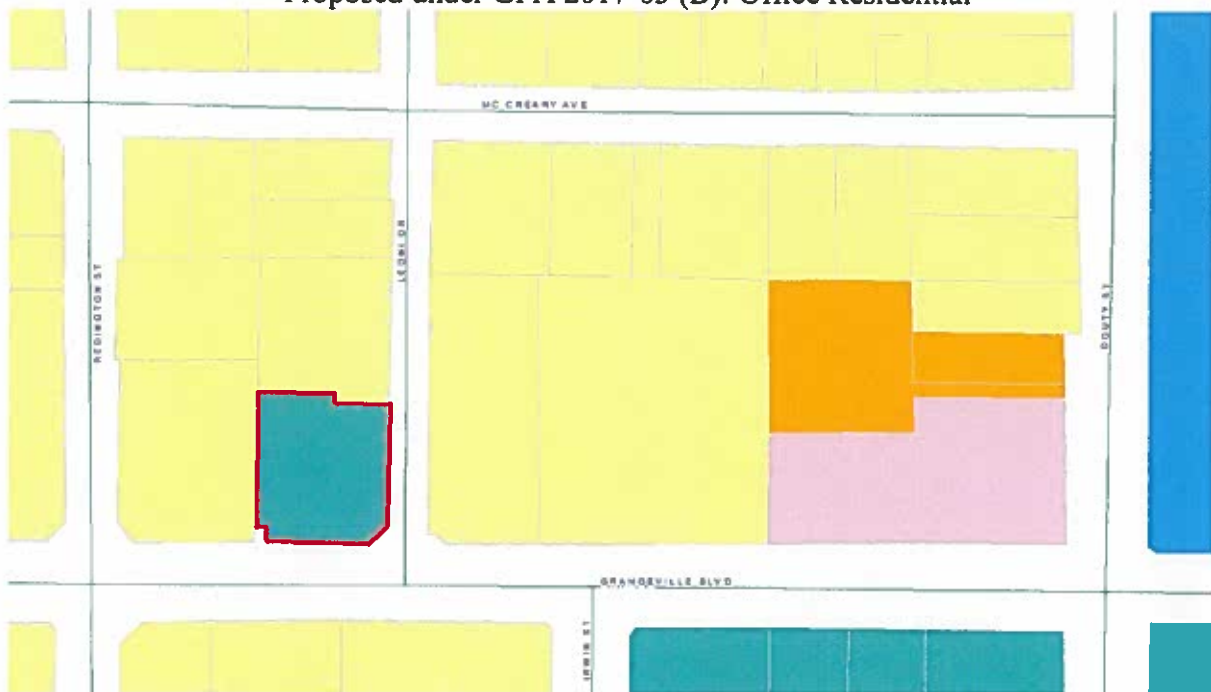


Exhibit B
Mitigation Monitoring and Reporting Program
General Plan Amendment No. 2017-03 (B)

Attachment: Resolution No. 17-54-R (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11
Mitigation Measures
Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?		
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development.	City to require; developer to comply
GREENHOUSE GAS EMISSIONS			
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions.	Developer
NOISE			

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORTATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?		to adhere
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ORDINANCE NO. 17-21**REZONE NO. 2017-02**

AN ORDINANCE OF THE CITY OF HANFORD CITY COUNCIL APPROVING REZONE APPLICATION NO. 2017-02, A REQUEST TO REZONE THE PROPERTY LOCATED AT 206 WEST GRANGEVILLE BOULEVARD FROM R-L-5 LOW-DENSITY REISIDENTIAL TO O-R OFFICE RESIDENTIAL. THE PROJECT IS LOCATED AT 206 W. GRANGEVILLE BOULEVARD (APN 008-282-003).

Section 1: the following described territory situated in the City of Hanford is hereby zoned under the terms of Chapter 17.86 of the Hanford Municipal Code:

Rezone No. 2017-02, filed by Daniel Conner,

FROM: R-L-5 Low-Density Residential

TO: O-R Office Residential

On property described as follows:

Approximately 0.58 acres located at 206 West Grangeville Boulevard (APN 008-282-003), as depicted in attached **Exhibit A**; and

Section 2: The Council does hereby find as a fact that the Planning Commission of the City of Hanford held a public hearing on October 10, 2017 after notice required by Section 17.70.110 of the Hanford Municipal Code and Government Code Section 65854. The City Council finds that Mitigated Negative Declaration No. 2017-12 is approved in conformance with the California Environmental Quality Act. The City Council hereby finds that the rezoning is consistent with the objectives of the zoning regulations as set forth in Section 17.86 of the Hanford Municipal Code, and that this Ordinance has been introduced by the City Council after public hearing held on the 7th day of November, 2017, at 7:00 p.m. of said day after notice required under the provisions of Section 65856 of the Government Code.

Section 3: That pursuant to Section 17.86.030, the City Council of the City of Hanford makes the following findings:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-02 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistent with Policy L79, L80, L81, and L82. The development proposed under Site Plan Review No. 2017-11, attached as **Exhibit B**, is consistent with the applicable development requirements of the Hanford Municipal Code.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program, attached as **Exhibit C**.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from R-L-5 Low-Density Residential to O-R Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with

offices. Office and residential are compatible uses.; both generate minimal noise, congestion, and traffic.

Section 4: This ordinance shall take effect (30) days after its passage, and be published once in the Hanford Sentinel within fifteen (15) days after its passage or a summary of this ordinance shall be published in the Hanford Sentinel in a manner consistent with the requirements of the California Government Code.

Passed and adopted at a regular meeting of the City Council of the City of Hanford duly called and held on _____, by the following roll call vote:

AYES: _____
 NOES: _____
 ABSTAIN: _____
 ABSENT: _____

APPROVED

DAVID G. AYERS

MAYOR of the City of Hanford

ATTEST:

JENNIFER GOMEZ
CITY CLERK

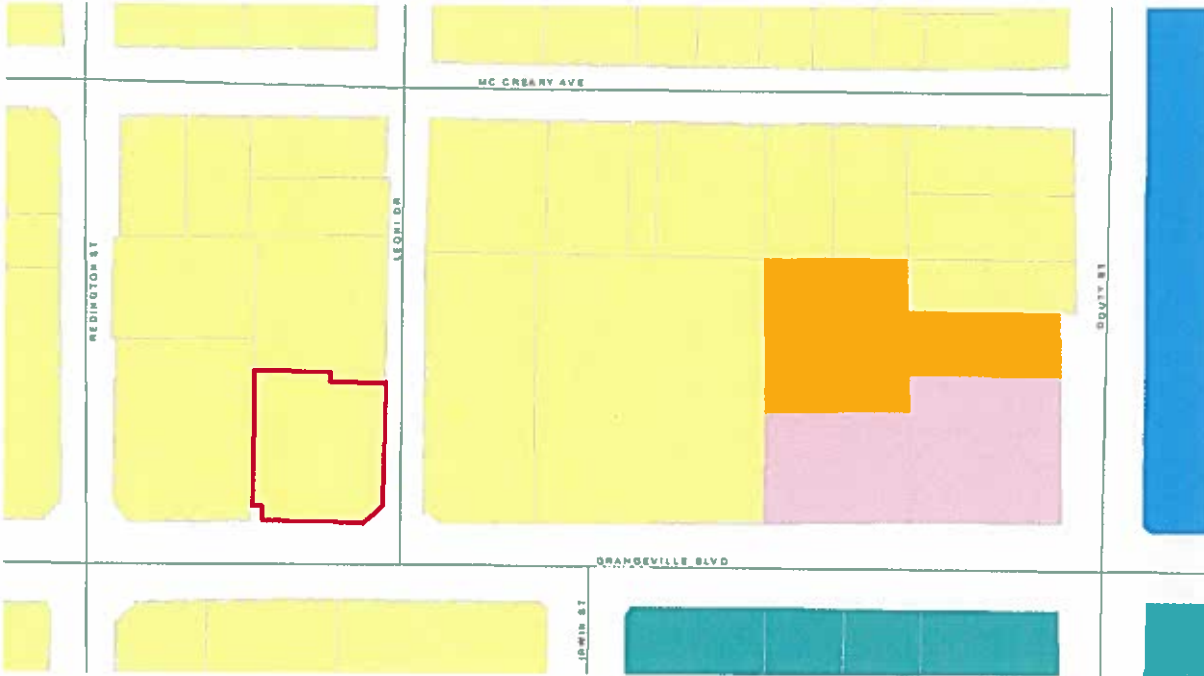
STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I JENNIFER GOMEZ, City Clerk of the City of Hanford, do hereby certify the foregoing ordinance was duly introduced at a regular meeting of the City Council of the City of Hanford on the 7^h day of November, 2017, and it was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the 21st day of November, 2017.

JENNIFER GOMEZ
CITY CLERK

Exhibit A
Rezone No. 2017-02

Zoning Designation:
Existing: R-L-5



Zoning Designation:
Proposed under Rezone 2017-02: O-R

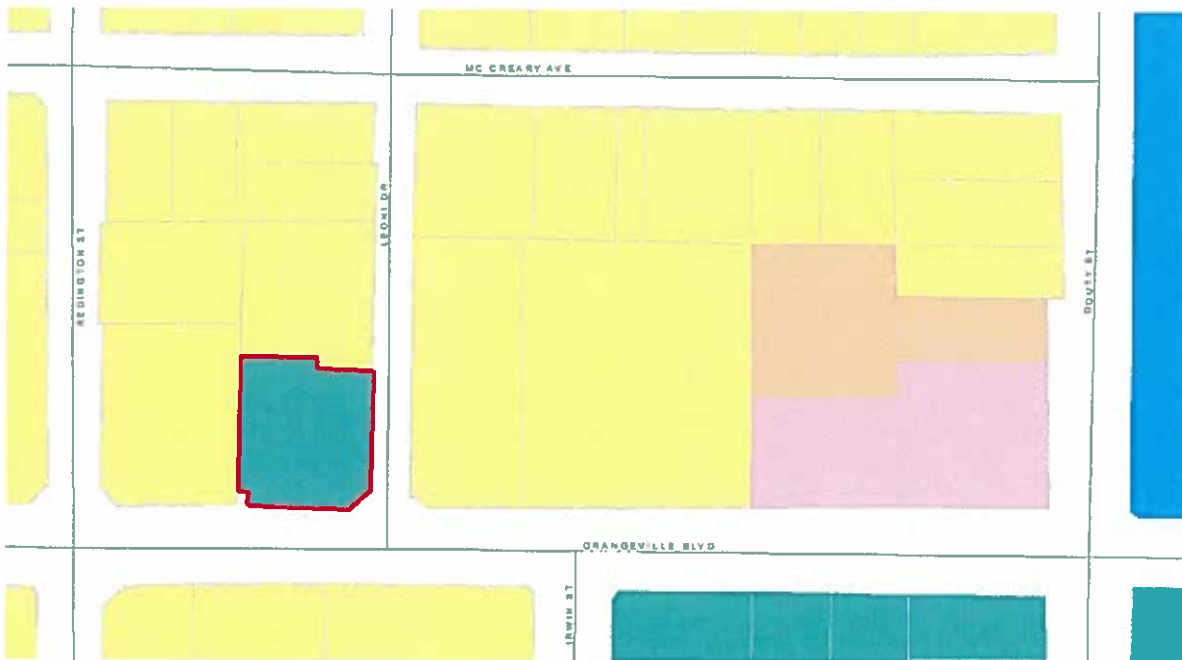


Exhibit B:
Site Plan Review No. 2017-11

Attachment: Ordinance No. 17-21 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

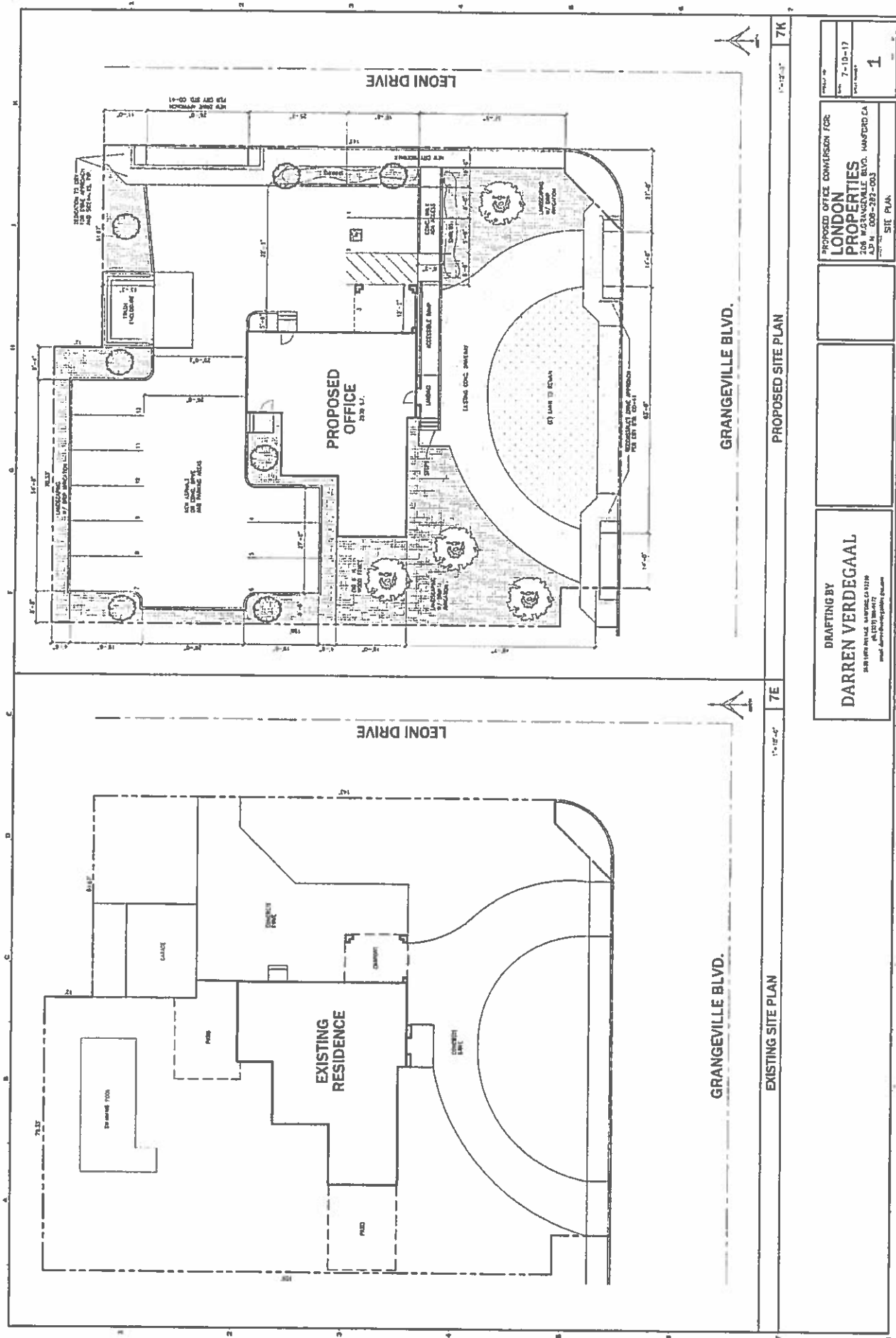


Exhibit C:
Mitigation Monitoring and Reporting Program

Attachment: Ordinance No. 17-21 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11
Mitigation Measures
Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?		
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development.	City to require; developer to comply
GREENHOUSE GAS EMISSIONS			
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions.	Developer
NOISE			

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?		to adhere
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RESOLUTION NO. 17-58-R

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
APPROVING SITE PLAN REVIEW NO. 2017-11: A REQUEST TO CONVERT A
SINGLE-FAMILY RESIDENCE TO A PROFESSIONAL OFFICE FOR THE
PROPERTY LOCATED AT 206 W. GRANGEVILLE FROM LOW-DENSITY
RESIDENTIAL TO OFFICE RESIDENTIAL.**

At a regular meeting of the City Council of the City of Hanford, duly called to order and held on November 7, 2017, at 7:00 p.m., it was moved by Council Member _____, and seconded by Council Member _____, and duly carried that the following resolution be adopted:

WHEREAS, Site Plan Review No. 2017-11 proposes to convert the existing single-family residence, located at 206 W. Grangeville Boulevard, to a professional office, as shown in attached **Exhibit A**; and

WHEREAS, the proposed site plan review application was presented to the Planning Commission of the City of Hanford; and

WHEREAS, the City of Hanford Planning Commission, at its regularly scheduled meeting on October 10, 2017, held a public hearing and received testimony and evidence for and against the proposed site plan. After closing the public hearing, the Planning Commission, by resolution, recommended that the City Council of the City of Hanford approve Site Plan Review No. 2017-11; and

WHEREAS, the City Council of the City of Hanford, at its regularly scheduled meeting on November 7, 2017, held a public hearing and received testimony and evidence regarding proposed Site Plan Review No. 2017-11; and

WHEREAS, the City Council of the City of Hanford considered the evidence presented in the staff report and testimony presented during the public hearing; and

WHEREAS, the City Council of the City of Hanford finds that no significant environmental impacts would result from the proposed project with the incorporation of mitigations, as presented in the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**; and

WHEREAS, Mitigated Negative Declaration No. 2017-12 was prepared and adopted; and,

WHEREAS, on the basis of the application for the amendment to the general plan, the documentation and information provided in the staff report, and the evidence and testimony submitted at the public hearing, the City Council of the City of Hanford hereby makes the following findings in accordance with Section 17.88.040 of the Hanford Municipal Code:

THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of Hanford hereby recommends approval of Site Plan Review No. 2017-11 to the City Council of the City of Hanford subject to the following conditions:

ADMINISTRATION DEPARTMENT

Contact City Attorney through the Planning Division (559) 585-2580
concerning questions that you may have on the conditions listed below:

Defense and Indemnification Provisions:

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or adequacy of any environmental document approved by the City or any approval related to the Project.

PLANNING DIVISION

Contact Associate Planner Gabrielle de Silva: (559) 585-2578
concerning questions that you may have on the conditions listed below:

General:

1. That approval of this project does not exempt compliance with all applicable sections of the Zoning Ordinance, Public Works Improvement Standards, fees, or other City Ordinances.
2. That all approved proposals of the applicant be conditions of development, if not mentioned herein.
3. That the site be developed according to the approved site plan, titled Site Plan Review No. 2017-11, with minor modifications to be approved by the Community Development Department.
4. That no expansion of the use which would tend to increase the projected scale of operations beyond the scope and nature described in this Site Plan Review shall be permitted except upon application for, and approval of, modification of this application according to all procedures and requirements thereof.
5. That the building address be posted at the site prior to the first building inspection and that a permanent address sign be placed on the site before occupancy.
6. That all conditions of the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, shall also be conditions of approval of Site Plan Review No. 2017-11.

Conversion to Non-Residential Use (Section 17.30.100)

1. That no exterior alterations or additions shall be permitted that significantly alters the original architectural style of the building.
2. That exterior alterations or additions shall be minimized to the extent possible.

Cultural Resources:

1. That if cultural resources are discovered during construction or related activities, all work shall be halted and a qualified archeologist and the City of Hanford shall be notified. The find shall be properly investigated and appropriate measures are to be taken before construction may continue.
2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth-disturbing activities.

Building Setback Areas (17.30.070)

1. That the appropriate setbacks be maintained, as follows for a two-story structure:

- a. Front (along Grangeville Boulevard): 15 feet
- b. Garage: 20 feet
- c. Rear: 25 feet
- d. Interior Side: 5 feet
- e. Street Side (Along Leoni Drive): 10 feet

Off Street Parking: (Section 17.54).

1. That the applicant shall provide 12 parking stalls on site, one of which is ADA-accessible, as shown on the approved site plan. Per the Hanford Municipal Code Section 17.54.040, all office and medical uses, except call center, hospital, and pharmacy, shall require one space per 250 square feet.

Calculation: $2,900 \text{ sq. ft.} \div 250 \text{ sq. ft.} = 11.6$ parking stalls minimum (12 stalls minimum)

2. That the standard parking space shall not be less than 18.5 feet in length and nine feet in width, exclusive of aisles and access drives (Section 17.54.110 A).
3. That the maximum number of compact-car parking spaces is limited to 30 percent of the total parking spaces required. A compact parking space shall not be less than 16 feet in length and 8 feet in width, and marked for compact cars (Section 17.54.110 B. and C).

- That parking stall number 1 on the site plan be marked for compact cars.

4. That parking for bicycles and low-emission vehicles shall be provided in accordance with the latest adopted version of the California Building Code (Section 17.54.190).

Signage: (Section 17.56).

1. That any/all signs proposed for this development shall be subject to the requirements and standards prescribed in Chapter 17.56 of the Hanford Municipal Code. A separate application is required.

Fencing and Walls: (Section 17.50.110 and 17.50.120).

1. That fences and walls in the OR zone district shall be constructed or installed in accordance with the following:
 - a. Along a rear lot line not exceeding seven feet in height
 - b. Along an interior side lot line not exceeding seven feet in height beginning at 10 feet from the front lot line.
2. That any proposed fencing on the site be maintained in good repair.

3. That no fence or wall shall be placed within the public right-of-way.
4. That a masonry fence exceeding three (3) feet in height shall require engineered footings and a building permit. All other fencing exceeding seven (7) feet in height shall require engineered post footings and a building permit.
5. That no hedge, shrub, fence, or wall exceeding the three (3) feet in height, or four (4) feet in height if the upper one (1) foot is fifty (50) percent or more open shall be planted, placed, or maintained within the twenty-five (25) feet corner sight triangle of a corner lot, or along a front or street side property line where the hedge, shrub, fence, or wall creates a traffic or pedestrian hazard as determined by the Community Development Director.

Landscaping: (Section 17.52.060).

1. General Design Standards: the following features shall be incorporated into the design of the proposed landscape and shown on the required landscape plans:
 - a. Publicly maintained landscape areas shall be separated from privately maintained landscape areas with, at a minimum, a four (4) inch wide concrete mow strip.
 - b. Pedestrian access to sidewalks and structures shall be integrated with the design of landscaped areas.
 - c. Landscape adjacent to driveways and parking areas shall be protected from vehicle damage through the provision of a minimum six (6) inch high and six (6) inch wide concrete curb.
 - d. Concrete mow strips, when used, shall be a minimum of four (4) inches in width.
 - e. Trees and shrubs shall be planted so that at maturity they do not interfere with utility lines and traffic safety sight areas.
 - f. Trees and shrubs shall be planted and maintained in a manner that protects the basic rights of adjacent property owners, particularly the right to solar access.
 - g. Trees planted within five (5) feet of sidewalks or curbs shall have an eighteen (18) inch by ten (10) foot long linear root barrier placed at each edge of the sidewalk or face of curb, centered on the tree.
2. Plant materials. Plant materials shall be selected and installed in accordance with the following requirements:
 - a. The size of ten (10) percent of the trees to be planted shall be twenty-four (24) inch box or larger. The remaining trees shall be sized fifteen (15) gallons or larger.
 - b. The size of seventy (70) percent of plants and shrubs shall be at five (5) gallon or larger. The remaining plants and shrubs shall be sized one (1) gallon or larger.

- c. The size of groundcover at planting shall be one (1) gallon or larger.
 - d. Groundcover shall be designed to have one hundred (100) percent coverage within two (2) years.
 - e. Drought tolerant plant material and climate appropriate species shall be emphasized in the design.
3. That the landscaped area shall be planted with live and healthy plant materials suitable for screening/or ornamenting the site. Landscaped areas shall be watered by automatic systems and designed and developed in accordance with Chapter 12.08 and the most recent State Model Water Efficient Landscaped Ordinance.
 4. That not less than five percent of the interior square footage of the parking area shall be landscaped with trees and other plant materials suitable for ornamentation. **Parking areas are to have one tree placed at every four lineal parking spaces.** Landscaped areas shall be distributed throughout the parking area and peripheral areas to the extend practical in consideration of the size and design of the parking area. (Section 17.54.180).
 5. That no fence, hedge, or shrub shall be installed, planted, or maintained along a street frontage, which creates a traffic or pedestrian hazard.
 6. That not less than 15 ft. from the property line adjoining Grangeville Boulevard shall be landscaped and permanently maintained (Section 17.52.050).
 7. That not less than 10 ft. from the property line adjoining Leoni Drive shall be landscaped and permanently maintained, exclusive of drive isles.

Trash Collection Areas (Section 17.50.090).

1. That a suitable area shall be provided on-site for collection of trash and recyclable materials for all multi-family residential, mixed-use, commercial, office, and industrial uses. Refuse storage areas shall be adequately screened from view. The refuse area enclosure shall be designed to meet the minimum recommended dimensional standards as determined by the City Engineer.
2. That all uses shall be in compliance with the provisions of Chapter 13.12 of the Municipal Code.

Outdoor Lighting Standards (Section 17.50.120)

1. That all lights and light fixtures, except public street lights, shall be located, aimed or shielded so as to minimize light trespassing across property boundaries or skyward.

2. That the height of freestanding light fixtures including freestanding parking lot fixtures shall be measured from the top of a light fixture to the adjacent grade at the base of the support for that light fixture and shall not exceed the following:
 - a. Eighteen (18) feet in height, when located within fifty (50) feet of any residential zone district; and
 - b. Twenty-five (25) feet in height when located within fifty-one (51) to one hundred fifty (150) feet of any residential zone district; and
 - c. Thirty (30) feet in height when located more than one hundred fifty (150) feet from any residential zone district; and
 - d. Fifty (50) feet in height when located in the RC regional commercial zone or freestanding light fixtures for public outdoor recreational facilities.
3. That mercury vapor lamps shall be a fully shielded fixture with all light directed on-site.

Dust Control:

1. That the appropriate dust-control practices of the San Joaquin Valley Air Pollution Control District shall be implemented.
2. That the any necessary permits be obtained through the San Joaquin Valley Air Pollution Control District.

BUILDING DIVISION

Contact Building Official: Tom Webb (559) 585-2584

Concerning questions that you may have on the conditions listed below:

1. That building permits must be obtained from the City Building Division for each structure to include but not limited to: buildings, pools, fences, trash enclosures, signs and carports for any structural, plumbing, electrical or mechanical work being done.
2. That no building or structure shall be used or occupied, and no change in the existing occupancy classification of building or structure or portion thereof shall be made until the building official has approved the change and issued a Certificate of Occupancy.
3. That detailed dimensioned plans be provided to the Building Division for each structure prior to obtaining construction permits. Each structure will require a separate submittal and permit.
4. That each structure will require plans and calculations signed by an architect or engineer licensed to practice in the State of California. Submittal shall consist of as applicable:
 - 4.1 1 copy of the City of Hanford Permit Application form
 - 4.2 6 complete sets of Drawings, unless noted, including:
 - 4.2.1 Grading Plan (Civil Drawings, for reference)

- 4.2.2 Site Plan
- 4.2.3 Architectural Drawings
- 4.2.4 Structural Drawings
- 4.2.5 Electrical Drawings
- 4.2.6 Mechanical Drawings
- 4.2.7 Plumbing Drawings
- 4.2.8 Landscape Plan (for reference)
- 4.2.9 Planning Dept. "Conditions of Approval" or "Resolution"
printed on the drawings and part of the drawing submittal
- 4.2.10 A minimum of 2 sets shall be stamped and wet signed by an Architect
or Engineer licensed in the State of California.

****** Each structure will be considered a separate submittal. Grading, Landscaping and all Fire permits are separate submittals as well and require separate applications and submittals as applicable.******

- 4.3 2 complete sets of documentation, unless noted, including:
 - 4.3.1 Architectural Specifications
 - 4.3.2 Structural Calculations
 - 4.3.3 Electrical Calculations, if not included on the drawings
 - 4.3.4 Mechanical Calculations, if not included on the drawings
 - 4.3.5 Plumbing Calculations, if not included on the drawings
 - 4.3.6 Energy Calculations, if not included on the drawings
 - 4.3.7 CalGreen Compliance, if not included on plans
 - 4.3.8 **Compliance with the City of Hanford Landscape Ordinance**
 - 4.3.9 A minimum of 2 sets shall be stamped and wet signed by an Architect
or Engineer licensed in the State of California.
- 5. That the site, as well as the buildings, shall be made accessible and usable by the disabled in accordance with the California Building Code, Chapter 11B.
- 6. That a school impact fee of \$0.56 (or revision thereof) for each square foot of new building area be paid when building permits are issued.
- 7. That all special inspection reports be submitted to the Building Division prior to final inspection.
- 8. That all construction shall conform to the Most Current Edition (2016) of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code, California Energy Code and CalGreen.
- 9. That Kings County Impact Fees shall apply at current rates.
- 10. That the tenant, lessee, and/or owner are responsible for compliance with the Americans with Disabilities Act. By federal law your facility must be made accessible to the highest degree possible.

11. That the applicant provide a complete set of AS-BUILT drawings on CD, in “tif” format, to the Building Division prior to Final Inspection.
12. That block walls and trash enclosures require separate submittals/permits.

FIRE DEPARTMENT

Contact Fire Inspector Susan Martinez @ (559) 585-4793 or smartinez@cityofhanfordca.com concerning questions that you may have on the conditions listed below:

General:

1. Approval of this project does not exempt compliance with all applicable sections of the City adopted fire codes and local fire ordinances.

Fire Extinguisher(s):

2. Fire extinguishers shall be mounted onto a secure surface and/or installed inside approved fire extinguisher cabinets in accordance with the most currently adopted edition of the California Fire Code (CFC).
3. Fire extinguishers that are not easily visible due to being installed inside of a fire extinguisher cabinet or are blocked from view due to building and/or other obstructions, shall have a sign posted nearby with the words Fire Extinguisher on the cabinet or above the location where the fire extinguisher is installed.
4. The size, type and location of all fire extinguishers shall be approved by the fire department, typically a 2-A:10-B:C.

Emergency Access:

5. A Knox Box is required to be installed at the main entrance area to the building. Any 3200 Series Model number is appropriate. The Knox Box shall be installed in an area visible and accessible to the fire staff with the top of the box no higher than 6'-0" AFF. The ordering of Knox Box products can be done directly online at www.knoxbox.com or a form can be obtained from the fire department.

Fire Hydrants:

6. Existing fire hydrants installed within the sphere of utilization for this project shall meet City Standard WA-20 if the existing fire hydrant is the old wharf model.

Special Requirements:

7. All address numbers shall be installed onto the building and shall be visible from the frontage street. The color of the address numbers shall be in a contrasting color to the building.

Size of Address Numbers:

- Downtown area (existing buildings): 4-inch numbers,
- Buildings 20-ft. or less from the street: 6-inch numbers,
- Buildings 21- to 40-ft. from the street: 8 inch numbers,
- Buildings more than 40-ft. from street: 12 inch numbers.

8. Solar photovoltaic installations shall conform to CFC 605.11 and require separate fire department plan check.

UTILITIES

Contact Utilities Superintendent Mike Cosenza at (559) 585-2564
Concerning questions that you may have on the conditions listed below:

General:

1. That all work within the public street right-of-way shall be under the control of a General Engineering Contractor, licensed for that purpose. Contractor shall verify all conditions in the field prior to commencing construction.
2. That locations of existing water, sanitary sewer and storm drain mains in the vicinity of the project site will be marked by Public Works Department staff based upon the city's best available records. Contractor shall provide city with a minimum of 48 hours prior notice when requesting location of existing utilities at (559) 585-2564. The City of Hanford is not a member of Underground Service Alert (U.S.A.).
3. That all sewer and water utility work and materials shall conform to City of Hanford Standards and Specifications, latest edition.

Water:

1. That the developer shall provide an accurate fixture unit count and size water services in accordance with the requirements of the Uniform Plumbing Code, latest edition.
2. That the developer shall furnish and install any new water service assemblies required for the project including water meters and meter boxes for both domestic and landscape uses. If existing services are utilized, fixture counts to ensure adequate size of service is required. All new services are to come off of Grangeville Blvd. or Leoni Drive.
3. That the developer shall furnish and install appropriate cross connection / backflow prevention assemblies for all required water services, including fire service lines.
4. That all backflow prevention assemblies required for the development shall be tested and approved by a certified technician prior to occupancy. Copies of all backflow test results shall be provided to the City of Hanford Utilities Division.
5. It is recommended that developer install a separate irrigation service to reduce the sewage usage bill. Sewage bills are calculated off of domestic water flows.

Sewer:

1. If an existing sanitary sewer lateral is not serviceable, the developer shall furnish and install a minimum four inch diameter sanitary sewer lateral to serve each of the buildings on project site located as shown on approved Site Plan. New sewer lateral shall be connected to the sanitary sewer main located within Leoni Drive.
2. That the developer shall furnish and install a floor drain inside any newly constructed Trash Enclosure. Floor drain run through a sand/grease interceptor and shall be connected via sanitary sewer lateral to City's Sanitary Sewer System.

ENGINEERING DIVISION

Contact Assistant Engineer Samantha Long at (559)585-2556
Concerning questions that you may have on the conditions listed below:

General Requirements:

1. That the development shall comply with all applicable City of Hanford Standard and Specification requirements. Any deviation from said Standards and Specifications must be approved by the City Engineer prior to construction.
2. That an Encroachment Permit for all work located within the public street right-of-way shall be obtained from the Public Works Department prior to start of work. For additional information regarding Encroachment Permit requirements, contact the City Engineering Division at (559) 585-2558.
3. That the development is subject to a \$4,200.00 Grading Plan Review fee in accordance with City Resolution No. 10-31 R, or any revisions thereof. Grading Plan Review fee shall be paid prior to issuance of building permits.
4. That the development is subject to Engineering Plan Review and Inspection fee based on the cost of improvements required to be constructed within the public street right of way, in accordance with City Resolution No. 92-58-R, or any revisions thereof. Subject fees shall be payable prior to approval of improvement plans.
5. That all financial and other arrangements for planning, engineering, scheduling, installation of and/or relocation/ undergrounding of electric, gas, telecommunications, or other privately owned utilities are the sole responsibility of the developer. The developer is advised that significant project delays may result if utility issues are not resolved prior to start of construction.

Map and Plan Requirements:

1. That the developer shall submit to the City Engineer a set of construction plans on 24" X 36" size sheets for all required improvements. The plans shall be prepared by a licensed civil engineer, and shall include a site plan showing all on-site and off-site improvements, including but not limited to, sanitary sewer, storm drainage, and water system infrastructure,

refuse enclosure locations, public street & parking lot improvements, landscape & irrigation systems and all other improvements as required by the project conditions of approval and the City of Hanford Standards and Specifications. Plans must be approved by the City of Hanford and any other affected agencies before issuance of building permits.

2. That prior to beginning any construction, or within twenty (20) calendar days after the approved plans are released by the City, the developer shall submit to the City of Hanford Engineering Division four (4) bond copies of the approved set of construction plans, and two (2) bound sets of the approved construction specifications, if any.
3. That within twenty (20) calendar days after all improvements have been constructed and accepted by the City, the developer shall submit to the City of Hanford Engineering Division one (1) reproducible and one (1) bond copy of the approved set of improvement construction plans revised to reflect all field revisions and marked "RECORD DRAWING".

Drainage Requirements:

1. That the developer shall comply with all applicable State of California requirements pursuant to the National Pollutant Discharge Elimination System (NPDES). If applicable to the project, a Notice of Intent for the development shall be electronically filed by the developer and accepted by the State Water Resource Control Board (SWRCB) prior to any disturbance of soils onsite. Documentation of SWRCB approval of the development shall be required by the City of Hanford prior to start of construction, and the developer shall comply with all SWRCB General Construction Permit requirements during construction. Contact the SWRCB at www.swrcb.ca.gov for further information.
2. That track-out of soil, gravel, or other construction-related materials on to public streets is prohibited.
3. That a drainage/site improvement plan for development be prepared by a license civil engineer for review and approval by the Public Works Department prior to the issuance of building permits. All construction shall be certified by a civil engineer as being constructed to approved plan.
4. That site grading and drainage shall comply with the approved grading and improvement plans for the development. Upon completion of construction, the developer's engineer shall provide a written statement that site grading and drainage has been completed in accordance with approved plans.

Curb, Gutter, and Sidewalk Requirements:

1. That the existing concrete curbs and gutters located along the Grangeville Blvd. project frontage may remain in place provided they are found to be in functional condition and adequately sloped for proper drainage. Sections damaged during construction, or otherwise found to be in disrepair, shall be removed and replaced with new curbs and gutters installed in conformance with City Standard CO-11 and CO-14. The locations of any such curbs and

gutters required to be reconstructed shall be shown on the engineered site improvement plans.

2. That new curb, gutter, and sidewalk shall be installed in conformance with City Standard CO-11 and CO-14 along the Leoni Drive project frontage and shall be shown on the engineered site improvement plans.

Drive Approach Requirements:

1. That the existing substandard drive approaches located on the Grangeville Blvd. and Leoni Drive frontage shall be removed and replaced with a new concrete drive approach installed in accordance with City Standard CO-41 (26' minimum width) located as shown on the site plan. All drive approaches shall be constructed in compliance with ADA requirements in order to provide continuous pedestrian and disabled access along the project frontage

Parking Lot Requirements:

1. That the design and construction of the parking lot improvements shall conform to City Standards GE-29 and GE-32.
2. That the driveway providing access to the trash enclosure be upgraded to comply with City Std. requirements for structural capacity to handle the trash trucks

DEVELOPMENT IMPACT FEES:

1. That development is subject to the following impact fees in accordance with city ordinances no. 90-09, 90-10 and 98-14, or any revisions thereof. Impact fee calculations are based upon square footage of structures as shown on site plan. If changes are made to structure thereby increasing or decreasing structure floor areas, then impact fees will likewise change to reflect actual field conditions. Fees listed below reflect rates effective July 1, 2017. All fees are payable prior to issuance of building permits. **(Building area: 2,900 sf – Commercial (Office) – Site Area: 0.58 Acres).**
 - A. That the development is subject to a **\$8,234.85 Transportation Impact Mitigation Fee** in accordance with City Resolution No. 98-56-R, or any revisions thereof.
 - B. That the development is subject to a **\$3,885.42 Water System Impact Fee** in accordance with City Resolution No. 98-54-R or any revisions thereof.
 - C. That the development is subject to a **\$4,259.23 Wastewater System Impact Fee** in accordance with City Resolution No. 98-55-R or any revisions thereof.
 - D. That the development is subject to a **\$4,286.92 Storm Water System Impact Fee** in accordance with City Resolution No. 98-57-R, or any revisions thereof.

- E. That the development is subject to a **\$1,875.43 Fire Protection Impact Fee** in accordance with City Resolution No. 98-52-R or any revisions thereof.
- F. That the development is subject to a **\$1,181.46 Police Protection Impact Fee** in accordance with City Resolution No. 98-53-R or any revisions thereof.
- G. That the development is subject to a **\$1,475.66 Refuse and Recycling Impact Fee** in accordance with City Resolution No. 98-53-R or any revisions thereof. (Based on 1 - 3 yard Trash bin picked up 2x per week, and 1 - 3 yard Recycle bin picked up 2x per week).

REFUSE DIVISION

Contact Ruben Carrillo at (559) 585-2569

Concerning questions that you may have on the conditions listed below:

General Requirements:

1. That a 10' x 15' inside clear dimension masonry block refuse enclosure with 6' high perimeter walls shall be constructed in accordance with City Std. GE-35, modified to include installation of 12" x 12" interior concrete curbs and 10' concrete apron. If enclosure will be used to service restaurants then a separate grease bin container area shall be constructed in accordance with City standard GE- 41. The refuse enclosure shall have gates of chain-link fencing with earth-tone color vinyl slats or other approved gate materials. The enclosure shall be architecturally compatible with surrounding buildings, and the location of the enclosure shall be approved by both the Public Works and Community Development Departments.
2. That nothing other than the city refuse bins shall be stored or kept in refuse enclosures.
3. That refuse enclosure gates shall be securely closed except when in use.
4. That refuse enclosures shall not be located adjacent to combustible construction or beneath windows or non-protected eaves.
5. That the applicant shall participate in all available waste recycling & reuse programs **including the new requirement for food waste separate bin service (if applicable).**

KINGS COUNTY AREA PUBLIC TRANSIT (KART)

Contact Mark Pedreiro, Facilities and Fleet Specialist at (559) 852-2624

Concerning questions that you may have on the conditions listed below:

1. That KART requires a bus stop at this location. A section of sidewalk seven feet wide from curb to back of sidewalk would be required in order to accommodate a sign, a bench, and four feet of ADA-clearance. (KART comments, attached as **Exhibit C**).

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Hanford hereby approves Site Plan Review No. 2017-11. Passed and adopted at a regular meeting of the City Council of the City of Hanford, duly called and held on November 7, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS
MAYOR of the City of Hanford

Attest:

JENNIFER GOMEZ
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, Jennifer Gomez, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the ____ day of _____, 2017.

Date: _____

City Clerk

Exhibit A
Site Plan Review No. 2017-11

Attachment: Resolution No. 17-58-R (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)



Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Resolution No. 17-58-R (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11
Mitigation Measures
Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?		
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development.	City to require; developer to comply
GREENHOUSE GAS EMISSIONS			
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions.	Developer
NOISE			

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?	to adhere
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Exhibit C
KART Comments

Attachment: Resolution No. 17-58-R (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET



MAYOR
DAVID G. AYERS
VICE MAYOR
SUSAN SORENSEN
COUNCIL MEMBERS
MATT DE VINE
FRANCISCO RAMIREZ
JUSTIN MENDES
CITY MANAGER
DARREL L. PYLE
CITY ATTORNEY
ROBERT M. DOWD

September 14, 2017

PROJECT REVIEW – Consultation Notice

For: General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02,
and Site Plan No. 2017-11

The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan 2017-11, filed by London Properties. General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office. The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by October 6, 2017 via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

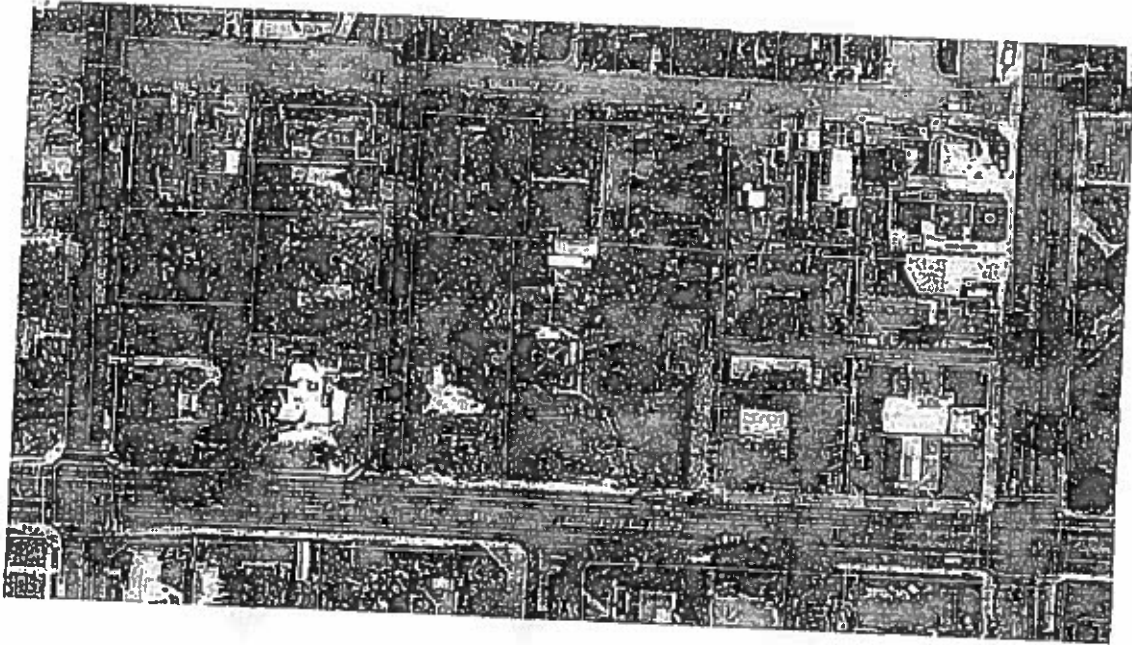
I ☒ do ☐ do not have comments regarding this Project

Mark Pedreira
Signature

NART
Agency

9/21/17
Date

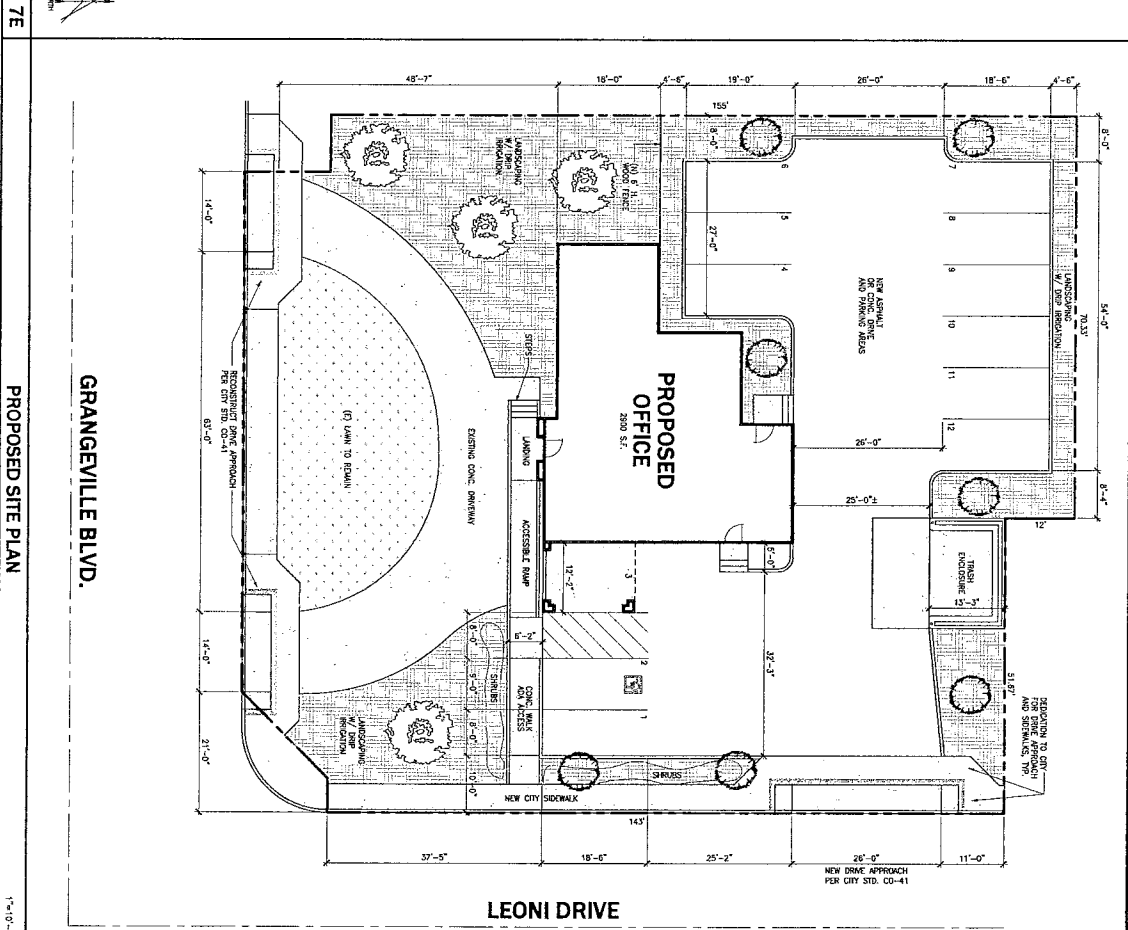
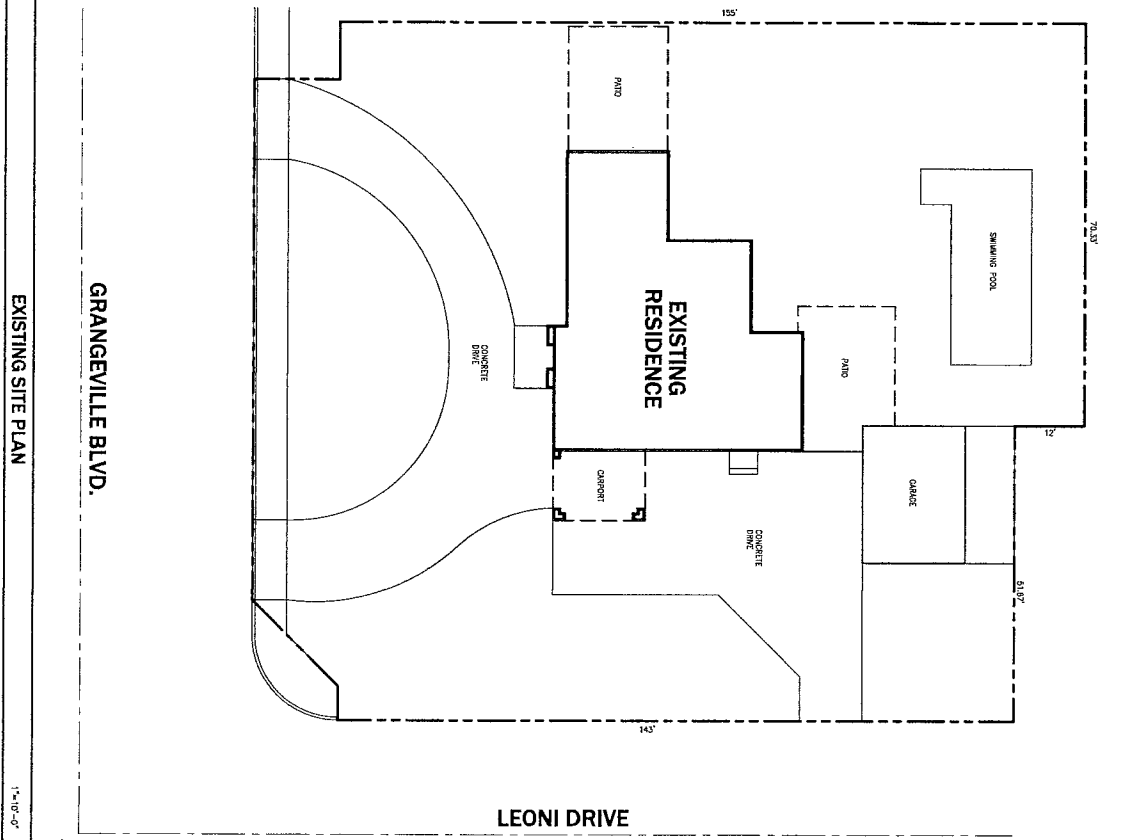
Land Use:



General Plan Designation:
Proposed under GPA 2017-03 (B): High-Density Residential



KART WOULD LIKE CONSIDERATION FOR A FUTURE BUS STOP
IF SIDEWALK IMPROVEMENTS ARE MADE PLEASE CONSIDER A
SECTION OF SIDEWALK 7' WIDE FROM CURB TO BACK OF
SIDEWALK FOR SIGN & POSSIBLE BENCH.



DRAFTING BY
DARREN VERDEGAL
5800 UPRY AVENUE, HANFORD, CA 91730
TEL: (559) 381-8472
CELL: (559) 381-8472
WWW.DARRENVERDEGAL.COM

PROPOSED OFFICE CONVERSION FOR:
LONDON PROPERTIES
405 W. GRANGEVILLE BLVD., HANFORD, CA
TEL: (559) 381-8472
CELL: (559) 381-8472
WWW.DARRENVERDEGAL.COM

PROJECT NO.
7-10-17

DATE
7-10-17

SHEET NUMBER
1

RESOLUTION NO. 2017-18

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL OF GENERAL PLAN AMENDMENT NO. 2017-03 (B) TO THE CITY COUNCIL. GENERAL PLAN AMENDMENT NO. 2017-03 (B) IS A REQUEST TO CHANGE THE GENERAL PLAN DESIGNATION ON THE PROPERTY LOCATED AT 206 W. GRANGEVILLE FROM LOW-DENSITY RESIDENTIAL TO OFFICE RESIDENTIAL. THE PROJECT IS LOCATED AT THE NORTHWEST INTERSECTION OF GRANGEVILLE BOULEVARD AND LEONI DRIVE (APN 008-282-003).

At a regular meeting of the Planning Commission of the City of Hanford duly called and held on October 10, 2017, at 7:00 p.m., it was moved by Commissioner **DOUGLAS**, and seconded by Commissioner **GALVAN**, that the following resolution be adopted:

WHEREAS, an application, filed by Daniel Conner, for General Plan Amendment No. 2017-03 (B) requesting a General Plan Amendment to change the General Plan designation of the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential, as shown in **Exhibit A**, was presented to the Hanford City Planning Commission on October 10, 2017; and

WHEREAS, the City of Hanford Planning Commission considered the general plan amendment, in accordance with Section 17.88 of the Hanford Municipal Code, at its regularly scheduled meeting on October 10, 2017; and,

WHEREAS, the City of Hanford Planning Commission considered the evidence presented in the staff report and testimony presented during the public hearing; and,

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-12, and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies; and

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-12 was prepared consistent with CEQA and City of Hanford Environmental Guidelines.

BE IT FURTHER RESOLVED that the City of Hanford Planning Commission, in accordance with Section 17.88.040 of the Hanford Municipal code, recommends approval to the City Council of General Plan Amendment No. 2017-03 (B), based upon the following findings and on the evidence presented:

In accordance with Section 17.88.040 of the Hanford Municipal Code, before a general plan amendment may be approved, all of the following findings shall be made by the reviewing authority:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan.

Analysis: That General Plan Amendment No. 2017-03 (B) is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistency with Policy L79, L80, L81, and L82.

2. That this amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program and in the conditions of approval for Site Plan Review No. 2017-11.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from Low-Density Residential to Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with offices. Office and residential are compatible uses. Both generate minimal noise, congestion, and traffic.

PASSED AND ADOPTED at a regular meeting of the City of Hanford Planning Commission by the following vote:

AYES:	Commissioners	DOUGLAS, GALVAN, HAM, PADEN, PERICO, SANCHEZ, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

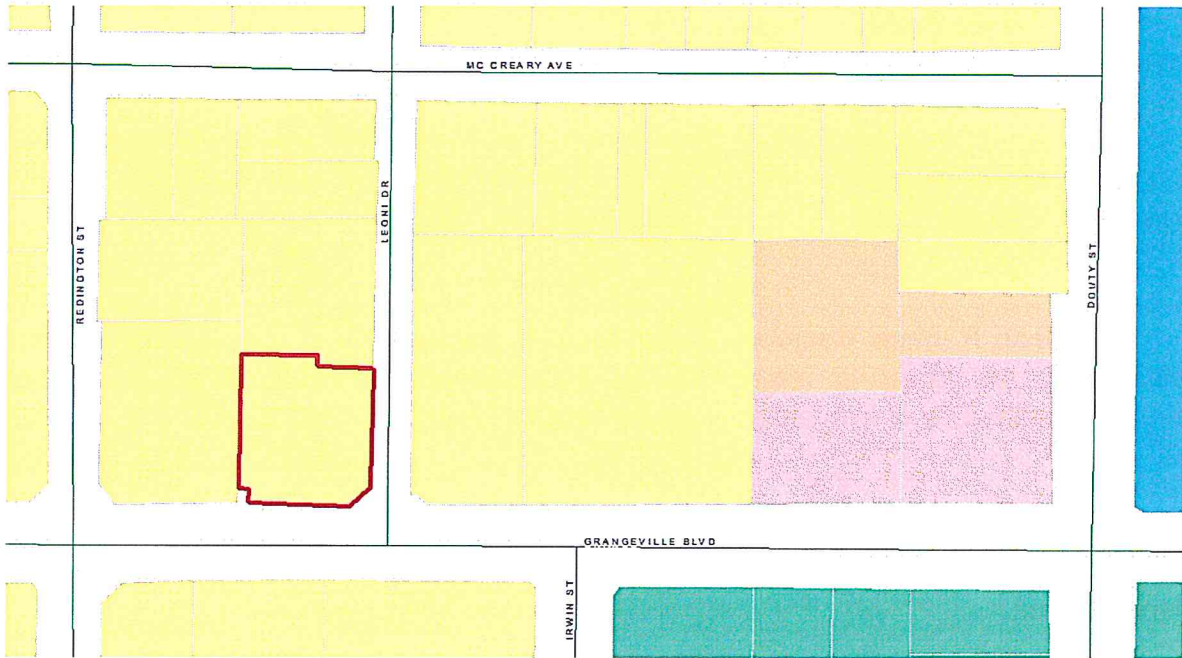
I, **Darlene R. Mata**, Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 10th day of October 2017.



Darlene R. Mata

Exhibit A
General Plan Amendment No. 2017-03 (B)

General Plan Designation:
Existing



General Plan Designation:
Proposed under GPA 2017-03 (B): Office Residential

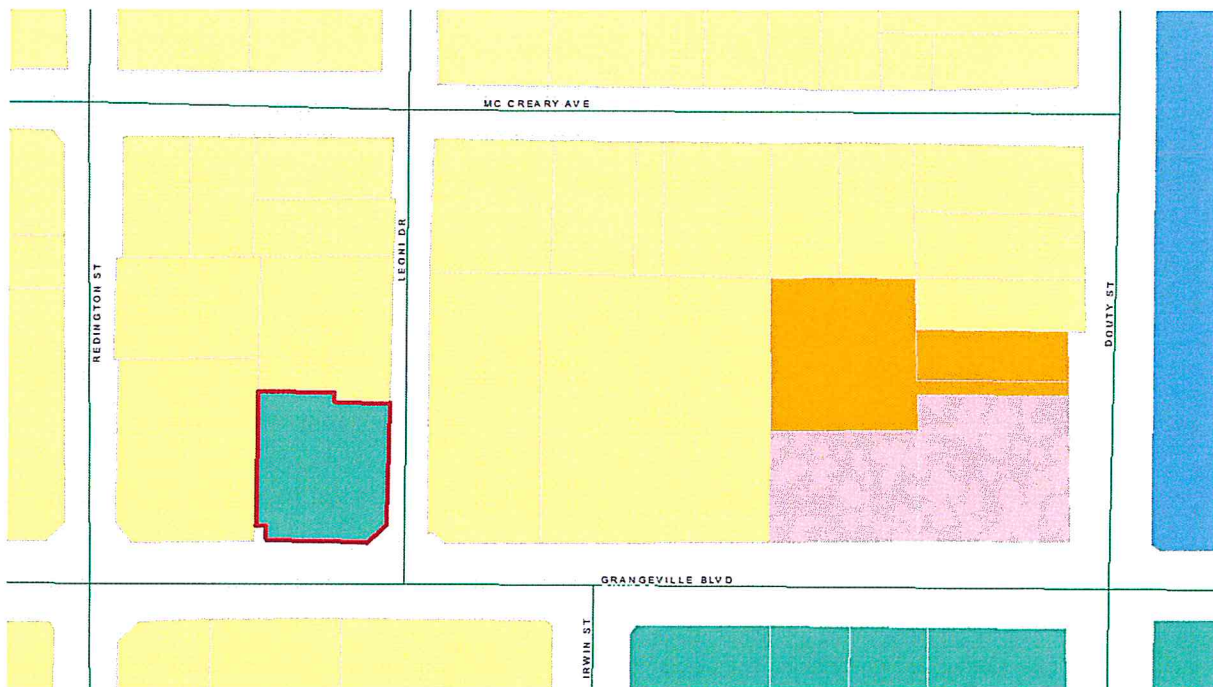


Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Exhibit B (1) - Reso 2017-18 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11

Mitigation Measures

Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	
CULTURAL RESOURCES		
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.
GEOLOGY AND SOILS		
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development. City to require; developer to comply
GREENHOUSE GAS EMISSIONS		
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions. Developer
NOISE		

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?		to adhere
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RESOLUTION NO. 2017-19

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL TO THE CITY COUNCIL OF REZONE NO. 2017-02. THE PROJECT IS A REQUEST TO CHANGE THE ZONING DESIGNATION FOR THE PROPERTY LOCATED AT 206 W. GRANGEVILLE BOULEVARD FROM R-L-5 LOW-DENSITY RESIDENTIAL TO O-R OFFICE RESIDENTIAL. THE PROJECT IS LOCATED AT THE NORTHWEST INTERSECTION OF GRANGEVILLE BOULEVARD AND LEONI DRIVE (APN 008-282-003).

At a regular meeting of the City of Hanford Planning Commission duly called and held on October 10, 2017, on motion of Commissioner **PADEN**, seconded by Commissioner **PERICO**, and duly carried, the following resolution was adopted:

WHEREAS, an application, filed by Daniel Conner, for Rezone No. 2017-02, requesting a zone change for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential, as shown in **Exhibit A**, was presented to the Hanford City Planning Commission on October 10, 2017; and

WHEREAS, the City of Hanford Planning Commission considered the rezone, in accordance with Section 17.86 of the Hanford Municipal Code, at its regularly scheduled meeting on October 10, 2017; and,

WHEREAS, the City of Hanford Planning Commission considered the evidence presented in the staff report and testimony presented during the public hearing; and,

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-12, and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies;

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-12 was prepared consistent with CEQA and City of Hanford Environmental Guidelines.

BE IT FURTHER RESOLVED that the City of Hanford Planning Commission, in accordance with Section 17.86.030 of the Hanford Municipal Code, recommends approval to the City Council of Rezone No. 2017-01, based upon the following findings and on the evidence presented:

1. That the amendment is internally consistent with the goals, objectives, and policies of the General Plan and the Municipal Code.

Analysis: That Rezone No. 2017-02 is internally consistent with the goals, objectives, and policies of the General Plan, specifically consistent with Policy L79, L80, L81, and L82. The development proposed under Site Plan Review No. 2017-11 is consistent with the applicable development requirements of the Hanford Municipal Code.

2. That the amendment would not be detrimental to the public health, safety, or welfare of the community.

ANALYSIS: That this application has been reviewed by County departments, utility companies, City Fire Department, City Building Division, and other involved departments. Any mitigation required for public health and safety were applied to the proposal and required in the mitigation monitoring and reporting program.

3. That the amendment would maintain the appropriate balance of land uses within the City.

Analysis: That jobs-housing balance is achieved by increasing opportunities of people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The jobs-housing balance is a general tool for analyzing where people work, where they live, and how effectively they can travel between the two. In the planning area, the existing jobs-housing balance ratio in 2013-2014 was 1.17. It is estimated that the implementation of the General Plan would increase the jobs-housing balance by 0.45 to 1.62, which would make the planning area a jobs rich area. The proposal to change the land use designation on the property from R-L-5 Low-Density Residential to O-R Office Residential will not affect the ability of the City to maintain an appropriate balance of land uses within the City.

4. That the anticipated land uses on the subject site would be compatible with existing and future surrounding uses.

Analysis: That the land uses on the subject property would be Office Residential. Several properties within the nearby vicinity are designated as Office Residential. The Office Residential designation includes residences, offices, and partially converted residences with offices. Office and residential are compatible uses. Both generate minimal noise, congestion, and traffic.

PASSED AND ADOPTED at a regular meeting of the City of Hanford Planning Commission by the following vote:

AYES:	Commissioners	PADEN, PERICO, HAM, GALVAN, DOUGLAS, SANCHEZ, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

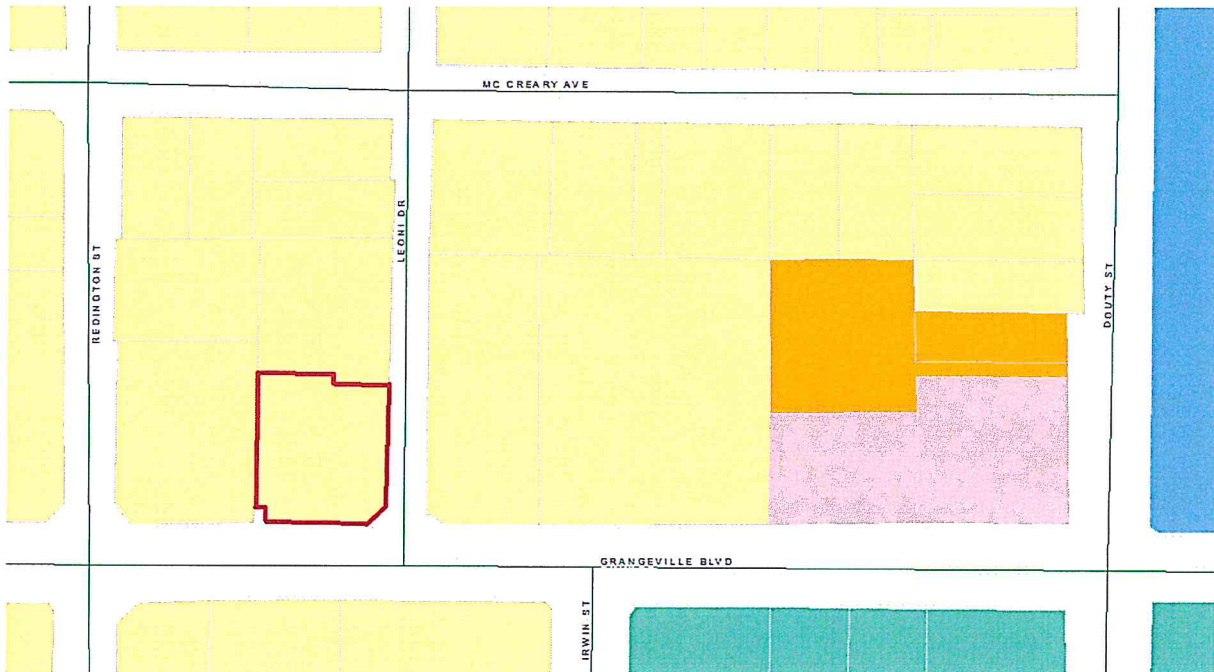
STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, **Darlene R. Mata**, Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 10th day of October 2017.

Darlene R. Mata

Exhibit A
Rezone No. 2017-02

Zoning Designation:
Existing: R-L-5



Zoning Designation:
Proposed under Rezone 2017-02: O-R

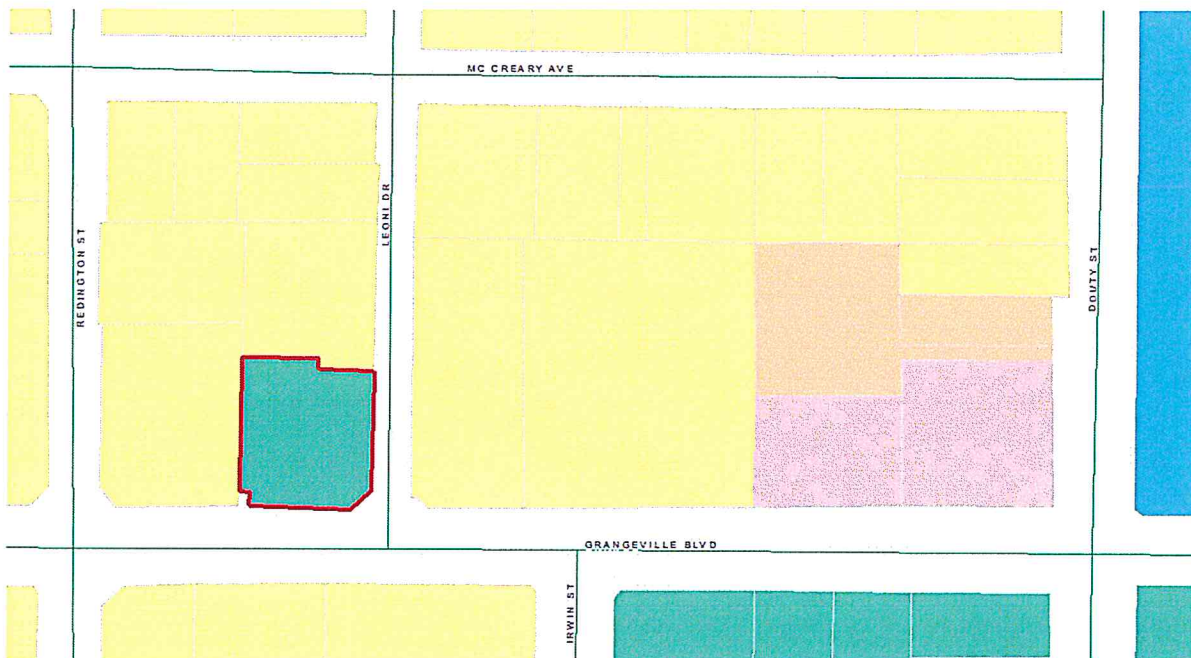


Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Exhibit B (2) - Reso 2017-19 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11
Mitigation Measures
Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?		
CULTURAL RESOURCES			
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities.	Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS			
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development.	City to require; developer to comply
GREENHOUSE GAS EMISSIONS			
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions.	Developer
NOISE			

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?		to adhere
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RESOLUTION NO. 2017-20

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF HANFORD RECOMMENDING APPROVAL TO THE CITY COUNCIL OF SITE PLAN REVIEW NO. 2017-11, A REQUEST TO CONVERT AN EXISTING RESIDENCE INTO AN OFFICE. THE PROJECT IS LOCATED AT THE NORTHWEST INTERSECTION OF GRANGEVILLE BOULEVARD AND LEONI DRIVE (APN 008-282-003).

At a regular meeting of the City of Hanford Planning Commission duly called and held on October 10, 2017, on motion of Commissioner **SANCHEZ**, seconded by Commissioner **HAM**, and duly carried, the following resolution was adopted:

WHEREAS, an application, filed by Daniel Conner, for Site Plan Review No. 2017-11 requesting to convert an existing residence into an office for the property located at 206 W. Grangeville Boulevard, as shown in attached **Exhibit A**, was presented to the Hanford City Planning Commission on October 10, 2017; and

WHEREAS, the City of Hanford Planning Commission considered the site plan at its regularly scheduled meeting on October 10, 2017; and,

WHEREAS, the City of Hanford Planning Commission considered the evidence presented in the staff report and testimony presented during the public hearing; and,

WHEREAS, the Initial Study, Mitigated Negative Declaration No. 2017-12, and all notices related thereto were prepared in compliance with the California Environmental Quality Act (CEQA) and the City of Hanford Municipal Code and Policies;

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission hereby recommends that the City Council find that no significant environmental impacts would result from the proposed project with the incorporation of mitigation measures, adopt a Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, and certify that Mitigated Negative Declaration No. 2017-12 was prepared consistent with CEQA and City of Hanford Environmental Guidelines.

THEREFORE, BE IT FURTHER RESOLVED that the Planning Commission of the City of Hanford hereby recommends approval of Site Plan Review No. 2017-11 to the City Council of the City of Hanford subject to the following conditions:

ADMINISTRATION DEPARTMENT

Contact City Attorney through the Planning Division (559) 585-2580
concerning questions that you may have on the conditions listed below:

Defense and Indemnification Provisions:

1. That the applicant shall defend, indemnify, and hold harmless the City of Hanford ("City"), its officials, officers, employees, representatives, agents and attorneys, from and against all claims, damages, losses, judgments, liabilities, expenses and other costs, including litigation costs and attorney's fees, arising out of, resulting from, or in connection with, the City's act or acts leading up to and including approval of any environmental document and/or granting of any approvals relating to the Project. Applicant's obligation to defend, indemnify and hold the City harmless specifically includes, but is not limited to, any suit or challenge by any third party against the City which challenges or seeks to set aside, void or annul the legality or

adequacy of any environmental document approved by the City or any approval related to the Project.

PLANNING DIVISION

Contact Associate Planner Gabrielle de Silva: (559) 585-2578
concerning questions that you may have on the conditions listed below:

General:

1. That approval of this project does not exempt compliance with all applicable sections of the Zoning Ordinance, Public Works Improvement Standards, fees, or other City Ordinances.
2. That all approved proposals of the applicant be conditions of development, if not mentioned herein.
3. That the site be developed according to the approved site plan, titled Site Plan Review No. 2017-11, with minor modifications to be approved by the Community Development Department.
4. That no expansion of the use which would tend to increase the projected scale of operations beyond the scope and nature described in this Site Plan Review shall be permitted except upon application for, and approval of, modification of this application according to all procedures and requirements thereof.
5. That the building address be posted at the site prior to the first building inspection and that a permanent address sign be placed on the site before occupancy.
6. That all conditions of the Mitigation Monitoring and Reporting Program, attached as **Exhibit B**, shall also be conditions of approval of Site Plan Review No. 2017-11.

Conversion to Non-Residential Use (Section 17.30.100)

1. That no exterior alterations or additions shall be permitted that significantly alters the original architectural style of the building.
2. That exterior alterations or additions shall be minimized to the extent possible.

Cultural Resources:

1. That if cultural resources are discovered during construction or related activities, all work shall be halted and a qualified archeologist and the City of Hanford shall be notified. The find shall be properly investigated and appropriate measures are to be taken before construction may continue.
2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth-disturbing activities.

Building Setback Areas (17.30.070)

1. That the appropriate setbacks be maintained, as follows for a two-story structure:
 - a. Front (along Grangeville Boulevard): 15 feet
 - b. Garage: 20 feet

- c. Rear: 25 feet
- d. Interior Side: 5 feet
- e. Street Side (Along Leoni Drive): 10 feet

Off Street Parking: (Section 17.54).

1. That the applicant shall provide 12 parking stalls on site, one of which is ADA-accessible, as shown on the approved site plan. Per the Hanford Municipal Code Section 17.54.040, all office and medical uses, except call center, hospital, and pharmacy, shall require one space per 250 square feet.

Calculation: 2,900 sq. ft. ÷ 250 sq. ft. = 11.6 parking stalls minimum (12 stalls minimum)

2. That the standard parking space shall not be less than 18.5 feet in length and nine feet in width, exclusive of aisles and access drives (Section 17.54.110 A).
3. That the maximum number of compact-car parking spaces is limited to 30 percent of the total parking spaces required. A compact parking space shall not be less than 16 feet in length and 8 feet in width, and marked for compact cars (Section 17.54.110 B. and C).

- That parking stall number 1 on the site plan be marked for compact cars.

4. That parking for bicycles and low-emission vehicles shall be provided in accordance with the latest adopted version of the California Building Code (Section 17.54.190).

Signage: (Section 17.56).

1. That any/all signs proposed for this development shall be subject to the requirements and standards prescribed in Chapter 17.56 of the Hanford Municipal Code. **A separate application is required.**

Fencing and Walls: (Section 17.50.110 and 17.50.120).

1. That fences and walls in the OR zone district shall be constructed or installed in accordance with the following:
 - a. Along a rear lot line not exceeding seven feet in height
 - b. Along an interior side lot line not exceeding seven feet in height beginning at 10 feet from the front lot line.
2. That any proposed fencing on the site be maintained in good repair.
3. That no fence or wall shall be placed within the public right-of-way.
4. That a masonry fence exceeding three (3) feet in height shall require engineered footings and a building permit. All other fencing exceeding seven (7) feet in height shall require engineered post footings and a building permit.
5. That no hedge, shrub, fence, or wall exceeding the three (3) feet in height, or four (4) feet in height if the upper one (1) foot is fifty (50) percent or more open shall be planted, placed, or maintained within the twenty-five (25) feet corner sight triangle of a corner lot, or along a

front or street side property line where the hedge, shrub, fence, or wall creates a traffic or pedestrian hazard as determined by the Community Development Director.

Landscaping: (Section 17.52.060).

1. General Design Standards: the following features shall be incorporated into the design of the proposed landscape and shown on the required landscape plans:
 - a. Publicly maintained landscape areas shall be separated from privately maintained landscape areas with, at a minimum, a four (4) inch wide concrete mow strip.
 - b. Pedestrian access to sidewalks and structures shall be integrated with the design of landscaped areas.
 - c. Landscape adjacent to driveways and parking areas shall be protected from vehicle damage through the provision of a minimum six (6) inch high and six (6) inch wide concrete curb.
 - d. Concrete mow strips, when used, shall be a minimum of four (4) inches in width.
 - e. Trees and shrubs shall be planted so that at maturity they do not interfere with utility lines and traffic safety sight areas.
 - f. Trees and shrubs shall be planted and maintained in a manner that protects the basic rights of adjacent property owners, particularly the right to solar access.
 - g. Trees planted within five (5) feet of sidewalks or curbs shall have an eighteen (18) inch by ten (10) foot long linear root barrier placed at each edge of the sidewalk or face of curb, centered on the tree.
2. Plant materials. Plant materials shall be selected and installed in accordance with the following requirements:
 - a. The size of ten (10) percent of the trees to be planted shall be twenty-four (24) inch box or larger. The remaining trees shall be sized fifteen (15) gallons or larger.
 - b. The size of seventy (70) percent of plants and shrubs shall be at five (5) gallon or larger. The remaining plants and shrubs shall be sized one (1) gallon or larger.
 - c. The size of groundcover at planting shall be one (1) gallon or larger.
 - d. Groundcover shall be designed to have one hundred (100) percent coverage within two (2) years.
 - e. Drought tolerant plant material and climate appropriate species shall be emphasized in the design.
3. That the landscaped area shall be planted with live and healthy plant materials suitable for screening/or ornamenting the site. Landscaped areas shall be watered by automatic systems and designed and developed in accordance with Chapter 12.08 and the most recent State Model Water Efficient Landscaped Ordinance.

4. That not less than five percent of the interior square footage of the parking area shall be landscaped with trees and other plant materials suitable for ornamentation. **Parking areas are to have one tree placed at every four lineal parking spaces.** Landscaped areas shall be distributed throughout the parking area and peripheral areas to the extent practical in consideration of the size and design of the parking area. (Section 17.54.180).
5. That no fence, hedge, or shrub shall be installed, planted, or maintained along a street frontage, which creates a traffic or pedestrian hazard.
6. That not less than 15 ft. from the property line adjoining Grangeville Boulevard shall be landscaped and permanently maintained (Section 17.52.050).
7. That not less than 10 ft. from the property line adjoining Leoni Drive shall be landscaped and permanently maintained, exclusive of drive isles.

Trash Collection Areas (Section 17.50.090).

1. That a suitable area shall be provided on-site for collection of trash and recyclable materials for all multi-family residential, mixed-use, commercial, office, and industrial uses. Refuse storage areas shall be adequately screened from view. The refuse area enclosure shall be designed to meet the minimum recommended dimensional standards as determined by the City Engineer.
2. That all uses shall be in compliance with the provisions of Chapter 13.12 of the Municipal Code.

Outdoor Lighting Standards (Section 17.50.120)

1. That all lights and light fixtures, except public street lights, shall be located, aimed or shielded so as to minimize light trespassing across property boundaries or skyward.
2. That the height of freestanding light fixtures including freestanding parking lot fixtures shall be measured from the top of a light fixture to the adjacent grade at the base of the support for that light fixture and shall not exceed the following:
 - a. Eighteen (18) feet in height, when located within fifty (50) feet of any residential zone district; and
 - b. Twenty-five (25) feet in height when located within fifty-one (51) to one hundred fifty (150) feet of any residential zone district; and
 - c. Thirty (30) feet in height when located more than one hundred fifty (150) feet from any residential zone district; and
 - d. Fifty (50) feet in height when located in the RC regional commercial zone or freestanding light fixtures for public outdoor recreational facilities.
3. That mercury vapor lamps shall be a fully shielded fixture with all light directed on-site.

Dust Control:

1. That the appropriate dust-control practices of the San Joaquin Valley Air Pollution Control

District shall be implemented.

2. That the any necessary permits be obtained through the San Joaquin Valley Air Pollution Control District.

BUILDING DIVISION

Contact Building Official: Tom Webb (559) 585-2584

Concerning questions that you may have on the conditions listed below:

1. That building permits must be obtained from the City Building Division for each structure to include but not limited to: buildings, pools, fences, trash enclosures, signs and carports for any structural, plumbing, electrical or mechanical work being done.
2. That no building or structure shall be used or occupied, and no change in the existing occupancy classification of building or structure or portion thereof shall be made until the building official has approved the change and issued a Certificate of Occupancy.
3. That detailed dimensioned plans be provided to the Building Division for each structure prior to obtaining construction permits. Each structure will require a separate submittal and permit.
4. That each structure will require plans and calculations signed by an architect or engineer licensed to practice in the State of California. Submittal shall consist of as applicable:
 - 4.1 1 copy of the City of Hanford Permit Application form
 - 4.2 6 complete sets of Drawings, unless noted, including:
 - 4.2.1 Grading Plan (Civil Drawings, for reference)
 - 4.2.2 Site Plan
 - 4.2.3 Architectural Drawings
 - 4.2.4 Structural Drawings
 - 4.2.5 Electrical Drawings
 - 4.2.6 Mechanical Drawings
 - 4.2.7 Plumbing Drawings
 - 4.2.8 Landscape Plan (for reference)
 - 4.2.9 Planning Dept. "Conditions of Approval" or "Resolution"
printed on the drawings and part of the drawing submittal
 - 4.2.10 A minimum of 2 sets shall be stamped and wet signed by an Architect or Engineer licensed in the State of California.

****** Each structure will be considered a separate submittal. Grading, Landscaping and all Fire permits are separate submittals as well and require separate applications and submittals as applicable. ******

- 4.3 2 complete sets of documentation, unless noted, including:
 - 4.3.1 Architectural Specifications
 - 4.3.2 Structural Calculations
 - 4.3.3 Electrical Calculations, if not included on the drawings
 - 4.3.4 Mechanical Calculations, if not included on the drawings
 - 4.3.5 Plumbing Calculations, if not included on the drawings
 - 4.3.6 Energy Calculations, if not included on the drawings
 - 4.3.7 CalGreen Compliance, if not included on plans
 - 4.3.8 **Compliance with the City of Hanford Landscape Ordinance**
 - 4.3.9 A minimum of 2 sets shall be stamped and wet signed by an Architect or Engineer licensed in the State of California.

5. That the site, as well as the buildings, shall be made accessible and usable by the disabled in accordance with the California Building Code, Chapter 11B.
6. That a school impact fee of \$0.56 (or revision thereof) for each square foot of new building area be paid when building permits are issued.
7. That all special inspection reports be submitted to the Building Division prior to final inspection.
8. That all construction shall conform to the Most Current Edition (2016) of the California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code, California Energy Code and CalGreen.
9. That Kings County Impact Fees shall apply at current rates.
10. That the tenant, lessee, and/or owner are responsible for compliance with the Americans with Disabilities Act. By federal law your facility must be made accessible to the highest degree possible.
11. That the applicant provide a complete set of AS-BUILT drawings on CD, in "tif" format, to the Building Division prior to Final Inspection.
12. That block walls and trash enclosures require separate submittals/permits.

FIRE DEPARTMENT

Contact Fire Inspector Susan Martinez @ (559) 585-4793 or smartinez@cityofhanfordca.com concerning questions that you may have on the conditions listed below:

General:

1. **Approval of this project does not exempt compliance with all applicable sections of the City adopted fire codes and local fire ordinances.**

Fire Extinguisher(s):

2. Fire extinguishers shall be mounted onto a secure surface and/or installed inside approved fire extinguisher cabinets in accordance with the most currently adopted edition of the California Fire Code (CFC).
3. Fire extinguishers that are not easily visible due to being installed inside of a fire extinguisher cabinet or are blocked from view due to building and/or other obstructions, shall have a sign posted nearby with the words Fire Extinguisher on the cabinet or above the location where the fire extinguisher is installed.
4. The size, type and location of all fire extinguishers shall be approved by the fire department, typically a 2-A:10-B:C.

Emergency Access:

5. A Knox Box is required to be installed at the main entrance area to the building. Any 3200 Series Model number is appropriate. The Knox Box shall be installed in an area visible and accessible to the fire staff with the top of the box no higher than 6'-0" AFF. The ordering of

Knox Box products can be done directly online at www.knoxbox.com or a form can be obtained from the fire department.

Fire Hydrants:

6. Existing fire hydrants installed within the sphere of utilization for this project shall meet City Standard WA-20 if the existing fire hydrant is the old wharf model.

Special Requirements:

7. All address numbers shall be installed onto the building and shall be visible from the frontage street. The color of the address numbers shall be in a contrasting color to the building.

Size of Address Numbers:

- | | |
|---|------------------|
| o Downtown area (existing buildings): | 4-inch numbers, |
| o Buildings 20-ft. or less from the street: | 6-inch numbers, |
| o Buildings 21- to 40-ft. from the street: | 8 inch numbers, |
| o Buildings more than 40-ft. from street: | 12 inch numbers. |
8. Solar photovoltaic installations shall conform to CFC 605.11 and require separate fire department plan check.

UTILITIES

Contact Utilities Superintendent Mike Cosenza at (559) 585-2564
Concerning questions that you may have on the conditions listed below:

General:

1. That all work within the public street right-of-way shall be under the control of a General Engineering Contractor, licensed for that purpose. Contractor shall verify all conditions in the field prior to commencing construction.
2. That locations of existing water, sanitary sewer and storm drain mains in the vicinity of the project site will be marked by Public Works Department staff based upon the city's best available records. Contractor shall provide city with a minimum of 48 hours prior notice when requesting location of existing utilities at (559) 585-2564. The City of Hanford is not a member of Underground Service Alert (U.S.A.).
3. That all sewer and water utility work and materials shall conform to City of Hanford Standards and Specifications, latest edition.

Water:

1. That the developer shall provide an accurate fixture unit count and size water services in accordance with the requirements of the Uniform Plumbing Code, latest edition.
2. That the developer shall furnish and install any new water service assemblies required for the project including water meters and meter boxes for both domestic and landscape uses. If existing services are utilized, fixture counts to ensure adequate size of service is required. All new services are to come off of Grangeville Blvd. or Leoni Drive.
3. That the developer shall furnish and install appropriate cross connection / backflow prevention assemblies for all required water services, including fire service lines.

4. That all backflow prevention assemblies required for the development shall be tested and approved by a certified technician prior to occupancy. Copies of all backflow test results shall be provided to the City of Hanford Utilities Division.
5. It is recommended that developer install a separate irrigation service to reduce the sewage usage bill. Sewage bills are calculated off of domestic water flows.

Sewer:

1. If an existing sanitary sewer lateral is not serviceable, the developer shall furnish and install a minimum four inch diameter sanitary sewer lateral to serve each of the buildings on project site located as shown on approved Site Plan. New sewer lateral shall be connected to the sanitary sewer main located within Leoni Drive.
2. That the developer shall furnish and install a floor drain inside any newly constructed Trash Enclosure. Floor drain run through a sand/grease interceptor and shall be connected via sanitary sewer lateral to City's Sanitary Sewer System.

ENGINEERING DIVISION

Contact Assistant Engineer Samantha Long at (559)585-2556
Concerning questions that you may have on the conditions listed below:

General Requirements:

1. That the development shall comply with all applicable City of Hanford Standard and Specification requirements. Any deviation from said Standards and Specifications must be approved by the City Engineer prior to construction.
2. That an Encroachment Permit for all work located within the public street right-of-way shall be obtained from the Public Works Department prior to start of work. For additional information regarding Encroachment Permit requirements, contact the City Engineering Division at (559) 585-2558.
3. That the development is subject to a **\$4,200.00** Grading Plan Review fee in accordance with City Resolution No. 10-31 R, or any revisions thereof. Grading Plan Review fee shall be paid prior to issuance of building permits.
4. That the development is subject to Engineering Plan Review and Inspection fee based on the cost of improvements required to be constructed within the public street right of way, in accordance with City Resolution No. 92-58-R, or any revisions thereof. Subject fees shall be payable prior to approval of improvement plans.
5. That all financial and other arrangements for planning, engineering, scheduling, installation of and/or relocation/ undergrounding of electric, gas, telecommunications, or other privately owned utilities are the sole responsibility of the developer. The developer is advised that significant project delays may result if utility issues are not resolved prior to start of construction.

Map and Plan Requirements:

1. That the developer shall submit to the City Engineer a set of construction plans on 24" X 36" size sheets for all required improvements. The plans shall be prepared by a licensed civil engineer, and shall include a site plan showing all on-site and off-site improvements, including but not limited to, sanitary sewer, storm drainage, and water system infrastructure, refuse enclosure locations, public street & parking lot improvements, landscape & irrigation systems and all other improvements as required by the project conditions of approval and the City of Hanford Standards and Specifications. Plans must be approved by the City of Hanford and any other affected agencies before issuance of building permits.
2. That prior to beginning any construction, or within twenty (20) calendar days after the approved plans are released by the City, the developer shall submit to the City of Hanford Engineering Division four (4) bond copies of the approved set of construction plans, and two (2) bound sets of the approved construction specifications, if any.
3. That within twenty (20) calendar days after all improvements have been constructed and accepted by the City, the developer shall submit to the City of Hanford Engineering Division one (1) reproducible and one (1) bond copy of the approved set of improvement construction plans revised to reflect all field revisions and marked "RECORD DRAWING".

Drainage Requirements:

1. That the developer shall comply with all applicable State of California requirements pursuant to the National Pollutant Discharge Elimination System (NPDES). If applicable to the project, a Notice of Intent for the development shall be electronically filed by the developer and accepted by the State Water Resource Control Board (SWRCB) prior to any disturbance of soils onsite. Documentation of SWRCB approval of the development shall be required by the City of Hanford prior to start of construction, and the developer shall comply with all SWRCB General Construction Permit requirements during construction. Contact the SWRCB at www.swrcb.ca.gov for further information.
2. That track-out of soil, gravel, or other construction-related materials on to public streets is prohibited.
3. That a drainage/site improvement plan for development be prepared by a license civil engineer for review and approval by the Public Works Department prior to the issuance of building permits. All construction shall be certified by a civil engineer as being constructed to approved plan.
4. That site grading and drainage shall comply with the approved grading and improvement plans for the development. Upon completion of construction, the developer's engineer shall provide a written statement that site grading and drainage has been completed in accordance with approved plans.

Curb, Gutter, and Sidewalk Requirements:

1. That the existing concrete curbs and gutters located along the Grangeville Blvd. project frontage may remain in place provided they are found to be in functional condition and adequately sloped for proper drainage. Sections damaged during construction, or otherwise found to be in disrepair, shall be removed and replaced with new curbs and gutters installed

in conformance with City Standard CO-11 and CO-14. The locations of any such curbs and gutters required to be reconstructed shall be shown on the engineered site improvement plans.

2. That new curb, gutter, and sidewalk shall be installed in conformance with City Standard CO-11 and CO-14 along the Leoni Drive project frontage and shall be shown on the engineered site improvement plans.

Drive Approach Requirements:

1. That the existing substandard drive approaches located on the Grangeville Blvd. and Leoni Drive frontage shall be removed and replaced with a new concrete drive approach installed in accordance with City Standard CO-41 (26' minimum width) located as shown on the site plan. All drive approaches shall be constructed in compliance with ADA requirements in order to provide continuous pedestrian and disabled access along the project frontage

Parking Lot Requirements:

1. That the design and construction of the parking lot improvements shall conform to City Standards GE-29 and GE-32.
2. That the driveway providing access to the trash enclosure be upgraded to comply with City Std. requirements for structural capacity to handle the trash trucks

DEVELOPMENT IMPACT FEES:

1. That development is subject to the following impact fees in accordance with city ordinances no. 90-09, 90-10 and 98-14, or any revisions thereof. Impact fee calculations are based upon square footage of structures as shown on site plan. If changes are made to structure thereby increasing or decreasing structure floor areas, then impact fees will likewise change to reflect actual field conditions. Fees listed below reflect rates effective July 1, 2017. All fees are payable prior to issuance of building permits. **(Building area: 2,900 sf – Commercial (Office) – Site Area: 0.58 Acres).**
 - A. That the development is subject to a **\$8,234.85 Transportation Impact Mitigation Fee** in accordance with City Resolution No. 98-56-R, or any revisions thereof.
 - B. That the development is subject to a **\$3,885.42 Water System Impact Fee** in accordance with City Resolution No. 98-54-R or any revisions thereof.
 - C. That the development is subject to a **\$4,259.23 Wastewater System Impact Fee** in accordance with City Resolution No. 98-55-R or any revisions thereof.
 - D. That the development is subject to a **\$4,286.92 Storm Water System Impact Fee** in accordance with City Resolution No. 98-57-R, or any revisions thereof.
 - E. That the development is subject to a **\$1,875.43 Fire Protection Impact Fee** in accordance with City Resolution No. 98-52-R or any revisions thereof.
 - F. That the development is subject to a **\$1,181.46 Police Protection Impact Fee** in accordance with City Resolution No. 98-53-R or any revisions thereof.

- G. That the development is subject to a **\$1,475.66 Refuse and Recycling Impact Fee** in accordance with City Resolution No. 98-53-R or any revisions thereof. (Based on 1 - 3 yard Trash bin picked up 2x per week, and 1 - 3 yard Recycle bin picked up 2x per week).

REFUSE DIVISION

Contact Ruben Carrillo at (559) 585-2569

Concerning questions that you may have on the conditions listed below:

General Requirements:

1. That a 10' x 15' inside clear dimension masonry block refuse enclosure with 6' high perimeter walls shall be constructed in accordance with City Std. GE-35, modified to include installation of 12" x 12" interior concrete curbs and 10' concrete apron. If enclosure will be used to service restaurants then a separate grease bin container area shall be constructed in accordance with City standard GE- 41. The refuse enclosure shall have gates of chain-link fencing with earth-tone color vinyl slats or other approved gate materials. The enclosure shall be architecturally compatible with surrounding buildings, and the location of the enclosure shall be approved by both the Public Works and Community Development Departments.
2. That nothing other than the city refuse bins shall be stored or kept in refuse enclosures.
3. That refuse enclosure gates shall be securely closed except when in use.
4. That refuse enclosures shall not be located adjacent to combustible construction or beneath windows or non-protected eaves.
5. That the applicant shall participate in all available waste recycling & reuse programs **including the new requirement for food waste separate bin service (if applicable).**

KINGS COUNTY AREA PUBLIC TRANSIT (KART)

Contact Mark Pedreiro, Facilities and Fleet Specialist at (559) 852-2624

Concerning questions that you may have on the conditions listed below:

1. That KART requires a bus stop at this location. A section of sidewalk seven feet wide from curb to back of sidewalk would be required in order to accommodate a sign, a bench, and four feet of ADA-clearance.

PASSED AND ADOPTED at a regular meeting of the City of Hanford Planning Commission by the following vote:

AYES:	Commissioners	SANCHEZ, HAM, GALVAN, PADEN, DOUGLAS, PERICO, JOHNSTON
NOES:	Commissioners	NONE
ABSTAIN:	Commissioners	NONE
ABSENT:	Commissioners	NONE

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, **Darlene R. Mata**, Secretary of the Planning Commission of the City of Hanford, do hereby certify the foregoing resolution was duly passed and adopted by the Planning Commission of the City of Hanford at a regular meeting thereof held on the 10th day of October 2017.



Darlene R. Mata

Exhibit A
Site Plan Review No. 2017-11



Exhibit B
Mitigation Monitoring and Reporting Program

Attachment: Exhibit B (3) - Reso 2017-20 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11

Mitigation Measures

Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	
CULTURAL RESOURCES		
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS		
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development.
GREENHOUSE GAS EMISSIONS		
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Developer
NOISE		

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?	to adhere
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Exhibit C
KART Comments

Attachment: Exhibit B (3) - Reso 2017-20 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET



MAYOR
DAVID G. AYERS
VICEMAYOR
SUE SORENSEN
COUNCIL MEMBERS
MARTIN DEVINE
FRANCISCO RAMIREZ
JUSTIN MENDES
CITY MANAGER
DARREL L. PYLE
CITY ATTORNEY
ROBERT M. DOWD

September 14, 2017

PROJECT REVIEW – Consultation Notice

For: General Plan Amendment No. 2017-03 (B) , Rezone No. 2017-02,
and Site Plan No. 2017-11

The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan 2017-11, filed by London Properties. General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office. The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by October 6, 2017 via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

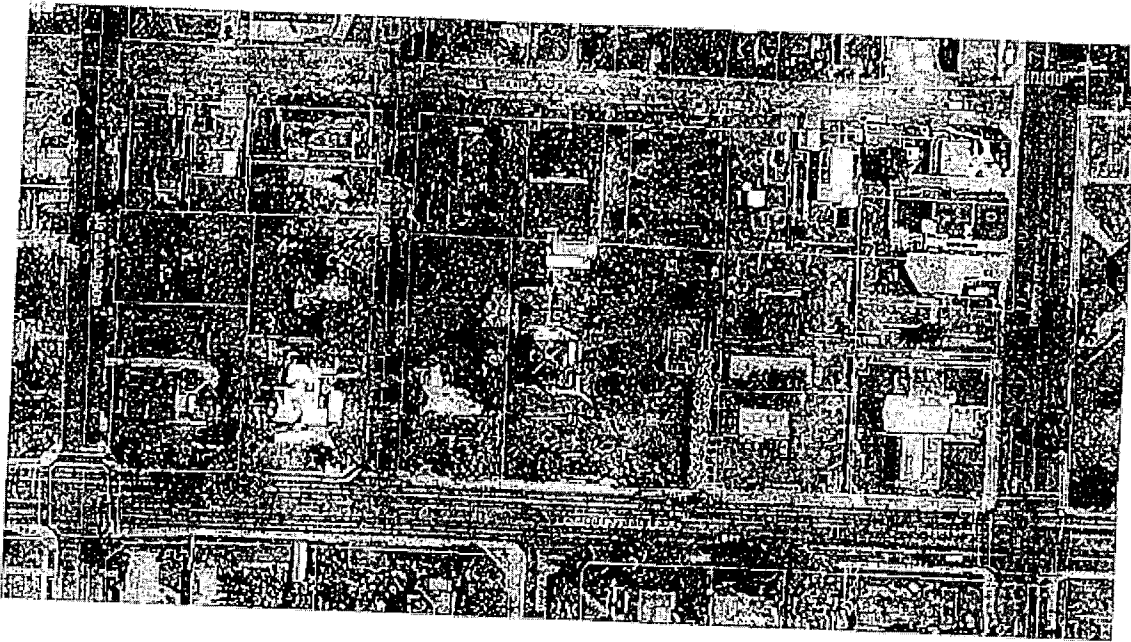
I ☒ do ☐ do not have comments regarding this Project

Mark Padilla
Signature

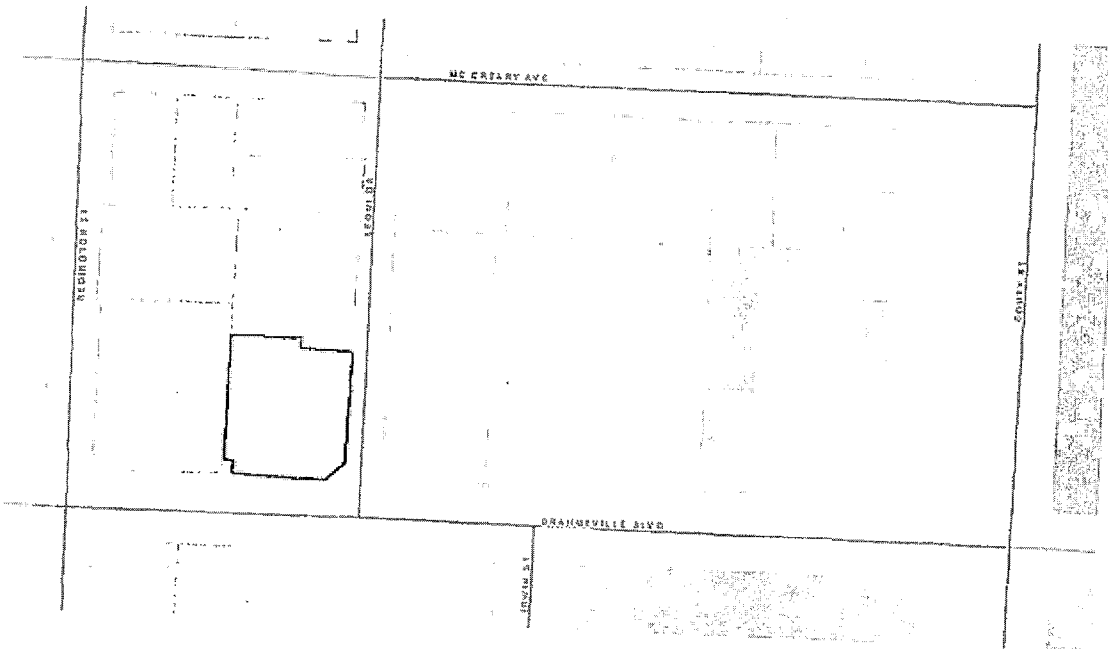
KART
Agency

9/21/17
Date

Land Use:



General Plan Designation:
Proposed under GPA 2017-03 (B): High-Density Residential



KART WOULD LIKE CONSIDERATION FOR A TOWN BUS STOP
IF SIDEWALK IMPROVEMENTS ARE MADE PLEASE CONSIDER A
SECTION OF SIDEWALK 7' WIDE FROM CURB TO BACK OF
SIDEWALK FOR SIGN & POSSIBLE BENCH.

City of HANFORD

CALIFORNIA 93230
CITY OFFICES 317 NORTH DOUTY STREET



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DAVID G. AYERS
VICEMAYOR
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CITY ATTORNEY
ROBERT M. DOWD

September 14, 2017

PROJECT REVIEW – Consultation Notice

For: General Plan Amendment No. 2017-03 (B) , Rezone No. 2017-02,
and Site Plan No. 2017-11

The Community Development Department of the City of Hanford is requesting your comments regarding General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan 2017-11, filed by London Properties. General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office. The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. A public hearing pertaining to the project will be held by the City of Hanford Planning Commission on October 10, 2017 at 7:00 p.m. in the Council Chambers of the Civic Auditorium, 400 N. Douty Street. You may review the Mitigated Negative Declaration, Initial Study, mitigation measures, reference material and any comments received on the Mitigated Negative Declaration at City of Hanford, 317 N. Douty Street, Hanford, CA 93230. (Comment period September 15 – October 6, 2017).

Recommendations or suggestions for changes or mitigation measures requested by agencies having jurisdiction by law over natural resources affected by the project must be accompanied by a proposed reporting or monitoring program for those changes or measures in accordance with Public Resources Code Section 21081.6. It is requested that your comments, if any, be transmitted to this office by **October 6, 2017** via mail to the address above or emailed to gdesilva@cityofhanfordca.com. Failure to comment will indicate approval of the project and no additional information will be sent to you. If you have any questions or concerns regarding this project please call me at (559) 585-2580.

Sincerely,

COMMUNITY DEVELOPMENT DEPARTMENT

Gabrielle de Silva

Gabrielle de Silva, Associate Planner

I ☒ do ☐ do not have comments regarding this Project

Mark Padreira
Signature

KART
Agency

9/21/17
Date

Attachment: Exhibit C - Kart Comments (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11)

Land Use:



General Plan Designation:
Proposed under GPA 2017-03 (B): High-Density Residential



KART WOULD LIKE CONSIDERATION FOR A FUTURE BUS STOP.
IF SIDEWALK IMPROVEMENTS ARE MADE PLEASE CONSIDER A
SECTION OF SIDEWALK 7' WIDE FROM CURB TO BACK OF
SIDEWALK FOR SIGN & POSSIBLE BENCH.

**NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
NOTICE OF PUBLIC HEARING**

NOTICE IS HEREBY GIVEN that on Tuesday, October 10, 2017 at 7:00 p.m., a public hearing will be conducted by the Hanford Planning Commission in the Council Chamber of the City of Hanford Civic Auditorium, 400 N. Douty Street, Hanford, California, pertaining to the following:

PROJECT DESCRIPTION AND LOCATION:

GENERAL PLAN AMENDMENT NO. 2017-03 (B): a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential.

REZONE NO. 2017-02: a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential.

SITE PLAN REVIEW NO. 2017-11: A request to convert an existing single-family residential home to a professional office.

LOCATION: The project is located at the northwest corner of Grangeville Boulevard and Leoni Drive, 206 W. Grangeville Boulevard (APN 008-282-003).

Based on an Initial Study, the Community Development Department has determined that the project described above would not have significant adverse impacts on the environment with the incorporation of mitigation measures. A Mitigated Negative Declaration has been prepared for the project. You may review the Mitigated Negative Declaration, Initial Study, proposed mitigation measures, reference material, and any comments received on the Mitigated Negative Declaration at the City of Hanford, 317 N. Douty Street, Hanford, CA 93230.

COMMENT PERIOD: September 15, 2017 – October 6, 2017 [20 day comment period]

PUBLIC COMMENT INVITED: All interested parties are invited to submit written comment on the Mitigated Negative Declaration by October 6, 2017 and/or to appear at the hearing described above to present testimony, in regard to the above-listed request. All comments should be submitted to the City of Hanford, Attention: Gabrielle de Silva, at the above listed address.

If you challenge any action or decision regarding the project described in this notice in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City prior to, or at, the public hearing.

For further information, contact the Hanford Community Development Department at (559) 585-2580 or 317 N. Douty Street, Hanford, California, 93230.

HANFORD COMMUNITY DEVELOPMENT DEPARTMENT

Attachment: Exhibit D - Mitigated Negative Dec. 2017-12 (General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review

MITIGATED NEGATIVE DECLARATION NO. 2017-12

Project Title: General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11

File Number: GPA 2017-03 (B) (515.0151), RZ 2017-02 (510.0231), and SPR 2017-11 (502.0983)

State Clearinghouse Number: n/a

Lead Agency: City of Hanford

Responsible Agency: N/A

Applicant: David J. Conner (c/o London Properties) 6442 N. Manoa Avenue Fresno, CA 93704	Property Owner(s): David J. Conner (c/o London Properties) 6442 N. Manoa Avenue Fresno, CA 93704
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Project Description:

GENERAL PLAN AMENDMENT NO. 2017-03 (B): a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. **REZONE NO. 2017-02:** A request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. **SITE PLAN REVIEW NO. 2017-11:** A request to convert an existing single-family residential home to a professional office.

LOCATION: The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.

Attachments:

Initial Study	(X)
Environmental Checklist	(X)
Maps	(X)
Mitigation Measures	(X)
Letters	()

Environmental Assessment: The Initial Study for the project is available for public review at the City of Hanford, Community Development Department, 317 N. Douty St., Hanford CA.

Declaration of No Significant Effect: The City of Hanford has completed the preparation of an initial study for the project described above. The initial study did not identify any potentially significant environmental effects that would result from the proposed project. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

- (a) The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- (b) The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- (c) The project does not have environmental effects which are individually limited but cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- (d) The environmental effects of the project will not cause substantial adverse effects on human beings, either directly or indirectly.

This Mitigated Negative Declaration has been prepared by the City of Hanford Community Development Department in accordance with the California Environmental Quality Act of 1970, as amended.

Contact Person: Gabrielle de Silva

Phone: (559) 585-2578

Signature: Gabrielle de Silva

Date: September 14, 2017

Review Period: 20 days [September 15, 2017 to October 6, 2017]

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION NO. 2017-12

Prepared For

David J Conner (c/o London Properties)

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11

Prepared By

The City of Hanford

September 14, 2017

INITIAL STUDY

INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study and Mitigated Negative Declaration (MND) prepared pursuant to the California Environmental Quality Act (CEQA) for the Project. This MND has been prepared in accordance with CEQA, Public Resources Code Section 21000 et seq., and the CEQA Guidelines.

The City of Hanford prepared a General Plan Update and certified a Program level Environmental Impact Report (EIR) on April 18, 2017. The CEQA Guidelines Section 15168 states that subsequent activities must be examined in the light of the program EIR to determine if the later activity would have effects that were not examined in the program EIR. Consistent with 15165, if a project is not otherwise statutorily or categorically exempt from CEQA, an Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with the CEQA Guidelines, Section 15064, an environmental impact report (EIR) must be prepared if the Initial Study indicates that the proposed project under review may have a potentially significant impact on the environment. A negative declaration may be prepared instead, if the lead agency prepares a written statement describing the reasons why a proposed project would not have a significant effect on the environment, and, therefore why it does not require the preparation of an EIR. According to the CEQA Guidelines Section 15070, a negative declaration shall be prepared when either:

- 1) The initial study show there is no substantial evidence, in light of the whole record before the agency, that the proposed project may have a significant effect on the environment, or
- 2) The Initial Study identified potentially significant effects, but:
 - a) Revisions in the project plans or proposals made by or agreed to by the applicant before the proposed negative declaration is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - b) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

If the Initial Study reveals that there may be a significant effect upon the environment, but those effects can be avoided or reduced to a less than significant level with revisions to the project plan and/or mitigation measures, and the applicant agrees to the revision and/or mitigation measures, the lead agency may prepare a mitigated negative declaration.

PROJECT DESCRIPTION:

The project has three components. General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office. The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive. The projects meet all General Plan policies and development standards of the City of Hanford.

ENVIRONMENTAL SETTING

The project pertains to a developed site in an urban area. There is a single-family dwelling on site, which is proposed to be converted to an office. The site is surrounded by single-family residential lots. The surrounding land uses are as follows:

	Zoning	General Plan Designation	Land Use
North	R-L-5	Low-Density Residential	Residential
East	R-L-5	Low-Density Residential	Residential
South	R-L-5	Low -Density Residential	Residential

West	R-L-5	Low-Density Residential	Residential
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ENVIRONMENTAL IMPACTS

No significant adverse environmental impacts have been identified for this project. The City of Hanford Land Use Element, Zoning Ordinance, and Climate Action Plan contain policies and regulations and measures that are designed to mitigate impacts to a level of non-significance. Environmental measures are methods, measures, standard regulations or practices that avoid, reduce, or minimize a project's adverse effects on various environmental resources. Based on the underlying authority, they may be applied before, during, or after construction of the project. Environmental measures are also commonly listed as conditions of approval. The City Municipal Code and other agencies currently contain measures that assist to mitigate environmental impacts. Mitigation measures have been included in the environmental assessment that will mitigate any potential impacts to a level of less than significant.

In addition, a Statement of Overriding Considerations was adopted for Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative), Cultural Resources (program and cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) for the EIR prepared for the 2035 General Plan Update. The project is being developed consistent with the land use designation that was evaluated in the 2017 General Plan EIR. The General Plan Update and EIR are herein incorporated by reference, including Resolution 17-20-R. Other documents used in the preparation of this environmental assessment are listed as sources and also incorporated by reference.

PROJECT COMPATIBILITY WITH EXISTING ZONES AND PLANS

The proposed General Plan Amendment and Rezone are consistent with the policy of the General Plan and Zoning Ordinance. The change in designation from low-density residential to office residential is consistent with the surrounding area.

SUMMARY OF INITIAL STUDY/MITIGATED NEGATIVE DECLARATION IMPACT CONCLUSIONS

An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the projects, General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, Tentative Parcel Map No. 2017-01, and Site Plan Review No. 2017-11, in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the City of Hanford Municipal Code. The IS/MND for the proposed Project is tiered from the 2035 General Plan Update Environmental Impact Report (EIR) (SCH No. 2015041024), certified by the City Council on April 15, 2017, for which a Statement of Overriding Considerations was adopted for Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative), Cultural Resources (program and cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) for the EIR prepared for the 2035 General Plan Update.

The Proposed IS/MND analyzed the Project's potential impacts with regard to the following environmental topical areas: (1) aesthetics, (2) agriculture and forest resources, (3) air quality, (4) biological resources, (5) cultural resources, (6) geology and soils, (7) greenhouse gas emissions, (8) hazards and hazardous materials, (9) hydrology and water quality, (10) land use and planning, (11) mineral resources, (12) noise, (13) population and housing, (14) public services, (15) recreation, (16) transportation/traffic, and (17) utilities and services systems.

The proposed Project, as analyzed in the IS/MND, incorporates all relevant General Plan policies, standards and Mitigation Measures (MMs), as adopted by the 2035 General Plan EIR for purposes of determining environmental impacts of Project implementation. Based on the Project-specific analysis presented in the IS/MND it was determined that the Project in each topical area would have either no impact, a less than significant impact, impacts that could be mitigated to a less than significant level or that project impacts were adequately analyzed in the 2035 General Plan Update EIR. The IS/MND concluded that the proposed Project would have no impact or a less than significant Project-specific impact in the following topical areas: Agriculture and Forestry Resources, Biological Resources, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation.

Further, it was concluded that the proposed Project would have less than significant cumulative impacts with mitigation measures. The initial study utilized the full build out of the General Plan Planning Area as the area for consideration of cumulative impacts. Significant and unavoidable impacts to Agriculture and Forestry Resources (program and cumulative), Air Quality (cumulative), Biological Resources (program and cumulative), Cultural Resources (program and cumulative), Greenhouse Gases (cumulative), and Population and Housing (program and cumulative) were identified with the full build out of the General Plan Planning Area. These impacts were analyzed in the 2035 General Plan EIR and determined to be a significant and unavoidable impact associated with implementation of the 2035 General Plan, of which the Project is a part and consistent with. A Statement of Overriding Considerations for these significant unavoidable impacts was adopted by the City Council as part of the approval of the 2035 General Plan Update. The proposed Project is consistent with and implements the General Plan and would not result in any new impacts that cannot be mitigated to

less than significant levels, nor would it increase the severity of any previously identified impacts. Therefore, the Statement of Overriding Considerations is re-affirmed for the proposed Project and a Mitigated Negative Declaration is the recommended appropriate environmental document for the proposed Project, in accordance with CEQA.

CONSULTATION

Pre-consultation was sent to the interested agencies on August 21, 2017.
No responses were received.

SOURCES:

Sources:

2010 Urban Water Management Plan. (2011, June 11). *City of Hanford* -

California Building Standards Code 2016 (Title 24, California Code Regulations). *Codes*.

City of Hanford 2035 General Plan Update (2017).

City of Hanford General Plan Update, 2035 – Environmental Impact Report. (2017). Hanford, California.

City of Hanford Storm Drainage Water Master Plan (1995, August)

City of Hanford Public Works Construction Standards

City of Hanford Water Master Plan

City of Hanford Waste Water Master Plan

County Important Farmland Data Information. Department of Ag

Final Staff Report – Climate Change Action Plan: Addressing GHG Emission Impacts under CEQA. (2009, December 17)
San Joaquin Valley Air Pollution Control District Climate Change Action Report.

San Joaquin Valley Air Pollution Control District Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI), Revised March 19, 2015.

San Joaquin Valley Air Pollution Control District Small Project Analysis Level (SPAL)

Hanford Municipal Code (Hanford, California). (2017). *Hanford Municipal Code*.

United States Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map for Hanford (Community Panel Number 06031C 0185C, June 16, 2009)

Final Regional Climate Action Plan (May 28, 2014)

APPENDIX G: Initial Study and Findings
ENVIRONMENTAL ASSESSMENT NO. 2017-12

1. Project Title: General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02 and Site Plan Review No. 2017-11
2. Lead Agency Name and Address: City of Hanford
317 N. Douty Street
Hanford, CA 93230
3. Responsible Agency Name and Address: n/a
4. Contact Person/Phone Number: Gabrielle de Silva
Community Development Department
(559) 585-2578
5. Project Location: The project is located at 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.
6. Project Sponsor's Name/Address: David J. Conner (c/o London Properties)
6442 N. Manoa Avenue
Fresno, CA
7. General Plan Designation: Low-Density Residential, proposed Office Residential
8. Zoning: R-L-5, Proposed O-R
9. Description of the Project:

The project has three components. General Plan Amendment No. 2017-03 (B) is a request to change the designation for the property located at 206 W. Grangeville Boulevard from Low-Density Residential to Office Residential. Rezone No. 2017-02 is a request to change the zoning designation for the property located at 206 W. Grangeville Boulevard from R-L-5 Low-Density Residential to O-R Office Residential. Site Plan Review No. 2017-11 is a request to convert an existing single-family residential home to a professional office. The project is located at the 206 W. Grangeville Boulevard (APN 008-282-003), the northwest corner of Grangeville Boulevard and Leoni Drive.
10. Surrounding land uses and setting:

	Zoning	General Plan Designation	Land Use
North	R-L-5	Low-Density Residential	Residential
East	R-L-5	Low-Density Residential	Residential
South	R-L-5	Low -Density Residential	Residential
West	R-L-5	Low-Density Residential	Residential

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|--|
| ☒ Aesthetics | ☐ Agriculture Resources | ☒ Air Quality |
| ☐ Biological Resources | ☒ Cultural Resources | ☒ Geology/Soils |
| ☒ Green House Gas Emissions | ☐ Hazards & Hazardous Materials | ☐ Hydrology/Water Quality |
| ☐ Land Use/Planning | ☐ Mineral Resources | ☒ Noise |
| ☐ Population/Housing | ☐ Public Services | ☐ Recreation |
| ☒ Transportation/Traffic | ☒ Utilities/Service Systems | ☒ Mandatory Findings of Significance |

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project **COULD NOT** have a significant effect on the environment. A **NEGATIVE DECLARATION WILL BE PREPARED**.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION WILL BE PREPARED**.
- ☐ I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

FOR: CITY OF HANFORD

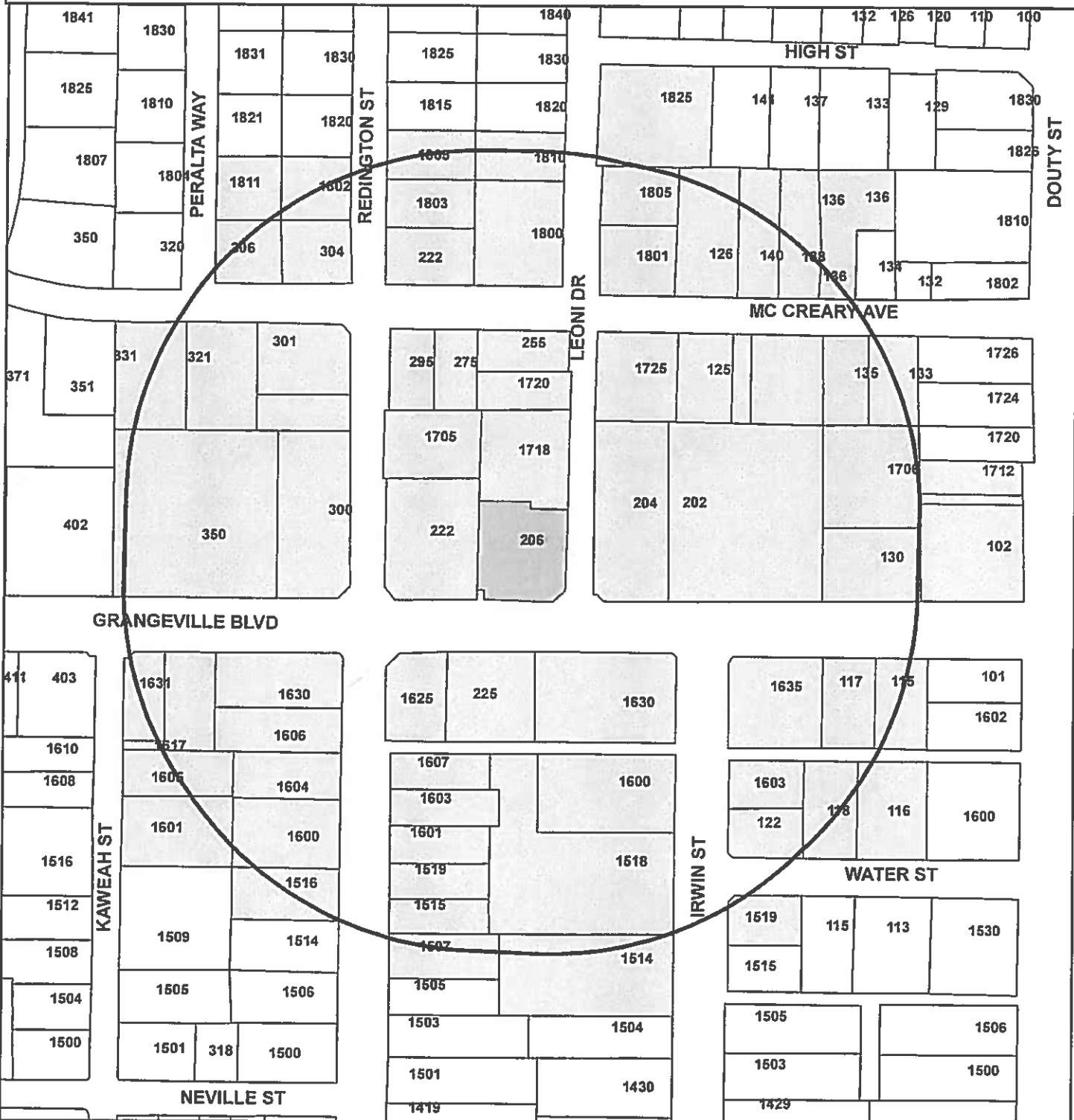
Gabrielle de Silva
 Gabrielle de Silva
 Associate Planner
 City of Hanford

September 14, 2017
 DATE

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Site and Notification Map



Legend

- 500 Ft Radius
- Subject Property
- Properties within 500 ft Radius



Issues:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐
ENVIRONMENTAL SETTING:				
SCENIC VISTAS AND CORRIDORS				
Views consist primarily of broad panoramas of agricultural land. Most of the land surrounding the northern and western part of the city is characterized by flat, dry valley grasslands scattered throughout as well as grazing and other agricultural uses. The grasslands, grazing land, and large farms create open vistas at the northern and eastern edges of the City.				
SCENIC HIGHWAYS				
According to the California Scenic Highway Mapping System, there are no adopted Scenic Highways within the planning area. (Caltrans 2015).				
VISUAL CHARACTER				
Hanford is located in the northern portion of Kings County and has a total area of 16.6 square miles, all of which is flat land not covered by water. The only natural watercourse is Muscle Slough, remnants of which still exist on the City's western edge. The Kings River is about 6.5 miles north of Hanford. The People's Ditch, an irrigation canal dug in the 1870s, traverses Hanford from north to south.				
The Planning Area consists of urban agricultural, and grassland habitat areas located in transitional zone in the Central Valley between the flat valley floor and the Sierra Nevada foothills to the east. Hanford is surrounded by productive agricultural land, much of which is encumbered by Williamson Act contracts that prohibit development.				
LIGHT AND GLARE				
The majority of the City includes existing sources of daytime glare and nighttime lighting and illumination.				
Significance Criteria				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
The Project may result in significant impacts to aesthetics if it substantially affects the view of a scenic corridor, vista or view open to the public, cause's substantial degradation of views from adjacent residences, or results in new night lighting that shines into adjacent residences. Checklist Discussion: a) Less than Significant Impact – Views consist primarily of broad panoramas of agricultural land. Most of the land surrounding the northern and western part of the city is characterized by flat, dry valley grasslands scattered throughout as well as grazing and other agricultural uses. The grasslands, grazing land, and large farms create open vistas at the northern and eastern edges of the City. These projects are along the western edge of the city and an existing developed area; therefore, the project would not have a significant effect on any scenic vista. b) Less than Significant Impact – There are no designated State Scenic Highways, as identified by the California Scenic Highway Mapping System within the City's General Plan Study area. There are also no rock outcroppings within the Study Area. The City does have an ordinance protecting trees in Chapter 12.12 Street Trees and Shrubs of the Municipal Code. The projects would be consistent with the tree ordinance. The projects would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway and impacts would be less than significant. c) Less than Significant Impact with Mitigation Incorporation– Several sections of the Hanford Municipal Code regulate physical development by controlling not only the appearance of new development, but also by controlling the placement of new development with consideration for surrounding uses. The projects would be held to appropriate development standards of the Hanford Municipal Code to mitigate impacts to aesthetics. (MM Aesthetics 1) d) Less than Significant Impact with Mitigation Incorporation– The projects would be subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards. Additionally, the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulation light power and brightness, shielding, and sensor controls (MM Aesthetics 2) Mitigation Measures: MM Aesthetics 1: that the projects are subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices MM Aesthetics 2: That the projects would be subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare. Conclusion: Impacts to aesthetics are anticipated to be less than significant after mitigation. Source(s): General Plan Environmental Impact Report, General Plan, Hanford Municipal Code, and California Building Code (2016) II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Significance Criteria The Project may result in significant impacts to agricultural resources since the project results in the removal of lands designated as prime farmland by the Department of Conservation.				
Checklist Discussion: a) No Impact – The project proposed at 206 W. Grangeville is located within an area listed as Urban and Built-Up Land on the Department of Conservation website. Therefore, the project would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural impacts. b) No impact - The project does not conflict with any agricultural zoning. The property is not enrolled in a Williamson Act contract. c) No impact – the projects would not conflict with existing zoning for, or cause rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production, as these designations do not exist within the City. There would be no impact. d) No Impact – There is no forest land within the City. The projects would not result in the loss of forest land or conversion of forest land to non-forest use, as these designations do not exist within the City. There would be no impact. e) No impact – The property is within a fully-developed urban area of the City. There will be no impacts to which would result in the conversion of farmland to non-agricultural uses.				
No Impact. Source(s): Department of Conservation Farmland Mapping and Monitoring Program map – Kings County (2012), Hanford General Plan (2017), General Plan Environmental Impact Report (2017)				
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Significance Criteria

The SJVAPCD has established the following standards of significance, a project is considered to have a significant impact on air quality if:

1. A project results in new direct or indirect emissions of ozone precursors (ROG and NOx) in excess of 10 tons per year.
2. Any project with the potential to frequently expose members of the public to objectionable odors will be deemed to have a significant impact.
3. Any project with the potential to expose sensitive receptors (including residential area) or the general public to substantial levels of toxic air contaminants would be deemed to have a potentially significant impact.
4. A project produces a PM10 emission of 15 tons per year (82 pounds per day)

While the SJVAPCD CEQA Guidance recognizes that PM10 is a major air quality issue in the basin, it has not established a numerical threshold for significant for PM10. For the purpose of this analysis, a threshold of 15 tons per year was used as the significance threshold. This is the threshold level at which new stationary sources requiring permits from SJVAPCD must provide offsets.

The SJVUAPCD significance impact for dust is based on appropriateness of construction dust controls, including compliance with Regulation VIII fugitive PM10 prohibitions. The guidelines provide feasible control measures for construction emission of PM 10s. If construction activities comply with the applicable rules, then air pollutant emissions for construction activities would be considered less than significant. All construction projects in the City of Hanford are required to comply with the SJVUAPCD Rules and Regulations, which will be included in project approval.

Pre-Consultation was mailed to the San Joaquin Valley Air Pollution Control District. The District indicated they did not have comments.

Checklist Discussion

- a) **Less than Significant with Mitigation Incorporation-** The project is located within the San Joaquin Valley Air Basin, which is in non-attainment for the federal and state ambient air quality standards for zone and PM10. The project would not obstruct implementation of an air quality plan; however, temporary air quality impacts could result from construction activities. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. The project would not create a significant impact over the current levels of ozone and PM10 or result in a violation of any applicable air quality standards. The project is not anticipated to conflict with the attainments plans adopted by the SJVUAPCD. With these mitigation measures, the project will have a less than significant impact.
- b) **Less than Significant with Mitigation Incorporation -** The project is located within the San Joaquin Valley Air Basin, which is in non-attainment for the federal and state ambient air quality standards for zone and PM10. The project would not obstruct implementation of an air quality plan; however, temporary air quality impacts could result from construction activities. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. The project would not create a significant impact over the current levels of ozone and PM10 or result in a violation of any applicable air quality standards. The project is not anticipated to conflict with the attainments plans adopted by the SJVUAPCD. With these mitigation measures, the project will have a less than significant impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Less than Significant Impact - the conversion from a residence to an office building would not result in a cumulatively considerable net increase in criteria pollutants. d) Less than Significant Impact - There are no known pollutant concentrations that would be generated by the conversion to an office, which would expose sensitive receptors to substantial pollutant concentrations. e) Less than Significant Impact - When developed, the project will include uses typical of a processional office development. No objectionable odors are anticipated to occur as part of the project. Mitigation Measures: 1. MM Air Quality 1 The project would not obstruct implementation of an air quality plan; however, temporary air quality impacts could result from construction activities. Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents. Conclusion: Less than Significant with Mitigation Incorporation -The project will not create or result in any significant air quality impacts, with the incorporation of the rules and regulations of the SJVUAPCD for dust control measures. Source(s): Hanford General Plan (2017), General Plan Environmental Impact Report (2017), San Joaquin Valley Air Pollution Control District, California Air Resources Board 2008, Ambient Air Quality Standards (4/1/2008) http://www.arb.ca.agc;				
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

No undisturbed, natural habitat remains within the Planning Area.

Standards of Significance

The project would have a significant effect on biological resources if it would:

1. Interfere substantially with the movement of any resident or migratory fish or wildlife species.
2. Substantially diminish habitat for fish, wildlife or plants.
3. Substantially affect a rare, threatened, or endangered species of animal or plant or the habitat of a rare, threatened or endangered species.

Checklist Discussion

- a) Less than significant impact - The site is already developed and does not contain natural, undisturbed areas that may be considered habitat.
- b) No Impact – the site does not contain any riparian habitat or other sensitive natural community.
- c) No Impact – the site is not identified as a federally protected wetland.
- d) Less than significant impact - The project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. There is not natural habitat remains within the project area.
- e) No Impacts - The project would not conflict with any local policies or ordinances protecting biological resources such as a tree preservation ordinance or policy.
- f) Less than Significant Impact – the project pertains to land that has no value as natural habitat; therefore, the plan does not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Conclusion: The site is within an urban area of the City and contains no natural, undisturbed areas for habitat. The project would have a less than significant cumulative impact for biological resources.

Source(s): Hanford General Plan (2017), General Plan Environmental Impact Report (2017)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
Environmental Setting The City of Hanford has completed several records searches for cultural resources. Three sites have been identified in or near the City of Hanford. None of the identified sites are located in the project area, although one culturally sensitive site is within one mile of the proposed project. Under SB 18 and AB 52, the Tachi Yokut Tribe requested formal notification of all projects requiring an environmental review under the California Environmental Quality Act (CEQA). Meaningful consultation was initiated with the Tachi Yokut Tribe through a meeting on January 10, 2017. As a result of the meeting, the following mitigation measures have been requested to reduce the impact of development on culturally sensitive resources: - That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Significance Criteria The project may have a significant impact on cultural resources if it causes substantial adverse changes in the significance of a historical or archaeological resource as set forth by the California Register of Historic Places and Section 106 of the National Historic Preservation Act; directly or indirectly destroys a unique paleontological resource or site. Checklist Discussion a) Less than Significant Impact - The project would not cause a substantial adverse change in the significance of a historical resource as defined in 15604.5 of the CEQA Guidelines, as the site is not registered as a historical resource. b) Less than Significant Impact - The project would not cause a substantial adverse change in the significance of a historical resource as defined in 15604.5 of the CEQA Guidelines, as the site is not registered as a historical resource. c) Less than Significant Impact - The project will not directly or indirectly destroy any unique paleontological resource or site, as the site has not been identified as containing unique paleontological resource nor unique geological feature. • Less than Significant with Mitigation Incorporation – The Santa Rosa Rancheria Tachi Yokut Tribe has requested all projects requiring an initial study be subject to the following mitigation:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Also, project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. Mitigation Measures: Mitigation Measure Cultural Resources 1: the site has not been identified as containing areas of human remains. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. Mitigation Measure Cultural Resources 2: That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Conclusion: The incorporation of mitigation measures requested from the Tachi Yokut Tribe will reduce the impacts of development on Cultural Resources. Source(s): Hanford General Plan (2017), California Health and Safety Code, Public Resources Code, consultation letter sent in accordance with Public Resources Code, Section 21080.3.1(b).				
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading,	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐

Environmental Setting

Hanford is located in a seismic zone that is sufficiently far from known faults, and consists of a stable geologic formation such that the effects of ground shaking should be minimal. [1974 Five County Seismic Safety Element] "The nearest known earthquake faults are located approximately 60 miles to the east of Hanford in the Sierra Nevada, and in the eastern Coast Ranges area approximately 50 miles to the west" (City of Hanford General Plan EIR, 2002). The project area is not subject to landslides.

"Several studies around Hanford have concluded that liquefaction potential is low due to the medium dense nature of soils, the distance to active faults, and the relatively deep water table. Therefore, the potential for liquefaction to occur is considered to be low"

Significance Criteria

The project may result in significant earth impacts if it causes substantial erosion or siltation, exposes people to geologic hazards or risk from faults, landslides or unstable soil conditions. Grading that disturbs large amounts of land or sensitive grading areas (such as slopes in excess of 20%) may cause substantial erosion or siltation.

Checklist Discussion

- Less than Significant Impact - No known faults are located on the project site. The project will not expose people or structures to shaking, ground failure including liquefaction, or landslides. Construction of the residential development may require some earth movement resulting in disruption and compaction of soils. This is not significant because the area is designated for urban uses.
- Less than Significant Impact with Mitigation Measures** – Construction of urban uses would create changes in absorption rates, drainage patterns, and the rate and amount of surface runoff in the annexed area. Standard construction practices that comply with City of Hanford ordinances and regulations, the California Building Code, and professional engineered designs approved by the Hanford Public Works Engineering Division will mitigate any potential impacts from future development, if any. The Hanford General Plan and City of Hanford Development Standards include policies for development that would reduce the potential impact of soil erosion or the loss of topsoil.
- Less than Significant Impact - The proposed project site would not be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Hanford General Plan addressed the potential for adverse effects from reactive soils in adverse conditions.
- Less than Significant Impact – the project will not result in or expose people to potential impacts from expansive soils. The Hanford General Plan addressed the potential for adverse effects from expansive soils and it was found that such conditions do not exist to the extent that Standard construction practices that comply with City of Hanford ordinances and regulations, the California Building Code, and professional engineering designs, approved by the Hanford Engineering Division, would not mitigate.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Less than Significant Impact –Sewer and water systems exist onsite. The project will not utilize septic or alternative disposal methods. Mitigation Measures: MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development. Conclusion The project will not result in significant impacts to geophysical conditions with mitigation measures in place, therefore the impact is considered less than significant, cumulatively. Source(s): General Plan and General Plan EIR (2017);				
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐
Significance Criteria The project related effects of GHG emissions are cumulative; therefore climate change impacts are addressed as cumulative, than a direct impact. Since climate change is a global phenomenon, no direct impact would be identified for individual projects. The following criteria are used to evaluate whether a project would result in a significant impact for climate change impacts: Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then, Does the project achieve 29% GHG reductions by using approved Best Performance Standards? If no, then Does the project achieve AB32 targeted 29% emission reductions compared with Business as Usual (BAU)? Project that meet one of these guidelines would have less than significant impact. Checklist Discussion a. Less than Significant Impact - The project complies with the adopted Climate Action Plan and will not impede the State's ability to meet the GHG-emission reduction targets under AB32. Current and probable future state and local GHG-reduction measures will continue to reduce the project's contribution to climate change. As a result, the project will not contribute significantly, either individually or cumulatively, to GHG emissions. b. Less than Significant with Mitigation Incorporation - Compliance with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District will reduce impact to greenhouse gases to a less than significant level. With the incorporation of the above mitigation, the proposed project will not result in a conflict with any plan, policy or regulation; therefore, impacts to greenhouse gas emissions are less than significant. Mitigation Measures:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
MM Greenhouse Gases 1: That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions. Conclusion With mitigation measures, the project will not contribute significantly to global climate change and would not impede the State's ability to meet its GHG reduction targets under AB32. The project will not contribute significantly, either individually or cumulatively, to global climate change. Source(s): General Plan Update (2017), General Plan Update EIR (2017), San Joaquin Valley Air Pollution Control District, Final Regional Climate Action Plan				
VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Environmental Setting

The General Plan contains a Hazards Management Element which was adopted to reduce potential safety issues associated with urban development. The project site is not listed as part of the State of California Hazardous Waste and Substances List. Field review by City staff did not reveal any potential for hazards or obvious signs of contamination on the site. Refer to previous sections for discussion of geologic and seismic hazards, water, water quality and flooding and air quality.

Significance Criteria

The project may result in significant hazards if it does any one of the following:

1. Create a public health hazard
2. Involve the use or production, disposal or upset of materials which pose a hazard to people in the area or interferes with an emergency response plan
3. Violates applicable laws intended to protect human health and safety or would expose workers to conditions that do not meet health standards.

Checklist Discussion

- a) Less than Significant Impact – There are no known hazardous materials that would be generated by the proposed project that would expose sensitive receptors to substantial risk. The proposed use of an office is not associated with substantial transportation, use, or disposal of hazardous materials.
- b) Less than Significant Impact – the project to convert an existing residence to an office and change the general plan and zoning designation will not create a significant hazard to the public or the environment through conditions involving the release of hazardous materials into the environment. All construction activities would be subject to the dust control measures set forth by the SJVAPCD.
- c) Less than Significant Impact- there is a school within a ¼ mile radius of the project site; however, the routine use of an office would not emit hazardous emissions or require the handling of hazardous materials, substances, or waste.
- d) Less than Significant Impact - The project site is located 1.5 miles from the Hanford Municipal Airport. The project would not result in a safety hazard for people working in the project area.
- e) No Impact -The project site is not located within two miles of a private or public airport/airstrip therefore there is no impact.
- f) Less than Significant Impact – the proposed project is located on Grangeville Blvd, which is an adopted emergency transportation corridors. The proposed project would not interfere with emergency transportation on this route.
- g) Less than Significant Impact– the proposed project is located within an urbanized area of the City and the risk of wildfire is very low.

Conclusion

The impact from hazards and hazardous materials are expected to be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Source: 2017 General Plan and General Plan EIR, State of California Hazardous Waste and Substance List				
IX. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
hazard area structures which would impede or redirect flood flows?				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Significance Criteria

The project may result in significant impacts if it would violate any water quality standards or waste discharge requirements, substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or substantially increase the rate of surface runoff; exceed the existing drainage system.

Checklist Discussion

- a) No Impact - The project will not violate any water quality standard or waste discharge requirements.
- b) Less than Significant Impact - The project would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the aquifer as a result of the project.
- c) Less than Significant Impact – the project would have a less than significant impact on the existing drainage pattern of the site, as it is already developed, with minor changes proposed.
- d) Less than Significant Impact – the project would have a less than significant impact on the existing drainage pattern of the site, as it is already developed, with minor changes proposed.
- e) Less than Significant– the project would not create or continue runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of pollutant runoff. The project proposed minor changes to an existing developed site.
- f) No impact – the project would not otherwise substantially degrade water quality.
- g) No Impact. The project does not include a housing component.
- h) No Impact – the project site is not located within a flood zone as shown in the Flood Insurance Rate Map for Hanford (Panel 06031C 0185C, June 16, 2009) therefore there is no impact.
- i) No Impact. The project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including dam failure. Therefore, there is no impact.
- j) No Impact. The project is not located near any ocean, coast, or seiche hazard area; therefore there is no impact.

Conclusion

Less than Significant Impact – The project proposed minor changes to an existing developed site, which would not impact hydrology and water quality.

Source: 2002 General Plan, 2002 General Plan Update, Hanford Storm Water Master Plan, State of California

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Department of Water Resources				
X. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
Environmental Setting The proposed project is consistent with the policy in the General Plan.				
Significance Criteria The project may result in significant impacts if it physically divides an established community, conflicts with existing off-site land uses, causes substantial adverse change in the types or intensity of land use patterns or conflicts with any applicable land use plan, policy or regulation.				
Checklist Discussion a) Less than significant impact – the project proposes the conversion of a single-family residential home and lot to office-residential for the use of an office. The project is consistent with the policy of the General Plan and does not physically divide an established community. b) Less than significant impact- The project is consistent with the policy in the General Plan. c) No Impact - There are no habitat conservation plans or natural community conservation plans for the project area therefore there is no impact.				
Conclusion The project is being developed consistent with the General Plan, specifically the Land Use Element and will not have significant impacts to Land Use and Planning.				
XI. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
recovery site delineated on a local general plan, specific plan or other land use plan?				
Environmental Setting There are no known mineral resources on the project site based on Hanford's 2002 General Plan EIR; therefore, no impacts are anticipated to occur.				
Significance Criteria The project would create significant impacts to mineral resources if there was a loss of availability of a known mineral resource.				
Checklist Discussion a) No Impact – there are no known mineral resources in the City, therefore, the project could not result in the loss of availability of a known mineral resource. b) No Impact. There are no known locally-important mineral resource recovery sites within the City of Hanford; therefore, the project would create an impact.				
Conclusion There will be no impact to mineral resources.				
XII. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Significance Criteria

Impacts from the project would be considered significant if they would result in significant noise or exposure of persons to or generation of noise levels in excess of standards established in the Hanford General Plan.

Checklist Discussion

- a) **Less than Significant with Mitigation Incorporation** – the property would be required to meet the noise level standards established by the General Plan. The use of an office does not typically generate excessive noise.
- b) **Less than Significant.** The project may result in a temporary increase in ground borne vibration or noise levels as a result of construction activities, impacts are anticipated to be less than significant.
- c) **Less than Significant** – the change from residential to office may cause an increase in noise, however, the noise level would be required to meet the noise level standards established by the General Plan. Also, the use of an office does not typically generate excessive noise.
- d) **Less than Significant with Mitigation Incorporation** - A temporary increase in ambient noise would occur in association with construction activities. Construction noise is short term and will occur for limited times. As a mitigation measure, construction would be limited to the hours of 7 a.m. to 10 p.m.
- e) **Less than Significant Impact** - The project is approximately 1.5 miles away from airport and will not be impacted by the public airport.
- f) **No Impact** - The project is not located within the vicinity of a private airstrip, there is no impact.

Conclusion

The project would create temporary construction noise, but the impact of noise will be mitigated to a point that is considered less than significant with required conditions of the development of the property.

Mitigation Measures:

MM Noise 1: that noise meet the noise level standards established by the General Plan (measured from the property line).

MM Noise 2: Construction is limited to the hours of 7 a.m. to 10 p.m.

Source: 2017 General Plan Update, 2017 General Plan Update EIR

XIII. POPULATION AND HOUSING -- Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
elsewhere?				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
Significance Criteria The project may result in significant impact if it induces substantial growth, displaces a large number of people, or contributes to a job housing imbalance.				
Checklist Discussion a) Less than significant impact – The project is a general plan amendment and rezone to change the designation of the property from R-L-5 low-density residential to O-R office residential and to convert an existing single-family dwelling into an office. The project will not induce population growth in the area. b) No Impact - The project will not result in displacement of housing. The property's current use is for a single-family residence, under the office-residential zone district, single-family residences are still a permitted use. c) No Impact - The project will not result in displacement of people.				
Conclusion Less than significant impact - The project will not result in a significant impact to population and housing.				
Source: 2017 General Plan Update, 2017 General Plan Update EIR				
XIV. PUBLIC SERVICES --				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☒	☐
Significance Criteria				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
The project may result in significant public service impacts if it substantially and adversely alters the delivery or provision of fire protection, police protection, schools, facilitates maintenance and other government services. Checklist Discussion a) (FIRE) Less than Significant Impact– impact fees for Fire have been paid for the property. Any proposed addition would be subject to further impact fees. b) (POLICE) Less than Significant Impact - impact fees for Police have been paid for the property. Any proposed addition would be subject to further impact fees. c) (SCHOOLS) Less than Significant Impact - school impact fees, as required by law, have been paid for the property. Any proposed addition would be subject to further impact fees. d) (PARKS) Less than Significant Impact – park impact fees have been paid for the property. Any proposed addition would be subject to further impact fees. e) (OTHER) Less than significant impact - Consultation was sent to various governmental agencies concerns were not cited. Conclusion The project can be served by existing public services. Impact fees have been paid for the site. Therefore, there would be no significant impact. Sources: 2017 General Plan and General Plan Update				
XV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
Environmental Setting Significance Criteria The project may create impacts if it creates demand for new expanded parks and recreation facilities or substantially alters existing facilities. Checklist Criteria a) No Impact – the project is a conversion of an existing single-family home to an office. The use of an office will not increase the use of parks or other recreational facilities. b) See a. Conclusion. No impact.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Source: 2017 General Plan, 2017 General Plan EIR				
XVI. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☒	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐
Significance Criteria				
The project may result in significant transportation/circulation impact if it does the following:				
1. Cause an increase in traffic which is substantial in relation to the existing traffic loads and capacity of the road system that are inconsistent with adopted standards. 2. Creates traffic conditions which expose people to traffic hazards. 3. Substantially interferes or prevents emergency access to the site or surrounding properties. 4. Conflicts with adopted policies or plans for alternative transportation.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Checklist Discussion				
a) Less than Significant impact—The project site will be subject to traffic impact fees and responsible for right of way improvements to Leoni Drive. b) Less than Significant -The City of Hanford has adopted an overall Level of Service (LOS) standard of C with peak hour LOS standard of D acceptable in some instances. Grangeville Boulevard between 12th Avenue to 10th Avenue has an existing level of service C. c) Less than Significant - The proposed project will not create a change in air traffic patterns nor increase traffic levels or change in location that result in substantial safety risks. The project is located 1.5 miles northwest from the nearest municipal airport. d) Less than Significant Impact with Mitigation Incorporation – the applicant is making improvements to the project site to create safer traffic conditions, such as eliminating a drive approach along Grangeville Boulevard, per the request of the Public Works Department. e) Less than Significant Impact - the proposed project is located on Grangeville Blvd, which is an adopted emergency transportation corridors. The proposed project would not interfere with emergency transportation on this route. f) Less than Significant with Mitigation Incorporation – the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for Office uses, 1 space per 300 sq. ft. (HMC Section 17.54). g) Less than Significant – the project will be required to comply with all adopted policies, plans and programs supporting alternative transportation.				
Mitigation Measures				
MM Transportation 1: That the applicant eliminate one drive approach along Grangeville Boulevard.				
MM Transportation 2: That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.				
Conclusion				
The project has been evaluated by the various departments; mitigations to reduce the impact to traffic are incorporated as conditions of approval of the project.				
Source: City of Hanford General Plan and EIR 2017, City of Hanford Municipal Code				
XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Thresholds of Significance

The project may result in significant impacts on utilities and service systems if it substantially and adversely alters the delivery of utilities or substantially increases the demand for utilities.

Checklist Discussion

- Less than Significant- the project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board.
- No Impact – the project would not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The property is already developed. The project proposes a designation change and a conversion of the existing single-family residence to office.
- No Impact – the project would not result in or require the construction of new storm water drainage facilities. The property is already developed. The project proposes a designation change and a conversion of the existing single-family residence to office.
- Less than Significant with Mitigation Incorporation** - Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.
- No Impact. The project will not require a determination by a wastewater agency.
- Less than Significant – the City of Hanford will provide for solid waste collection and disposal for the proposed project site. The City has achieved a 50% diversion rate from the landfill and has incorporated a greenwaste program and recycling at the Materials Recycling Facility.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) No Impact. The project will be required to comply with all federal, state and local statutes regulating solid waste. Mitigation Measure: Mitigation Measure Utilities 1: Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping. Conclusion Less than Significant Impact with Mitigation Incorporation - Impacts to utilities and services are considered less than significant with compliance with existing State and local water conservation measures. Source: 2017 General Plan and General Plan EIR, State of California Department of Water Resources.				
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐
a) Less than Significant - Based on the analysis provided in the initial study, the project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals. b) Less than Significant with Mitigation Incorporation- Based on the analysis provided, the project would not result in any significant cumulative impacts relative to other current projects, or the effects of probable future projects. c) Less than Significant with Mitigation Incorporation - Based on the analysis provided, the project will				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
not have environmental effects that will cause substantial adverse effects on human beings.				

Gabrielle de Silva

Gabrielle de Silva
Associate Planner

September 14, 2017

Date
September 14, 2017

This section addresses the project's potential to contribute to cumulative impacts in the region, CEQA Guidelines Section 15355 defines cumulative impacts as two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects.

Cumulative Setting

The cumulative setting for the proposed project is the full build out of the surrounding area. All projects in the area are developed, past projects.

Impact Analysis

Aesthetics

Less than Significant with Mitigation Incorporation - Impacts to aesthetics are anticipated to be less than significant with mitigation measures for light sources from new projects including this project, and past projects.

Agriculture and Forest Resources

Less than Significant- The area has been fully developed, therefore, impacts to agriculture and forest resources are anticipated to be less than significant.

Air Quality

Less than Significant with Mitigation Incorporation -The project will not create or result in any significant air quality impacts. Effects to air quality from this project will be mitigated with standards from the SJVAPCD for dust control. Past projects are fully developed and would have no impact.

Biological Resources

Less than Significant – the project area and surrounding project area contains no natural and undisturbed areas that may be considered habitat.

Cultural Resources

Less than Significant with Mitigation Incorporation – it is anticipated the project and surrounding project area would have a less than significant impact on cultural resources with the mitigation stipulation that, a burial treatment plan be implemented and that if any remains are found, construction halt and the city be notified.

Geology and Soils

Less than Impact - The project and existing projects in the area will not result in significant impacts to geophysical conditions.

Greenhouse Gas Emissions

Less than Significant

Hazards and Hazardous Materials

Less than Significant - The impact from hazards and hazardous materials from this project and existing projects are expected to be less than significant.

Hydrology/Water Quality

Less than Significant with Mitigation Incorporation – this project and past projects have been developed in accordance with City requirements specific to hydrology and water quality. Mitigations have been required on a project by project basis.

Land Use Planning and Population

Less than Significant -The projects are being developed consistent with the General Plan policy. This project and existing projects in the area have been developed consistent with the General Plan.

Mineral Resources

No Impact - there are no known mineral resources in the City.

Noise

Less than Significant with Mitigation Incorporation- this project and future existing projects within the area are required to meet the decibel requirement prescribed by the General Plan for Noise.

Population and Housing

Less than Significant - The proposed project is consistent with the General Plan policy. The area is fully developed and considered an implementation of the General Plan.

Public Services

Less than Significant with Payment of Impact Fees to Mitigate Effect -The project any proposed development is subject to impact fees to reduce impacts to public service.

Recreation

Less than Significant with Payment of Impact Fees to Mitigate Effect -The existing development in the area was subject to impact fees for parkland development.

Transportation/Traffic

Less than Significant with Payment of Impact Fees and Future Road Improvements to Mitigate Effect - Grangeville Boulevard between 12th Avenue to 10th Avenue has an existing level of service C. Any proposed development in the area is subject to review by the Public Works department and may be subject to transportation impact fees to mitigate the effect to traffic and transporation.

Utilities and Service Systems

Less than Significant with Mitigation Incorporation – Impacts to utilities and services are considered less than significant with compliance with existing State and local water conservation measures. This project and future projects in the area have been accounted for and can be served by the City's utilities and service systems.

General Plan Amendment No. 2017-03 (B), Rezone No. 2017-02, and Site Plan Review No. 2017-11
Mitigation Measures
Mitigated Negative Declaration 2017-12

Mitigation Number	Potential Impact	Mitigation Measure	Responsible Party
AESTHETICS			
MM Aesthetics 1	The project may potentially substantially degrade the existing visual character or quality of the site and its surroundings?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the appropriate development standards of the Hanford Municipal Code, specifically standards to regulate the conversion of old single-family homes into offices	Developer to provide
MM Aesthetics 2	The project could potentially create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	That the conversion to office from single-family residential, under Site Plan Review No. 2017-11 is subject to the applicable provisions of the Hanford Municipal Code, such as Section 17.39.030 – Outdoor Lighting Standards and the standards set forth by the California Building Code to reduce light pollution and glare.	Developer to provide; City to inspect
AIR QUALITY			
MM Air Quality 1:	Project could potentially conflict with or obstruct implementation of the applicable air quality plan? The project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non attainment under an applicable federal or state	Effective dust control must be maintained on the job site at all times in order to reduce the risk of valley fever to workers and nearby residents.	Developer to file application with San Joaquin Valley Air Pollution Control District

	ambient air quality standard? The project could potentially violate any air quality standard or contribute substantially to an existing or projected air quality violation?	
CULTURAL RESOURCES		
MM Cultural Resources 1	The project could potentially disturb human remains, including those interred outside of formal cemeteries?	1. Project conditions of approval will include a requirement that in the case that any human remains are discovered at any time, that construction will cease and the City is notified as well as the County Coroner pursuant to California Health and Safety Code 7050.5 and Public Resources Code 5097.98. 2. That a Burial Treatment Plan be entered to by the applicant/property owner prior to any earth disturbing activities. Developer to coordinate with the Tachi Yokut Tribe
GEOLOGY AND SOILS		
MM Geology 1:	That the project could result in substantial soil erosion or the loss of topsoil?	MM Geology 1: That the applicant comply with City of Hanford ordinances and regulations, the California Building Code and professional engineered designs, approved by the Hanford Public Works Engineering Division, to mitigate any potential impacts from future development. City to require; developer to comply
GREENHOUSE GAS EMISSIONS		
MM Greenhouse Gas 1:	The project could potentially conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	That all development comply with the Climate Action Plan and the rules of the San Joaquin Valley Air Pollution Control District to reduce GHG emissions. Developer
NOISE		

MM Noise 1:	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	That noise meet the noise level standards established by the General Plan (measured from the property line).	developer; Police to enforce
MM Noise 2:	The project could cause a substantial temporary or periodic increase in ambient noise levels existing without the project?	That construction is limited to the hours between 7:00 a.m. and 10 p.m.	Developer; Police to enforce
TRANSPORATION AND TRAFFIC			
MM Transportation 1:	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	That the applicant eliminates one drive approach along Grangeville Boulevard.	Developer to pay
MM Transportation 2:	Result in inadequate parking capacity?	That the applicant will be required to provide parking at the ratio prescribed by the Municipal Code for office uses, one space per 250 sq. ft.	Developer to pay
UTILITIES AND SERVICE SYSTEMS			
MM Utilities 1	Would the project have sufficient water supplies available to serve the project from existing entitlements and	Due to the drought the project will be required to comply with all State and local regulations regarding water conservation measures and landscaping.	City to require and ensure compliance; developer and future occupants

	resources, or are new or expanded entitlements needed?	to adhere
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AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: A
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SUBJECT:

Utilities and Engineering: Approve an additional appropriation from Storm Drain Reserves in the amount of \$32,381.92 and approve the purchase and installation of a new pump and motor from Valley Pump and Dairy Systems for a price not to exceed \$32,381.92.

RECOMMENDATION:

That the City Council, by motion,

1. Approve an additional appropriation from the Storm Drainage Reserve Fund in the amount of \$32,381.92 and;
2. Approve the purchase and installation of a new pump for Lift Station No. 35 from Valley Pump & Dairy Systems for a price not to exceed \$32,381.92.

BACKGROUND:

Lift Station No. 35, located on West Lacey Blvd. at the People's Ditch Crossing, was installed in 1967 and updated in 1982. This lift station provides street drainage for the area west of 11th Avenue, south of Greenfield Avenue, east of Kings County Drive, and north of Seventh Street. The existing pump and motor has recently failed and is unable to be repaired. The purchase of a new 15hp pump for Lift Station No. 35 is necessary to provide ongoing storm drainage for this area.

This approval is necessary to ensure compliance with the Council's current purchasing policy.

FISCAL IMPACT:

Two quotes were received from local vendors with Valley Pump & Dairy Systems providing the low bid of \$32,381.92. There are insufficient funds available in the Storm Drainage Operations account to fund this replacement, therefore an appropriation from the Storm Drainage Reserve Fund in the amount of \$32,381.92 is requested.

ATTACHMENTS:

Valley Pump Quote - Lift Station No. 35

Valley Pump & Dairy Systems, Inc.

P.O. BOX 668

Armona, CA 93202

Estimate

Date	Estimate #
9/21/2017	209

Name / Address
CITY OF HANFORD PUBLIC WORKS 900 S. 10TH AVE. HANFORD, CA 93230

			Project
Description	Qty	Rate	Total
ESTIMATE FOR PUMP REPLACEMENT FOR LIFT STATION NO RAIL STATION - USE CUSTOMERS EXISTING 8" X 10" & 10" ELBOWS - CUSTOMER TO DECIDE ON CHECK VALVE STYLE			
KEEN K8VK NON-CLOG 15HP 870RPM 460V 3PH - 5-3/4" FROM BOTTOM - LEAD TIME 6-8 WEEKS - NON CHOPPER	1	21,972.00	21,972.00
10" X 10' COLUMN PIPE FABRICATED TO FIT	1	800.00	800.00
VALVE, WAFER CHECK 10"	1	1,086.00	1,086.00
VALVE, CHECK SLOW OPEN FLANGE X FLANGE 10"	1	3,103.00	3,103.00
MISC. MATERIAL I.E. ELECTRICAL CONNECTIONS, BOLTS, ETC.	1	500.00	500.00
12T PUMP LABOR	8	310.00	2,480.00
SHOP LABOR TO TEARDOWN & INSPECT ORIGINAL PUMP	5	90.00	450.00
POSSIBLE FLOAT SYSTEM ADJUSTMENTS TO BE DETERMINED WHEN DECISION IS MADE ON PUMP			
7.25% Kings County		7.25%	1,990.92
1A service charge of 1.5% per month will be made on all past due accounts.		Total	\$32,381.92

Attachment: Valley Pump Quote - Lift Station No. 35 (UE: Lift Station No. 35 Pump Replacement)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: B
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SUBJECT:

Utilities and Engineering: Approve the purchase of new water meters, meter box lids, AMR radio units, and attaching hardware in conjunction with the flat to meter conversion project from Zenner, USA for a price not to exceed \$461,787.17.

RECOMMENDATION:

That the City Council, by motion, approve the purchase of new water meters, meter box lids, AMR radio units, and attaching hardware in conjunction with the flat to meter conversion project from Zenner, USA for a price not to exceed \$461,787.17.

BACKGROUND:

In 2004 Governor Schwarzenegger signed Assembly Bill 2572, requiring all water services served by a municipal water system be metered by 2025. In 2015 due to the ongoing drought, Governor Brown tasked the State Water Resource Control Board with mandating water tighter water conservation measures. In order to comply with the state's regulation and enforcement order, the City agreed to expedite metering of the City's 2,586 flat rate service accounts. This agreement provided an additional means of conservation as well as assisting the City to quantify the actual water used by our customers which is required by our Urban Water Management Plan.

This approval is for the purchase of a portion of the required equipment for this project. This project, when completed, will replace all of the old flat rate accounts within the City to metered services.

FISCAL IMPACT:

The FY17/18 Water Capital Improvement Budget allocates \$1,942,500 for equipment and installation of this project. Separate items will be brought to council for additional equipment and installation of this equipment.

ATTACHMENTS:

Flat to Meter Conversion Budget Page 275
Zenner, USA Quote

Flat to Meter Conversion

Project Background:

This project will replace all of the old flat rate accounts within the City to metered services.

Existing Conditions:

The City has approximately 2500 non-metered connections that are still within the City's service area. The City has been required by the State of California to expedite the installation of meters on all accounts.

Project Justification:

Fiscal Implications:

Funding for the Flat to Meter Conversion will be allocated from water capital reserves.

Project Budget Summary:

		6-Year Funding Allocation					
		2017	2018	2019	2020	2021	2022
Expenditure	Program or Project		Construction				
	Engineering / Inspection		50,000				
	Construction		1,850,000				
	Contingency		92,500				
	Department Overhead		7,500				
Total Expenditure		\$0	\$2,000,000	\$0	\$0	\$0	\$0
Revenue	Funding						
	391 Water Capital		2,000,000				
Total Funding		\$0	\$2,000,000	\$0	\$0	\$0	\$0



Customer Name: Hanford City Of
 Billing Address:
 City/State/Zip:
 Shipping Name:
 Shipping Address:
 City/State/Zip:
 Email: _
 Phone: _

Salesman: Robert Gallegos
 Attn: Mike Cosenza
 Subject: New Construction PD Meters
 PO:
 Ship VIA:
 FFA:
 Accept Partial Shipments:

Sales Quote

Date: 8/23/2017

Section	Meter Type	Meter Size	Register Units	Register Options	Qty	Unit Price	Extended Price	Annual Maintenance	List Price
1.1	Positive Displacement (PPD)	3/4" Short Lay (03)	CF (CF)	ETR Encoder Output (E)	1,327	\$74.76	\$99,206.52		
1.2	Positive Displacement (PPD)	1" (07)	CF (CF)	ETR Encoder Output (E)	1,250	\$109.37	\$136,712.50		
1.3	Positive Displacement (PPD)	2" FLG (12)	CF (CF)	ETR Encoder Output (E)	11	\$361.00	\$3,971.00		

Section	Register/ETR Options	Register Shroud	Register Lid	Bottom Type	Part Number	Notes
1.1	5' Bare wire (E)	Composite (P)	Composite (P)	Bronze (B)	PPD03CFEPPB	Potted at the Factory
1.2	5' Bare wire (E)	Composite (P)	Composite (P)	Bronze (B)	PPD07CFEPPB	Potted at the Factory
1.3	5' Bare wire (E)	Composite (P)	Composite (P)	Bronze (B)	PPD12CFEPPB	Potted at the Factory

Section	Fire Hydrant Meter	Handle Options	Registration	Inlet Connection	Qty	Unit Price	Extended Price	Annual Maintenance	List Price
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Section	Outlet Connection	FHM Add-ons	Qty	Unit Price	Extended Price	Annual Maintenance	List Price
2	Flanges/Gaskets/Bolts/Kits				\$0.00	\$0.00	
3	Radio Interface Units				\$142,340.00	\$0.00	
3.1	Stealth 2 w/18" Bare Wire (ST2BW) "Stealth 2 Bare Wire"		2,588	\$55.00	\$142,340.00		
4	System Interface Development				\$0.00	\$0.00	
5	Handheld/Mobile/Probe				\$0.00	\$0.00	
6	AMR Hardware				\$0.00	\$0.00	
7	Software				\$0.00	\$0.00	
8	Project Management Installation/Training				\$0.00	\$0.00	
9	Accessories and other Items				\$79,887.15	\$0.00	
9.1	Stealth pit Install kit		1	\$2.03	\$2.03		
9.2	Stealth Lid Lock with Extension		2,588	\$4.50	\$11,646.00		
Misc.	Nicor Lids 8-16		2,588	\$26.24	\$67,909.12		
10	Hydrant Meter Accessories				\$0.00	\$0.00	
Total System Cost and Annual Maintenance					\$461,787.17	\$0.00	

Note: This sales order/sales quote is subject to terms of the Zenner Performance Meters License and Maintenance Agreement. All prices are valid for ninety (90) days unless otherwise extended in writing.
Payment Terms are Net 30.

Shipping: All shipping is FOB Zenner Performance Meter's office in Banning, California.

Sales Order/Sales Quote Accepted:

Authorized Signature: _____ Date: _____
 Signature

End of Document

Attachment: Zenner, USA Quote (UE: Flat to Meter Conversion Project - Equipment Purchase)



AGENDA STAFF REPORT

MEETING DATE: 11/7/2017	AGENDA SECTION: C
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SUBJECT:

Community Development: Recommendation by the Community Development Director to award a total of 21 Cannabis Business Permits to Nc3 dba Caliva, Genezen and Premium Extracts in accordance with Section 5.56.090 of the Hanford Municipal Code and adopt Resolution 17-59-R Amending the Number of Permits

RECOMMENDATION:

In accordance with Section 5.56.090 of the Municipal Code, the Community Development Director recommends that the City Council award a Commercial Cannabis Permit to the following entities:

- Caliva - One Cultivation Permit, One Manufacturing Permit, One Distribution Permit
- Genezen - One Cannabis Campus Permit, 14 Cultivation Permits, One Manufacturing Permit, One Distribution Permit
- Premium Extracts - One Manufacturing Permit

Adoption of Resolution 17-59-R is required to be adopted if the City Council approves the staff recommendation on the Genezen permits.

BACKGROUND:

See Attached Staff Report.

FISCAL IMPACT:

ATTACHMENTS:

CC Staff Report Award Permits
Resolution 17-59-R Cannabis Permit Numbers
Attachment 1: City of Hanford Application Procedures

Attachment 2: Caliva Application and Site Plan
Attachment 3: Genezen Application and Site Plan
Attachment 4: Premium Extracts Application and Site Plan
Attachment 5: Essential Farms Application and Site Plan
Attachment 6: Bridge the Gap Application



CITY OF HANFORD CITY COUNCIL

MEETING DATE: November 7, 2017

Recommendation by the Community Development Director to award Cannabis Business Permits to Nc3 dba Caliva, Genezen and Premium Extracts in accordance with Section 5.56.090 of the Hanford Municipal Code.

RECOMMENDATION

In accordance with Section 5.56.090 of the Municipal Code, the Community Development Director recommends that the City Council award a Commercial Cannabis Permit to the following entities:

- Caliva – one Cultivation Permit, one Manufacturing Permit, one Distribution Permit
- Genezen – one Cannabis Campus Permit, 14 Cultivation Permits, one Manufacturing Permit, one Distribution Permit
- Premium Extracts – one Manufacturing Permit

Adoption of Resolution 17-59-R is required to be adopted if the City Council approves the staff recommendation on the Genezen permits.

RECOMMENDED MOTION

I move to adopt Resolution 17-59-R amending the total number of Commercial Medical Cannabis Permits that may be issued.

I move to award Commercial Cannabis Permits to the following entities:

- Caliva – one Cultivation Permit, one Manufacturing Permit, one Distribution Permit
- Genezen – one Cannabis Campus Permit, 14 Cultivation Permits, one Manufacturing Permit, one Distribution Permit
- Premium Extracts – one Manufacturing Permit

CANNABIS APPLICATIONS

In July of 2017, the City Council adopted Ordinance 17-08, which allowed for the commercial cannabis operations in the City of Hanford IH (Industrial Heavy) zone. The

City Council also adopted Resolution 17-43-R, which limited the number of Commercial Cannabis Permits to Two Campuses, with eight permits each, Two Cultivation, Two Manufacturing, Two Distribution, Two Lab Testing facilities for a total of 26 permits.

At the close of the application period on October 2, 2017, the City had received applications from five different companies (total permits requested in parenthesis): Nc3 dba Caliva (3), Genezen (18), Premium Extracts (1), Bridge the Gap (1) and Essential Farms (3).

APPLICATION SUMMARIES

A summary of each application is as follows:

Nc3 dba Caliva

The applicant proposes a 325,000 square foot facility on two parcels totaling 47 acres (Assessor's Parcel Numbers 018-232-002, 018-232-003). The site is on the south side of Houston Avenue, bordered on the west by B.N.&S.F. Railroad. See Attachment 2 – Caliva Application and Site Plan.

The site meets all Hanford Zoning Ordinance requirements for location of a cannabis business.

PRINCIPAL OWNERS/MANAGERS: Larry Thacker, CEO; Dennis O'Malley, President; Robby Force, Director of Agriculture Operations; Jessica Box, Compliance Manager; Michael Vu, Director of Lab and Concentrates; Michael Bacon, VP Risk Management.

Genezen

Genezen is comprised of various LLC's to operate the various licenses. They include Genezen Campus 1 and 2, GZ1 Grow 1-7, GZ2 Grow 1-7, Genezen Go and Genezen Infusion.

The Genezen group submitted applications for two separate campuses, with each campus having seven cultivation licenses. Once campus contains a Manufacturing license and the other the Distribution license.

The site of both Campus applications is located at 10210 Idaho Avenue, at the corner of Idaho and 10th Avenue. (APN 018-242-021 and 022) and is comprised of approximately 50 acres. See Attachment 3 – Genezen Application and Site Plan

Although the Genezen team applied for two campus permits, since they are at the same location, staff is recommending an alternative to the issuance of two separate campus permits, which is to award a single campus permit with 14 cultivation permits, one manufacturing permit and one distribution permit. Staff has reviewed this option with the applicant and they have no objection. The only concern they expressed is that each individual campus was going to be allowed five permits each in subsequent years. They would request to be allowed ten if the permits are consolidated. Staff has no objection in that prior to opening up for additional permits, the existing operations will be required to be in good standing and the additional applicants will have to go through the same application process in order to be awarded a permit. The opening up of additional

permits is also at the discretion of the City Council and is not automatic. Genezen will be available to answer any questions City Council may have regarding staff's proposal.

The site meets all Hanford Zoning Ordinance requirements for location of a cannabis business.

PRINCIPAL OWNERS/MANAGERS: Elisa Stewart, Manager; Robert DiVito Jr., Christian Drake, Fred Fagundes, Lloyd Fagundes, Ralph Fagundes, Erin McIlhatton.

Premium Extracts

Premium Extracts proposes to manufacture cannabis products in a 6,600 square foot building located on Industry Avenue (APN# 018-242-033). The parcel is approximately 122,000 square feet. See Attachment 4 – Premium Extract Application and Site Plan.

The site meets all Hanford Zoning Ordinance requirements for location of a cannabis business.

PRINCIPAL OWNERS/MANAGERS: Jose Rivas II, CEO; Michael Seramin, Vice President; Robert DeOchoa, Board Member.

Essential Farms

Essential Farms proposes to cultivate, manufacture and distribute cannabis in a 20,000 square foot existing building located at 10757 Energy Street (APN 018-242-070). The parcel is approximately 111,000 square feet. See Attachment 5 – Essential Farms Application and Site Plan.

The site meets all Hanford Zoning Ordinance requirements for location of a cannabis business.

PRINCIPAL OWNERS/MANAGERS: Christopher Greaves, CEO; Thomas James Alton, COO; Jeremy Lill, CFO

Bridge the Gap

Bridge the Gap proposes to cultivate cannabis in a new 8,000 square foot building on Industry Avenue (APN 018-242-034). The parcel is approximately 122,000 square feet. See Attachment 4 – Bridge the Gap Application. A digital copy of the site plan was not included in the digital files.

The site meets all Hanford Zoning Ordinance requirements for location of a cannabis business.

PRINCIPAL OWNERS/MANAGERS: Jeff Fontes, Co-Owner; Jacob Yparrea, Managing Member, Co-Owner; Raymond Maaskant, Member/Manager; Daniel Brian Brooks, Managing Member.

APPLICATION REVIEW PHASES

The first phase of the application review was a review of background checks on all the principals of each company. All five applicants passed the background check phase. Phase 2 of the process was an evaluation of the application materials. The review was completed by the City consultant, HdL Companies. The application materials were rated in six areas; 1) Proposed Location, 2) Business Plan, 3) Neighborhood Compatibility Plan, 4) Safety and Security, 5) Air Quality Plan and 6) Labor and Employment Plan. For a full description of what was required in these plans, see Attachment 1 - Hanford Application Process.

All five firms scored a 70% or better and were forwarded on to the applicant interview stage, or Phase 3.

During Phase 3 an interview was conducted by the Community Development Director and Police Chief, along with Matthew Eaton and Kami Miller of HdL Companies on October 26th and 27th. All five of the companies were evaluated in 11 areas and scored by all four members of the interview panel. The categories evaluated are 1) Final Location, 2) Business Plan, 3) Community Benefits 4) Enhanced Product Safety 5) Environmental Benefits, 6) Labor and Employment, 7) Local Enterprise, 8) Neighborhood Compatibility Plan, 9) Qualification of Principals, 10) Safety and Security, 11) Air Quality Plan.

	PERMIT TYPE	TOTAL POINTS	AVERAGE	%
Caliva	Cultivation	10,462	3,651	92
	Manufacturing	10,462	3,651	92
	Distribution	10,462	3,651	92
Genezen Campus 1	Campus	9,641	3,468	85
GZ1 Grow (7)	Cultivation	9,641	3,468	85
GZ Infusion	Manufacturing	9,641	3,468	85
Genezen Campus 2	Campus	9,641	3,468	85
GZ2 Grow (7)	Cultivation	9,641	3,468	85
GZ Go	Distribution	9,641	3,468	85
Premium Extracts	Manufacturing	9,590	3,298	84
Essential Farms	Cultivation	8,016	2,792	71
	Manufacturing	8,016	2,792	71
	Distribution	8,016	2,792	71
Bridge the Gap	Cultivation	6,857	2,502	67

The totals from both rankings were added together to get a final total score, then averaged. The three applicants that scored over 80%, Caliva, Genezen and Premium Extracts, are being recommended for award of Commercial Cannabis Business Permits. One recommendation by staff is that in lieu of awarding two campus permits to Genezen, award one campus permit and all the permits for two campuses or 16 individual permits on one campus. This option will eliminate the duplicative staff time to address two separate campus permits, all other review time will stay the same. Staff's recommendation is due to both campuses being adjacent to each other on parts of the same property.

The Council has several options: 1) Award the permits to the applicants as requested, 2) Amend the permits in accordance with the alternate staff recommendation, 3) Do not award any permits.

NEXT STEPS

In accordance with the City Municipal Code, the applicants that are awarded permits are required to obtain a conditional use permit for each individual permit. The campus will obtain an overall site conditional use permit. As part of the conditional use permit process, an environmental assessment will be required in accordance with the California Environmental Quality Act.

The environmental analysis will include, but is not limited to, analysis of traffic, water use, hydrology, energy use, greenhouse gases and air quality specifically.

The conditional use permits will be reviewed by the Planning Commission and only considered by the City Council if appealed after the Planning Commission consideration.

City staff is currently working with the Finance Department on a budget for the "Cannabis Division" for the regulation of the future cannabis industry in Hanford. The budget will include a list of employees that will be assigned to the Division and the allocation of those costs. The budget will be presented to the City Council in the next month and the Commercial Cannabis Permit Fee will also be considered for adoption at that time. The City will evaluate the costs annually to ensure full cost recovery every year.

Staff has also prepared a schedule for putting a Cannabis Tax on the November 6, 2018 ballot. Also within the next couple of months, staff will be presenting Council options on a Cannabis Tax and language for the ballot measure. June 18, 2018 is the last day recommended for the City Council to adopt a resolution putting a tax measure on the ballot. It is anticipated that a final resolution for adoption will be presented to the City Council well ahead of that date.

RESOLUTION NO. 17-59-R**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
AMENDING THE NUMBER OF COMMERCIAL MEDICAL CANNABIS
BUSINESS PERMITS IN ACCORDANCE WITH SECTION 5.56.080 OF THE
HANFORD MUNICIPAL CODE.**

At regular meeting of the City Council of the City of Hanford duly called and held on November 7, 2017, it was moved by Council Member _____, and seconded by Council Member _____, and carried that the following resolution be adopted:

WHEREAS, Resolution 17-43-R was adopted on July 18, 2017 establishing a number of Commercial Medical Cannabis Business Permits for the City of Hanford; and,

WHEREAS, the City Council has previously determined that the adoption Ordinance 1708, Commercial Medical Cannabis Ordinance, is exempt from CEQA under the General Rule, Section 15061 (b)(1) and in accordance with Business and Professions Code 26055(h) and the adoption of the procedures, applications and number of permit implement Ordinance 17-08.

WHEREAS, the City Council has determined that limiting the number of Commercial Medical Cannabis Business Permits is in the best interest of the City of Hanford to allow the City to address potential impacts to health, safety and welfare and to adequately address issues or impacts that may result from the regulation of the Cannabis industry.

NOW, THEREFORE, BE IT RESOLVED that the City Council finds that limiting the number of Commercial Medical Cannabis Business Permits is in the best interest of the City of Hanford and, in accordance with 5.56.080, establishes the following limits for the number of permits to be issued. The limitation on the number of permits shall remain in effect until changed by resolution of the City Council:

FREESTANDING FACILITIES

CULTIVATION - maximum of two (2)

MANUFACTURING - maximum of two (2)

TESTING - maximum of two (2)

DISTRIBUTION - maximum of two (2)

CANNABIS CAMPUS – maximum of one (1) – Cannabis Campuses are limited to the following limitations:

1. Sixteen (16) permits in Year One; Ten (10) permits in Year Two; (10) permits in Year 3 and each subsequent year.
2. The on-going issuance of permits may be affected by the failure of a future tax initiative.

Passed and Adopted at a regular meeting of the City Council of the City of Hanford held on November 7, 2017, by the following vote:

AYES: _____

NOES: _____

ABSTAIN: _____

ABSENT: _____

DAVID G. AYERS
MAYOR of the City of Hanford

Attest:

JENNIFER GOMEZ
CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF KINGS) ss
CITY OF HANFORD)

I, Jennifer Gomez, City Clerk of the City of Hanford, do hereby certify the foregoing Resolution was duly passed and adopted at a regular meeting of the City Council of the City of Hanford held on the _____ day of _____, 2017.

Date: _____

City Clerk

Attachment: Resolution 17-59-R Cannabis Permit Numbers (Cannabis Permit Award)



APPLICATION PROCEDURE TO OPERATE A COMMERCIAL MEDICAL CANNABIS BUSINESS IN THE CITY OF HANFORD

The application process to operate a Commercial Medical Cannabis Business ("CMCB") in Hanford will open on Wednesday, **August 2, 2017**. Applications will be available at the Community Development Department located at City Hall. For questions regarding the application process please review the FAQ's, at the City of Hanford's webpage: www.cityofhanfordca.com. This outlines the application process, required materials, and other information necessary to operate a CMCB in Hanford. To be considered, final applications **must be** submitted by **4:00 PM on Monday October 2, 2017** at the Community Development Department at 317 North Douty Street, Hanford, CA, 93230. This application process is adopted pursuant to Hanford Municipal Code Chapter 17 and Chapter 5.56.090.

BEFORE YOU APPLY:

- Review the information to learn about the application process and which documents you will need.
- Review the application in its entirety to ensure that it is complete and accurate.
- Review the information regarding the Commercial Medical Cannabis Business permit application on the webpage: www.cityofhanfordca.com which includes the following information:

- Local regulations governing Hanford CMCB's: Hanford Municipal Code ("HMC") Chapters 17 and Chapter 5.56
- Background authorization form and/or Live Scan
- Additional application information: Ordinance No. 17-08.
- State laws governing CMCB's: The California Department of Justice Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use and Senate Bill 420 (Medical Marijuana Program Act).
- Medical Cannabis Safety Act (MCRSA)
- Adult Use Marijuana Act (AUMA)
- Frequently Asked Questions

- (1) **Application Process: Evaluation and Ranking:** The selection process shall consist of the following Four Phases:

Phase 1: Preliminary determination of eligibility. \$4,254

Phase 2: Initial ranking. \$1,689

Phase 3: Second ranking. \$2,241

Phase 4: City Managers Final Recommendation to City Council. \$1,102

For more information, see Evaluation and Selection Process below.

- (2) **Criminal History Check:** As part of Phase 1 of the Application Process each principal/owner must undergo a criminal background check demonstrating that they do not provide "good cause" for denial per HMC Section 5.56.070, and HMC Section 5.56.290 (m) the Live Scan Fee shall be **\$135.55** and the background review shall be **\$300**. The application for the Live Scan and the background form will be available on the City website or at the Community Development Department in City Hall. Please provide proof of completing your background form and/or Live Scan form by providing proof of a

receipt with your application on or before October 2, 2017. This process will be required to meet the minimum threshold qualifications pursuant to HMC Section 5.56.290. (m). Principals who do not meet criminal history eligibility requirements will be disqualified.

- (3) Applicants will be required to obtain a **“Zoning Verification Letter”** from the Community Development Department in City Hall, located at 317 N. Douty Street to ensure that the location proposal the applicant is applying for meets locational requirements prior to submitting their CMCB application. The review process typically takes approximately ten (10) working days and will cost **\$135**. The “Zoning Verification Letter” will need to be included with the application package. Please note the issuance of a “Zoning Verification Letter” does not mean the written evidence of permission given by the City of Hanford or any of its officials to operate a CMCB, nor does it not mean “permit” within the meaning of the Permit Streamlining Act, nor does it constitute an entitlement under the Zoning or Building Code. A regulatory permit for regulating a CMCB does not constitute a permit that runs with the land on which the CMCB is established. Request for Zoning Verification Letters require a written request from the Community Development Department and will not be completed over the counter since it may require additional research and review.
- (4) **Application:** Applicants must hand deliver two (2) complete comprehensive and signed copies of the Hanford Commercial Medical Cannabis Business Form, and all attachments, if any, along with a flash drive which contains one comprehensive and signed copy of the application in a pdf format, and payment of **\$4,254** for the initial application fee by **4:00 PM on Monday October 2, 2017**. Payment must be made by a certified check, cashier’s check or money order made payable to the City of Hanford. Please note the City will not accept cash and Application Fees are non-refundable. A complete application will consist of the following information:
- The Hanford Commercial Medical Cannabis Business Form;
 - Background Authorization Form and/or Proof of Live Scan payment for each of the Principals;
 - Zoning Verification Letter; and
 - All the information about the CMCB to be evaluated in Phase 1, Phase 2 and Phase 3 which is described in the Application and Evaluation Process section below in this procedure. The only information that can be submitted after the initial application is proof of property ownership or lease agreement. However, any change in location will require a new “Zoning Verification Letter” and must be submitted with the application package prior to your interview in Phase 3 of the selection process. Please note that should you choose to submit a different location prior to Phase 3 you can only do so if your initial proposed site was approved as part of your original application package on or before October 2, 2017.

LATE AND INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED.

(5) Amendments to the Application: Applicants will not be allowed to make amendments to their application or to supplement their application, except as otherwise specifically permitted in these procedures or authorized in writing by the City. During Phase 1, applicants will be notified if any of the Principals are ineligible and/or if their application is incomplete and will not move forward in the application process. However, in some cases the City may move forward in the application process to other phases should it anticipate that the Live Scan or background check may be delayed to expedite the application process in a timely manner. In this case Applicants wishing to move forward in the process acknowledge by signing the application that they agree to these terms and should they be disqualified because of a background or a Live Scan disqualification they will not be eligible for a refund of any fees collected resulting from the modification of this procedure.

(6) Payment of Application Fees: The individual designated as the CMCB contact on the application will be notified by e-mail as to whether the application is advancing to Phase 2 and, subsequently, to Phase 3. A payment of **\$1,689** will be due before Phase 2 and a payment of **\$2,241** will be due before Phase 3. As part of Phase 4 all eligible Applicants as determined by the Ordinance or by resolution will be presented to City Council and must pay a fee of **\$1,102** to move forward for final consideration.

Deadlines for these payments will be included in the e-mail notification to the primary contact person.

EVALUATION AND SELECTION PROCESS:

The evaluation and selection process shall consist of the following four phases:

- **Phase 1: Determination of Eligibility and Application**
 - Each Principal must undergo a criminal history check demonstrating compliance with the eligibility requirements of HMC Section 5.56.290 (m) and 5.56.070.
 - Applications must be complete to be considered. Applications will be considered complete only if they include all information required for Phases 1, 2 and 3.
 - Proposed location of business.
 - Execute an agreement indemnifying the City from liability.
- **Phase 2: Initial Ranking (1,500 Points)**
 - Applications will be evaluated based on the following criteria:
 - Proposed Location of business (200 Points)
 - Business Plan (500 Points)
 - Neighborhood Compatibility Plan (300 Points)
 - Safety and Security Plan (300 Points)
 - Air Quality Plan (100 Points)
 - Labor and Employment Plan (100 Points)
 - Those applicants who scored a minimum of 80% in Phase 2 will move on to Phase 3.
- **Phase 3: Second Ranking (2,500 Points)**
 - All applications who score at least 80% in Phase 2, will be interviewed and evaluated by the Selection Committee based on the criteria listed below.
 - Prior to the scheduling of the interviews in Phase 3 each of the applicants will be required to have their proposed site inspected by the assigned City designee to ascertain current conditions of the facility.
 - The second ranking will be scored based on the following criteria:
 - Final Location (proof of ownership or a signed and notarized statement from the Property Owner (200 Points)
 - Business Plan (300 Points)
 - Community Benefits (750 Points)
 - Enhanced Product Safety (100 Points)
 - Environmental Benefits (100 Points)
 - Labor & Employment (100 Points)
 - Local Enterprise (100 Points)
 - Neighborhood Compatibility Plan (200 Points)
 - Qualifications of Principals (300)
 - Safety and Security Plan (250 Points)
 - Air Quality Plan (100 Points)
 - After all the applicants from Phase 3 scores have been tabulated they will be combined with Phase 2 to establish a new ranking of the top applicants. The top applicants as determined by how many permits will be issued by the City Council will move onto Phase 4 of the selection process.

➤ **Phase 4: City Manager's Recommendations and City Council's Final Approval**

Phase 4 Steps to be followed:

1. Selection Committee's final review and evaluation.
2. City Manager presents final rankings and recommendation report to City Council.
3. City Council Approves Final recommendations.

After the completion of the application interviews in Phase 3 and prior to the Selection Committees final review and evaluation, the City reserves the right to request and obtain additional information from any candidate who submitted a proposal. Upon the completion of the final review process, the Selection Committee will tabulate its final scores of the all applicants who were interviewed in Phase 3. The City Manager will present to the City Council the final ranking along with his/her recommendation in which the City Council may award up to the amount permitted by the Ordinance or Council Resolution pursuant to HMC Section 5.56.080. The City Council reserves the right to award a lesser number of permits, or to award no permits at all. Only those applicants on the final list will be eligible to be issued a permit from the initial permit process. The top Applicants which are being recommended by the City Manager for consideration to the City Council should be prepared to attend a City Council meeting in Hanford to provide a public presentation before the Mayor and City Council introducing their team and providing an overview of their proposal if requested by the City Manager.

- Please note that being awarded a CMCB does not constitute a land use entitlement and does not waive or remove the requirements of applying for and receiving permits for all construction including electrical, plumbing, fire, planning permits or reviews, and any other permits, licenses, or reviews as may be necessary by the relevant departments or governmental entities in charge of said permits. Nor does it guarantee that the plans submitted via the CMCB application process meet the standards or requirements in Chapter 17 or any other permit requirement from other city departments or agencies.

DESCRIPTION OF EVALUATION CRITERIA:

- **Proposed Location.** Your application must include the address and a detailed description of the proposed location. (Note that proof of ownership, or a notarized letter of the owner's willingness to lease will not be given any additional consideration until Phase 3). This section should also describe all sensitive uses described in within six hundred (600) feet of the proposed location from the property line of a K-12 school, daycare center and youth center. The CMCB must be in the appropriate zoning and meet all the locational requirements as described in HMC Chapter 17 and HMC 5.56.290 (o).
- **Business Plan.** With as much detail as possible, the Business Plan should describe:
- Description of day-to-day operations which meet industry best practices for the specific type of permit in which they will be applying for in the City.
 - How the CCB will conform to local and state law. See HMC Sections 5.56.290, and HMC Sections 5.56.310, 5.56.340, Ordinance 17-08, and the Attorney General's Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use.
 - Mechanisms for ensuring that the CMCB will operate on a Not-for-Profit basis until the Medical Cannabis Regulation and Safety Act is fully in effect or until the implementation of the Adult Use Marijuana Act (AUMA) or those requirements stipulated by Chapter 5.56.
 - How medical and retail cannabis will be tracked and monitored to prevent diversion.
 - A schedule for beginning operation, including a narrative outlining any proposed construction and improvements and a timeline for completion.

The Business Plan should include:

- A **budget** for construction, operation, maintenance, compensation of employees, equipment costs, utility costs, and other operation costs. The budget must demonstrate sufficient capital in place to pay startup costs and at least three months of operating costs, as well as a description of the sources and uses of funds.
Proof of capitalization, in the form of documentation of cash or other liquid assets on hand, Letters of Credit or other equivalent assets.
- A **pro forma** for at least three years of operation.
- **Neighborhood Compatibility Plan.** For the proposed location, your application should address how the CMCB, including its exterior areas and surrounding public areas, will be managed, to avoid becoming a nuisance or having impacts on its neighbors and the surrounding community. Furthermore, a site plan (accurate, dimensioned and to-scale [minimum scale of 1/4"]) should be included for each potential location.
- **Safety and Security Plan.** For each proposed location, your application should include:
 - A detailed **safety plan**. This plan should describe the fire prevention, suppression, HVAC and alarm systems the facility will have in place. **It should include an assessment of the facility's fire safety by a qualified fire prevention and suppression consultant.** An appropriate plan will have considered all possible fire, hazardous material, and inhalation issues/threats and will have both written and physical mechanisms in place to deal with each specific situation.
 - A detailed **security plan**. This plan should include a description and detailed schematic of the overall facility security. It should have details on operational security, including but not limited to general security policies for the facility, employee specific policies, training, sample written policies, transactional security, visitor security, 3rd party contractor security, and delivery security. In particular, applications should address ingress and egress access, perimeter security, product security (at all hours), internal security measures for access (area specific), types of security systems (alarms and cameras), and security personnel to be employed. **The security plan shall also include an assessment of site security by a qualified security consultant.** Security plans will not be made public.
 - A **floor plan** showing existing conditions. If changes are proposed as part of the project, then a proposed floor plan should also be submitted. The floor plan(s) should be accurate, dimensioned and to-scale (minimum scale of 1/4").
- **Community Benefits.** The application should describe benefits that the CMCB would provide to the local community, such as employment for residents of the City, community contributions, or economic incentives to the City.
- **Enhanced Product Safety.** The application should state how the CMCB will ensure enhanced consumer safety as required by State or local law.
- **Environmental Benefits.** The application should describe any proposed "green" business practices relating to energy and climate, water conservation, odor control, and waste management.
- **Labor & Employment.** The application should describe to what extent the CCB will adhere to heightened pay and benefits standards and practices, including recognition of the collective bargaining rights of employees. Specific practices that are subject to consideration include the following:
 - Providing compensation to and opportunities for continuing education and training of employees/staff (applications should provide proof of the CMCB policy and regulations to employees);
 - Providing a "living wage" to facility staff and employees. Wage scale should be provided in writing for all levels of employment at the facility. "Living Wage" shall mean 150% of the minimum wage mandated by California or Federal law, whichever is greater.
- **Local Enterprise.** The application should state the extent to which the CMCB will be a locally managed enterprise whose Principals reside within Hanford and/or Kings County.
- **Qualifications of Principals.** The application should include information concerning any special business or professional qualifications or licenses of principals that would add to the number or quality of services that the CMCB would provide, especially in areas related to medical cannabis, such as scientific or health care fields.

The City's Reservation of Right's

The City reserves the right to reject any and/or all proposals, with or without any cause or reason. The City may also, modify, postpone, or cancel the request for permit applications without liability, obligation, or commitment to any party, firm, or organization. In addition, the City reserves the right to request and obtain additional information from any candidate submitting a proposal. Late and incomplete proposals WILL BE REJECTED. Furthermore, a proposal RISKS BEING REJECTED for any of the following reasons:

1. Proposal considered not fully responsive to this request for a permit application.
2. Proposal contains excess or extraneous material not called for in the request for permit application.

CONTACT:

If you have any questions or would like an update on the status of your application, please contact (Darlene Mata) at 559-585-2580 or by email at DMata@cityofhanfordca.com.

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: NC3 Systems Inc, dba Caliva

Business Primary Contact: Larry Thacker

Contact Title: CEO

Contact's Mailing Address: 214 Dupont Street, Floor 2
San Jose, CA 95126

Phone #: (714) 313-6003 E-mail: larry@gocaliva.com

24-Hour Contact Information: Caliva San Jose Guard Room - (669) 242-7283

Type of Permit Being Requested:

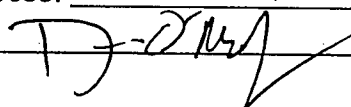
Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

- ☒ Cultivation
- ☐ Distribution
- ☐ Manufacturing
- ☐ Testing Labs
- ☐ Cannabis Business Park or Campus
- ☒ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

X Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)Staff use only: Pass background check ☐ SignaturePrincipal Name: Dennis O'MalleyPrincipal Title: PresidentPrincipal Home or Cell Phone: (408) 309-1401Principal Home Address: 120 Dundee Lane, San Carlos, CA 94070Principal Signature: Date: 9/28/2017

Attachments:

X Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation) Receipt from background check (Live Scan)X Picture of applicant (two passport quality photographs 2X2) Copy of Social Security CardX Copy of Driver's License, DMV issued ID Card or PassportX Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)Staff use only: Pass background check ☐ Signature**ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.**

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)
Caliva has received a registration from the City of San Jose to operate a vertically integrated cannabis business in San Jose. The registration needs to be renewed annually; we have gone through the initial application process and a successful renewal of the registration.

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

No partners have been found guilty of any of the above.

Attachment: Attachment 2: Caliva Application and Site Plan (Cannabis Permit Award)

Phase II

Section A: Principal Background Information (Must be signed by all Principals)

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Robby ForcePrincipal Title: Director of Agriculture OperationsPrincipal Home or Cell Phone: (408) 209-1739Principal Home Address: 1106 Mariners Drive, Lathrop, CA 95330Principal Signature: [Signature] Date: 10/10/2017

Attachments:

☒ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)☐ Receipt from background check (Live Scan)☒ Picture of applicant (two passport quality photographs 2X2)☒ Copy of Social Security Card☒ Copy of Driver's License, DMV issued ID Card or Passport☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)Staff use only: Pass background check ☐ SignaturePrincipal Name: Jessica BoxPrincipal Title: Compliance ManagerPrincipal Home or Cell Phone: (408) 387-3334Principal Home Address: 5842 Comanche Drive, San Jose, CA 95123Principal Signature: [Signature] Date: 10/9/2017

Attachments:

☒ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)☐ Receipt from background check (Live Scan)☒ Picture of applicant (two passport quality photographs 2X2)☒ Copy of Social Security Card☒ Copy of Driver's License, DMV issued ID Card or Passport

Attachment: Attachment 2: Caliva Application and Site Plan (Cannabis Permit Award)

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

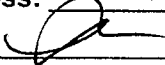
Staff use only: Pass background check ☐ Signature

Principal Name: Michael Vu

Principal Title: Director of Lab and Concentrates

Principal Home or Cell Phone: (831) 214-2604

Principal Home Address: 809 Auzerais Drive, San Jose, CA 95126

Principal Signature:  Date: 10/9/17

Attachments:

☒ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

☐ Receipt from background check (Live Scan)

☒ Picture of applicant (two passport quality photographs 2X2)

☒ Copy of Social Security Card

☒ Copy of Driver's License, DMV issued ID Card or Passport

☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)
Caliva has received a registration from the City of San Jose to operate a vertically integrated cannabis business in San Jose. The registration needs to be renewed annually; we have gone through the initial application process and a successful renewal of the registration.

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

No partners have been found guilty of any of the above.

Attachment: Attachment 2: Caliva Application and Site Plan (Cannabis Permit Award)

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

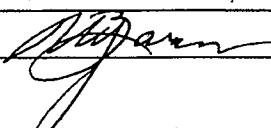
Staff use only: Pass background check ☐ Signature

Principal Name: Michael Bacon

Principal Title: Vice President of Risk Management

Principal Home or Cell Phone: (925) 822-2496

Principal Home Address: 4416 Prairie Willow Court, Concord, CA 94521

Principal Signature:  Date: 10/9/2017

Attachments:

☒ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

☒ Picture of applicant (two passport quality photographs 2X2)

☒ Copy of Social Security Card

☒ Copy of Driver's License, DMV issued ID Card or Passport

☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)
Caliva has received a registration from the City of San Jose to operate a vertically integrated cannabis business in San Jose. The registration needs to be renewed annually; we have gone through the initial application process and a successful renewal of the registration.
2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

No partners have been found guilty of any of the above.

Attachment: Attachment 2: Caliva Application and Site Plan (Cannabis Permit Award)

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

Caliva is a commercial cannabis business organized as a Corporation under the State of California
operating under not for profit by-laws.

☒ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):

See Attachment for "Purpose of Commercial Cannabis Business"

2. Proposed Location of Business:

Assessor's Parcel Numbers 018-232-002, 018-232-003; site is on the south side of Houston Avenue, bordered on the west by B.N. & S.F. Railroad.

3. Name and address of property owner: Daniel M. Fadenrecht and Betty Fadenrecht Trust c/o Anne Fadenrecht
6728 East McKenzie Avenue, Fresno, CA 93727

4. Name and address of school closest to Proposed Location:

Home Garden Learning Center - 9726 Home Avenue, Hanford, CA 93230 (1.1 miles)

Martin Luther King Jr. Elementary School - 820 Hume Avenue, Hanford, CA 93230 (1.3 miles)

5. Name and address of existing alcohol related establishment closest to Proposed Location:

Plan B Taphouse - 129 W 5th Street, Hanford, CA 93230 (2 miles)

6. Have you received a Zoning Verification Letter? (Please check the appropriate response)

Yes ☒ (If yes, include documentation with this section of the application) No ☐

7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.

See Attachment for "Description of Neighborhood"

Attachment: Attachment 2: Caliva Application and Site Plan (Cannabis Permit Award)

8. Site plan must be dimensioned and show the entire parcel including parking and additional structures. In addition, please, show elevations and photos of proposed location (Attach to application). If any exterior alterations are proposed for the existing building, also attach proposed site plans (accurate, dimensioned and to-scale [minimum scale of ¼"] should be included for each potential location and elevations.
9. Floor Plans (Attach to application accurate, dimensioned and to-scale [minimum scale of ¼"] should be included for each potential location). If any interior alterations are proposed for the existing building, also attach proposed floor plans.
10. Signage Plan.
11. Vicinity Map.
12. Photos of the site and building(s).

Section D: Required supplemental information

This information is required for this application to be considered complete. Attach the following reports to the application. For explanation about the information required, see the Implementation Procedures handout.

- ☒ Business Plan
- ☒ Neighborhood Compatibility Plan
- ☒ Safety and Security Plan

PHASE III

Section E: Final Location Information

Only one site per application can be considered at this point. Attach proof of ownership of the site OR signed and notarized statement from the owner.

Section F: Essential Supplemental Information

This information is required and you must submit this as part of meeting the requirements for a completed application. Check the box evidencing that you have read the Description of Evaluation Criteria related to these specific categories in the Implementation Procedures and attach the relative report(s) to the application.

- ☒ Enhanced Project Safety
- ☒ Environmental Benefits
- ☒ Community Benefits
- ☒ Labor and Employment
- ☒ Local Enterprise
- ☒ Qualifications of Principals

Staff use only:

Date of initial application: _____

Number assigned to application: _____

Date fee received for Phase II: _____

Date application reviewed for Phase II: _____

Points Awarded in Phase II: _____

☐ Continued to Phase III ☐ Denied

Date fee received for Phase III: _____

Date Proof of ownership was verified or a signed and notarized statement from the property owner was received for Phase III: _____

Date application reviewed for Phase III: _____

☐ Approved ☐ Denied

Date fee received for Phase IV: _____

Date application reviewed for Phase IV: _____

☐ Approved ☐ Denied

REVISIONS BY

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Streeter Group, Inc.

Architectural, Structural Engineering

2573 Main Street, Suite C, San Jose, CA 95128

Phone: (415) 477-1781 www.streetergroup.com

HANFORD BUSINESS PARK

HANFORD, CA

A.P.N.'s: 018-232-002, 018-232-003

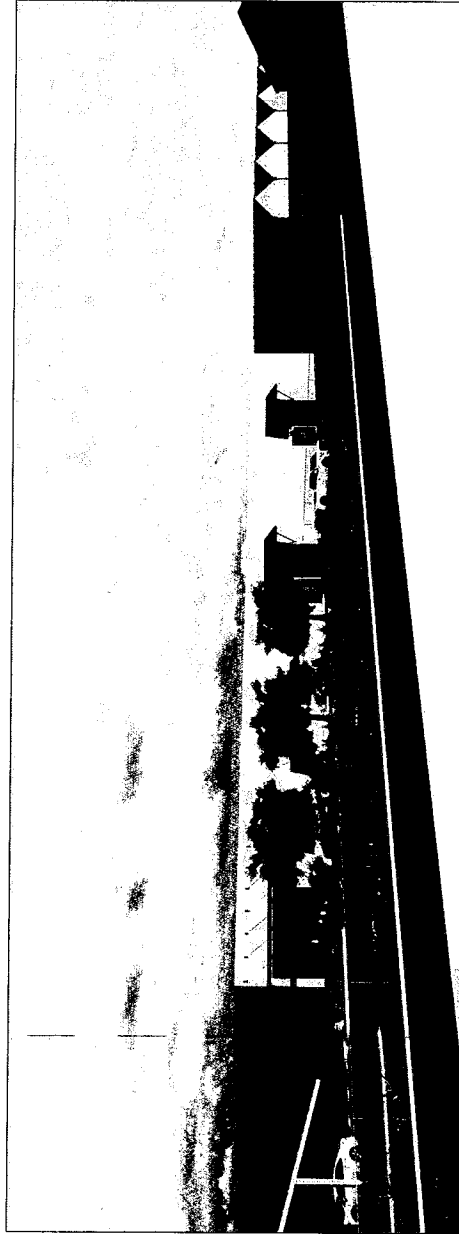
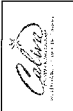


SCHEMATIC SITE PLAN VICINITY MAP

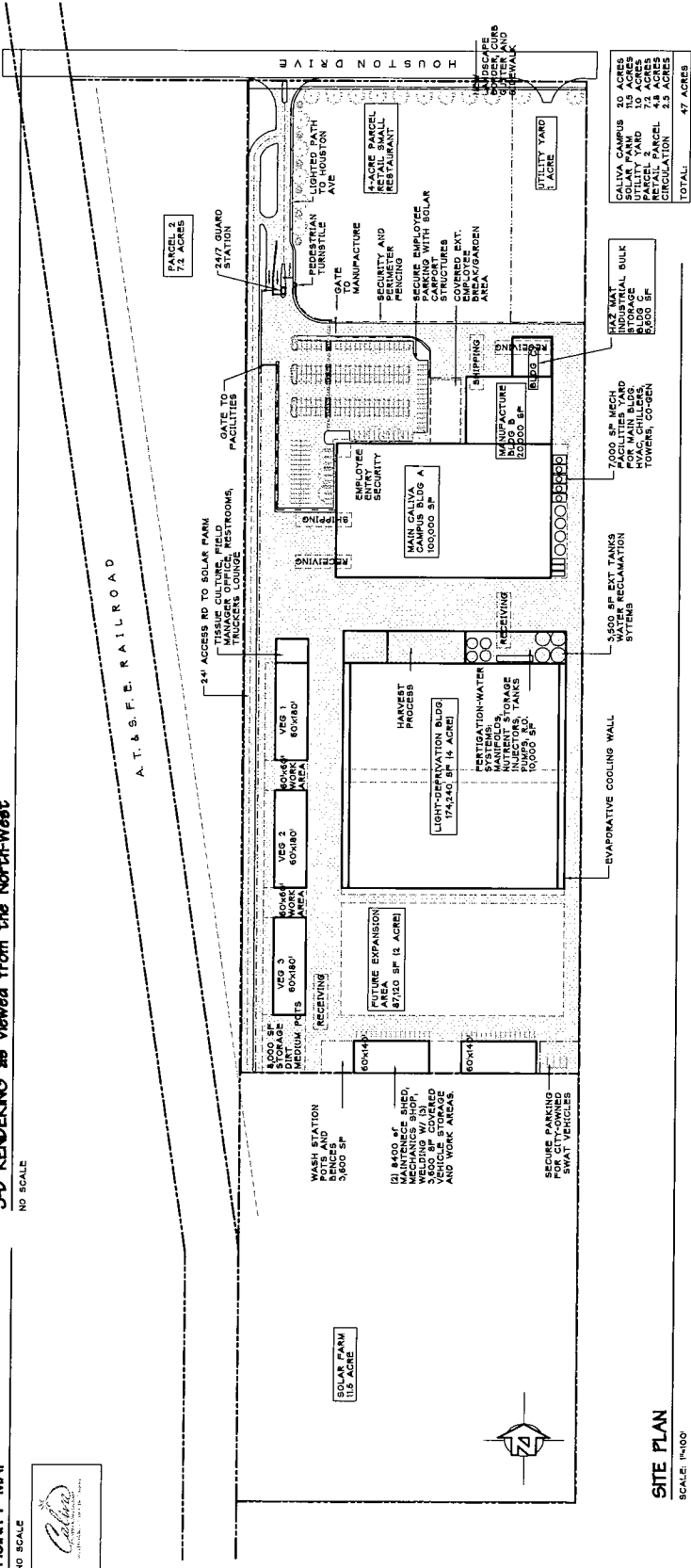
DATE: 08-18-17
SCALE: AS SHOWN
DRAWN BY: KS
CHECK BY: BS
CADD FILE: C10
JOB NO: 17060
SHEET
C10
SP 07



VICINITY MAP
NO SCALE



3-D RENDERING as viewed from the North-West
NO SCALE



SITE PLAN

SCALE: 1"=100'
0 100 150 200 300

CALIVA CAMPUS	30 ACRES
UTILITY YARD	10 ACRES
MANUFACTURING BLDG	2 ACRES
SHIPPING BLDG	2 ACRES
RESTAURANT	2.3 ACRES
CIRCULATION	2.3 ACRES
TOTAL:	47 ACRES

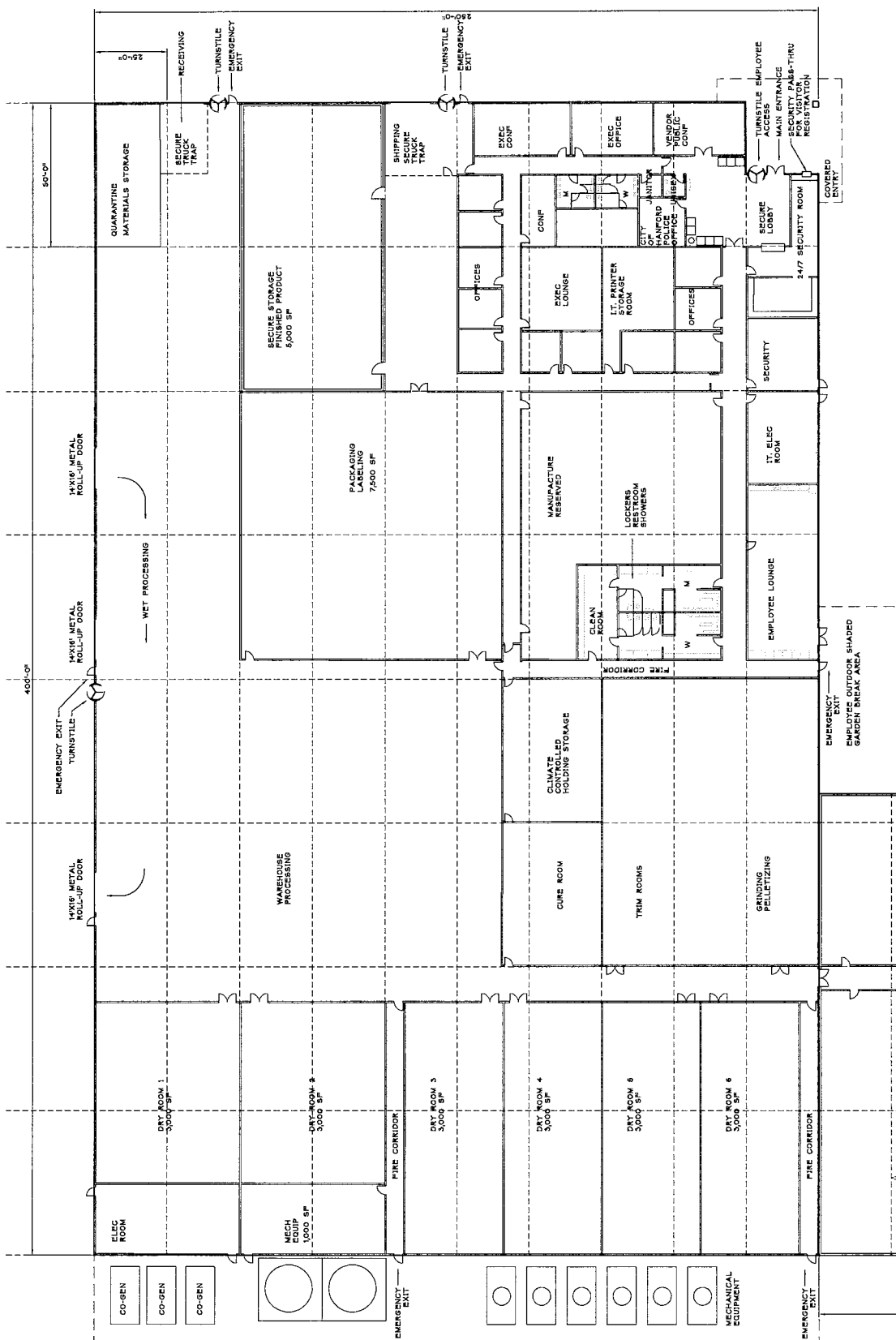


HANFORD
BUSINESS PARK
HANFORD, CA
A.P.N. 6 018-232-002, 018-232-003



Streeter Group, Inc.
Architects, Structural Engineering
2571 Main Street, Suite C, San Jose, CA 95073
Phone: (415) 477-1781 www.streetergroup.com

REVISIONS	BY
1	
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Schematic Floor Plan - Building A

SCALE: 1/1000-11-010

REVISIONS BY

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STREETER GROUP, INC.

ARCHITECTS

1777 MAIN STREET, SUITE 200, SAN JOSE, CA 95128

(408) 437-1777 WWW.STREETERGROUP.COM

HANFORD BUSINESS PARK

HANFORD, CA

A.P.N. 018-232-002, 018-232-003



BUILDING B-C

FLOOR PLAN

Schematic

DATE: 7-31-17

SCALE: AS NOTED

DRAWN BY: KS

CHECK BY: BSB

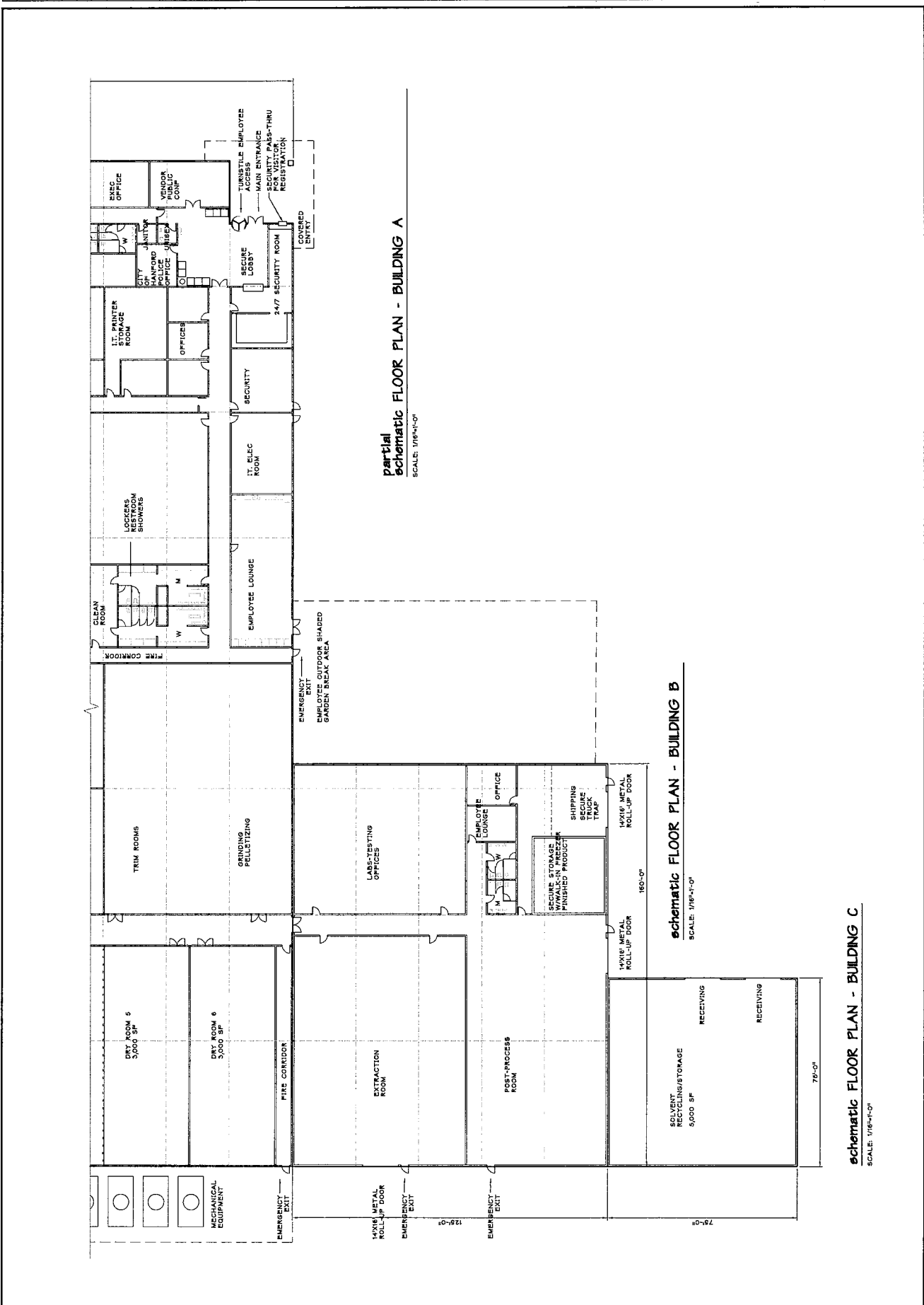
CAD FILE: A12

JDS NO: 17060

SHEET

A12

OF 07



REVISIONS

1	BY	
2	BY	
3	BY	
4	BY	
5	BY	
6	BY	
7	BY	
8	BY	
9	BY	
10	BY	

Streeter Group, Inc.

Architects, Structural Engineers
2571 Main Street, Suite C, San Jose, CA 95128
Phone: (408) 437-1234 | www.streetergroup.com

HANFORD
BUSINESS PARK

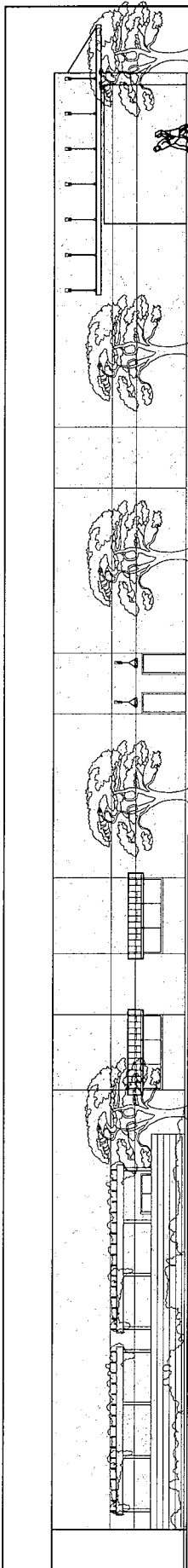
HANFORD, CA
A.P.N.'s 018-232-002, 018-232-003

SEAL

Professional Engineer
No. 12345
State of California
Exp. 12/31/2024

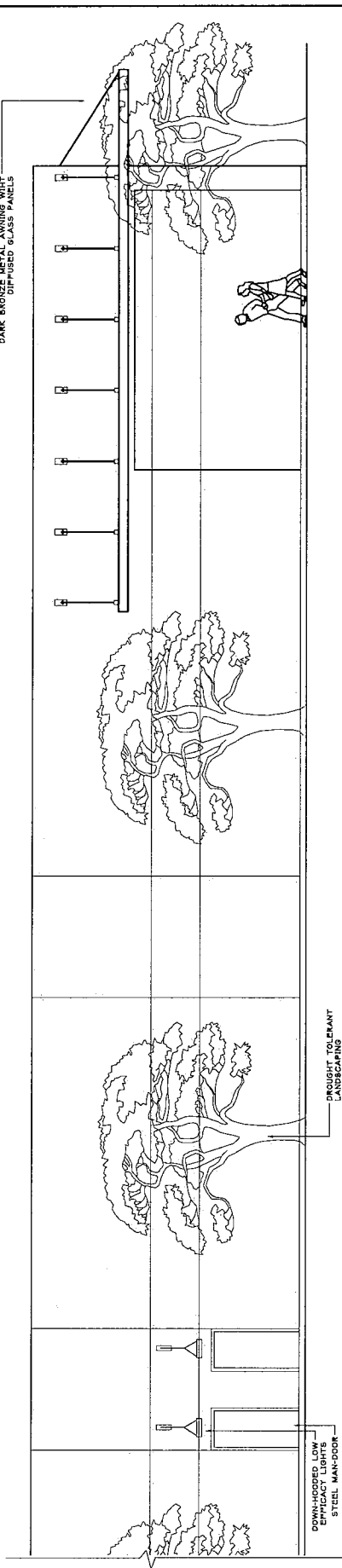
MAIN CAMPUS
NORTH ELEVATION

DATE: 08-18-17
SCALE: AS NOTED
DRAWN BY: KB
CHECK BY: BS
CADD FILE: A11
JOB NO: 17060
SHEET
A22
OF 07



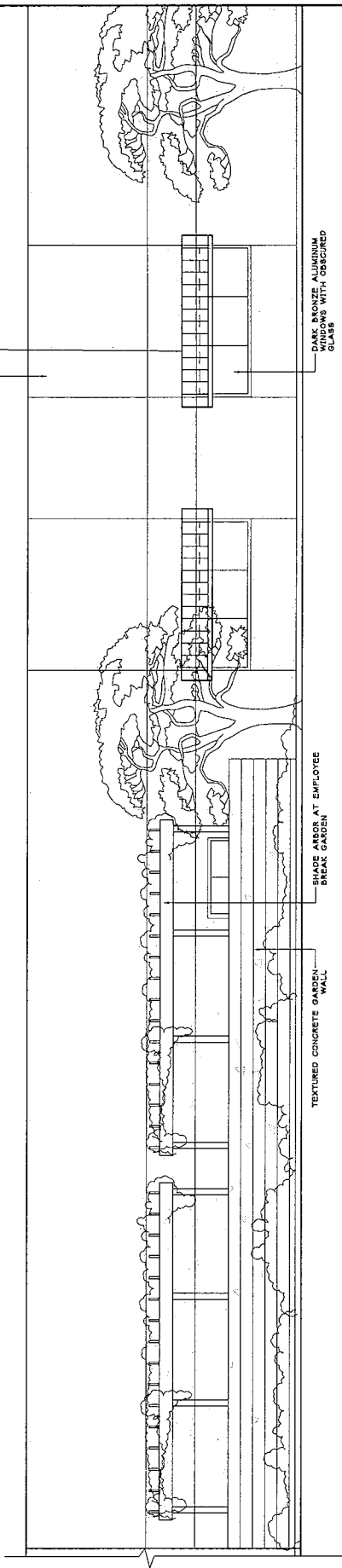
MAIN CAMPUS NORTH ELEVATION

SCALE: 1/8"=1'-0"



MAIN CAMPUS PARTIAL NORTH ELEVATION

SCALE: 1/8"=1'-0"



MAIN CAMPUS PARTIAL NORTH ELEVATION

SCALE: 1/8"=1'-0"

REVISIONS BY

1	A	
2	A	
3	A	
4	A	
5	A	
6	A	

STREETER GROUP, INC.

Architectural, Structural Engineering
3571 Main Street, Suite C, San Jose, CA 95128
Phone: (415) 471-7181 www.streetergroup.com

HANFORD BUSINESS PARK

HANFORD, CA
A.P.N. 018-232-002, 018-232-003

SEAL

Professional Engineer
No. 1001
Exp. 12/31/2020
State of California

BUILDING ELEVATIONS

LIGHT-DEPRIVATION

DATE: 08-18-17

SCALE: AS NOTED

DRAWN BY: KS

CHECK BY: BS

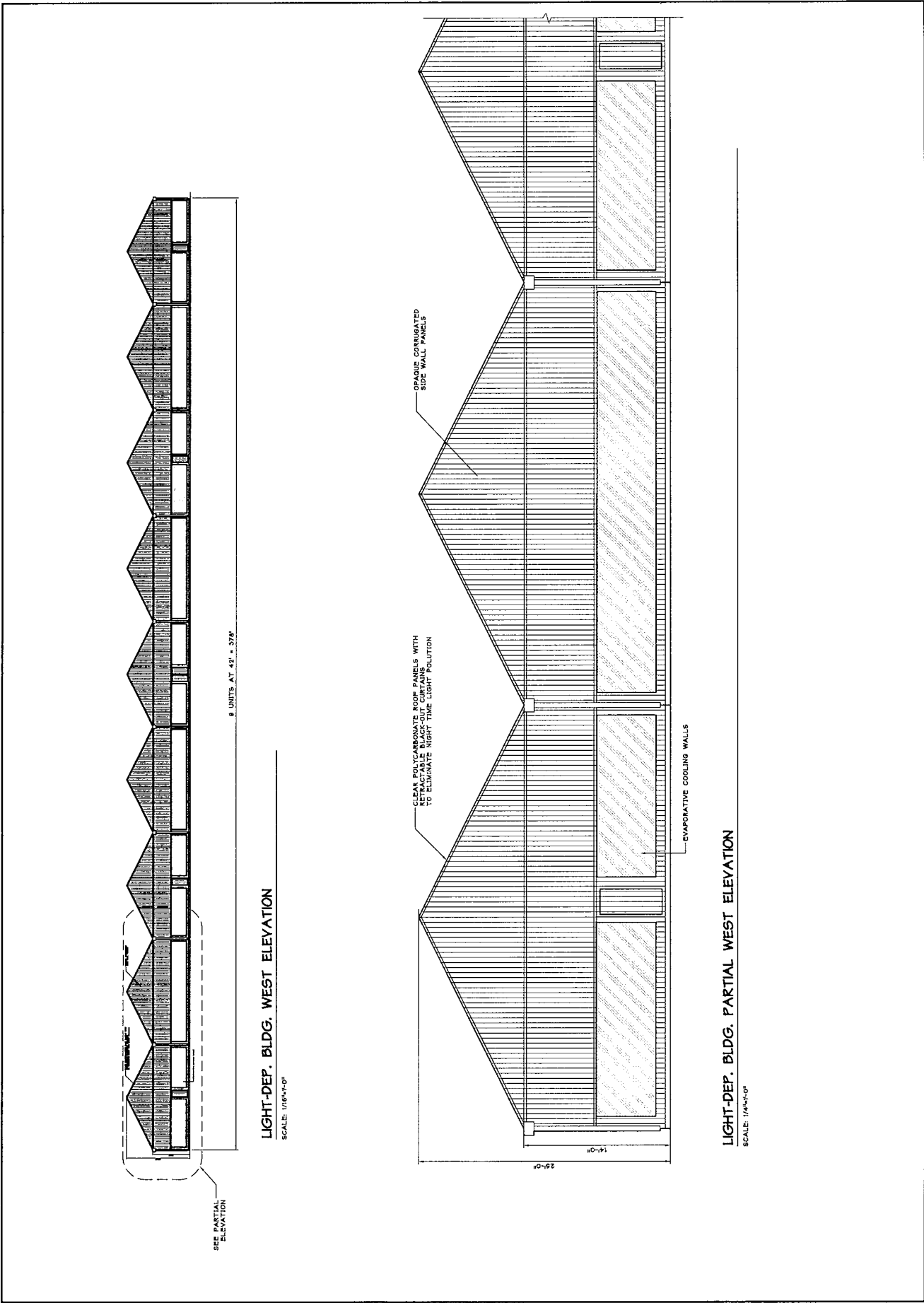
CAD FILE: A23

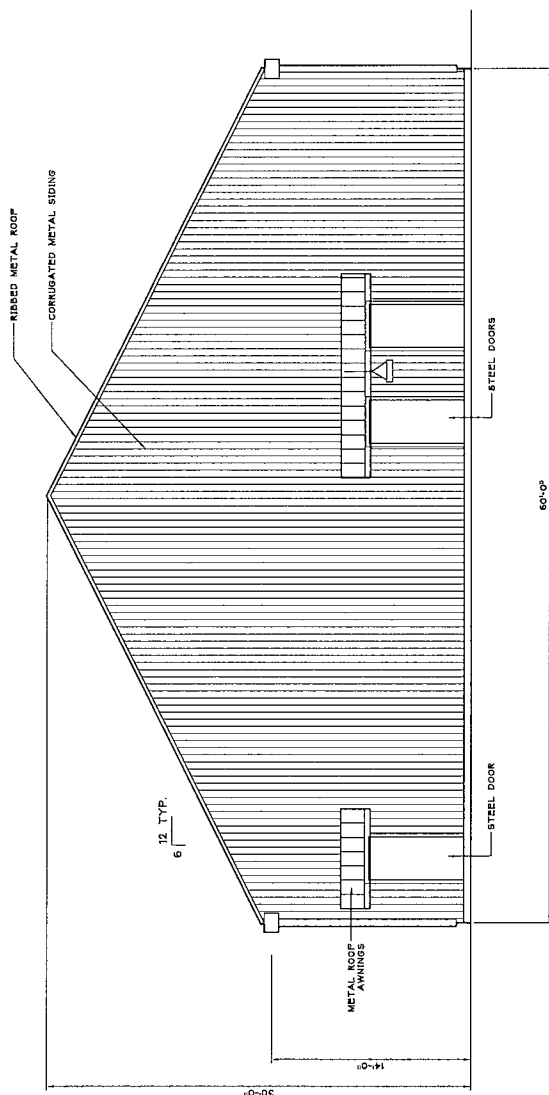
JOB NO: 17060

SHEET

A23

OF 07





ELEVATION - VEGETATION SHEDS

SCALE: 1/4"=1'-0"

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: Genezen Hanford, LLC

Business Primary Contact: Elisa Stewart

Contact Title: Manager

Contact's Mailing Address: 2200 Powell Street, Suite 440; Emeryville, CA 94608

Phone #: 415-274-0916 E-mail: estewart@stewartandmusell.com

24-Hour Contact Information: 415-595-3622

Type of Permit Being Requested:

Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

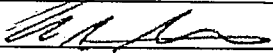
- ☐ Cultivation
- ☐ Distribution
- ☐ Manufacturing
- ☐ Testing Labs
- ☒ Cannabis Business Park or Campus
- ☒ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

Phase II

Section A: Principal Background Information (Must be signed by all Principals)

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Elisa StewartPrincipal Title: ManagerPrincipal Home or Cell Phone: 415-595-3622Principal Home Address: 2400 Bonar Street; Berkeley, CA 94702Principal Signature:  Date: 10/02/2017

Attachments:

- ☒ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)
 Receipt from background check (Live Scan)
- ☒ Picture of applicant (two passport quality photographs 2X2)
- ☒ Copy of Social Security Card
- ☒ Copy of Driver's License, DMV issued ID Card or Passport
- ☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: _____

Principal Title: _____

Principal Home or Cell Phone: _____

Principal Home Address: _____

Principal Signature: _____ Date: _____

Attachments:

- ____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)
- ____ Receipt from background check (Live Scan)
- ____ Picture of applicant (two passport quality photographs 2X2)
- ____ Copy of Social Security Card
- ____ Copy of Driver's License, DMV issued ID Card or Passport

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: _____

Principal Title: _____

Principal Home or Cell Phone: _____

Principal Home Address: _____

Principal Signature: _____ Date: _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)
N/A

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)
N/A

Attachment: Attachment 3: Genezen Application and Site Plan (Cannabis Permit Award)

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

The organizational status of the business is a Limited Liability Company, organized under the laws of the State of California. Please see Articles of Organization and Operating Agreement attached.

- ☒ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):
Genezen Hanford, LLC proposes to operate as a Cannabis Business Park offering designed space for affiliated and third party businesses to operate pursuant to lawfully obtained permits and state licenses for cultivation, distribution and manufacturing.
2. Proposed Location of Business:
10210 Idaho Avenue, Hanford, CA 93230
3. Name and address of property owner: Forebay Farms, LLC is the owner of a four parcel property located at 10210 Idaho Avenue, Hanford, California 93230
4. Name and address of school closest to Proposed Location: Kings Community School
W Highland St, Hanford, CA 93230
5. Name and address of existing alcohol related establishment closest to Proposed Location:
Spirits Lounge, 390 S 11th Ave, Hanford, CA 93230
6. Have you received a Zoning Verification Letter? (Please check the appropriate response)
Yes ☒ (If yes, include documentation with this section of the application) No ☐
7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.
The land use is Heavy Industrial and the zoning is consistent. The surrounding uses and nearby sensitive uses are more fully described in the Proposed Business Location Narrative attached herein.

8. Site plan must be dimensioned and show the entire parcel including parking and additional structures. In addition, please, show elevations and photos of proposed location (Attach to application). If any exterior alterations are proposed for the existing building, also attach proposed site plans (accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location and elevations.
9. Floor Plans (Attach to application accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location). If any interior alterations are proposed for the existing building, also attach proposed floor plans.
10. Signage Plan.
11. Vicinity Map.
12. Photos of the site and building(s).

Section D: Required supplemental information

This information is required for this application to be considered complete. Attach the following reports to the application. For explanation about the information required, see the Implementation Procedures handout.

- ☒ Business Plan
- ☒ Neighborhood Compatibility Plan
- ☒ Safety and Security Plan

PHASE III

Section E: Final Location Information

Only one site per application can be considered at this point. Attach proof of ownership of the site OR signed and notarized statement from the owner.

Section F: Essential Supplemental Information

This information is required and you must submit this as part of meeting the requirements for a completed application. Check the box evidencing that you have read the Description of Evaluation Criteria related to these specific categories in the Implementation Procedures and attach the relative report(s) to the application.

- ☒ Enhanced Project Safety
- ☒ Environmental Benefits
- ☒ Community Benefits
- ☒ Labor and Employment
- ☒ Local Enterprise
- ☒ Qualifications of Principals

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

Staff use only:

Date of initial application: _____

Number assigned to application: _____

Date fee received for Phase II: _____

Date application reviewed for Phase II: _____

Points Awarded in Phase II: _____

☐

Continued to Phase III

☐

Denied

Date fee received for Phase III: _____

Date Proof of ownership was verified or a signed and notarized statement from the property owner was received for Phase III: _____

Date application reviewed for Phase III: _____

☐

Approved

☐

Denied

Date fee received for Phase IV: _____

Date application reviewed for Phase IV: _____

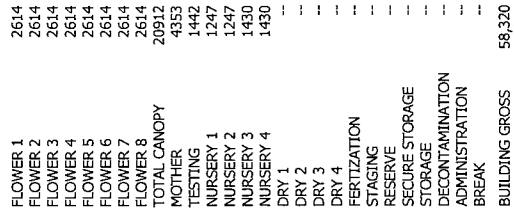
☐

Approved

☐

Denied

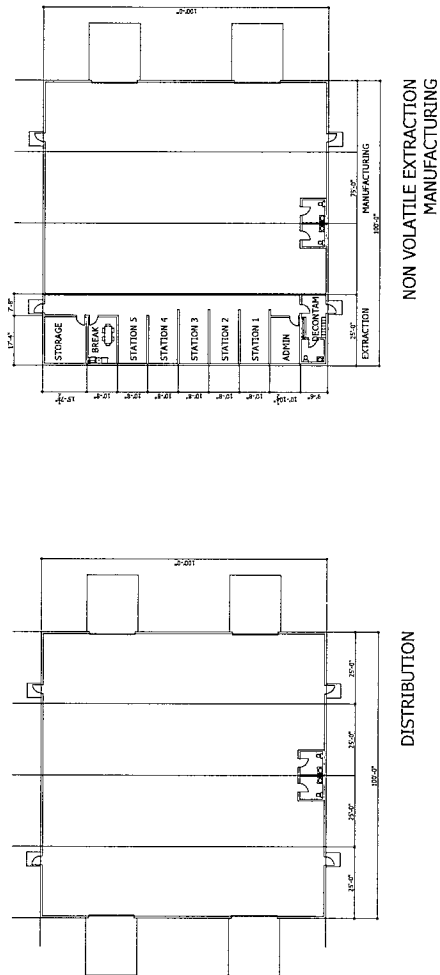




FLOOR PLAN
1" = 20'-0"

CULTIVATION BUILDINGS

GENEZEN HANFORD
HANFORD CA
09 26 2017



FLOOR PLAN
1" = 20'-0"

DISTRIBUTION
NON VOLATILE EXTRACTION
MANUFACTURING

white lam +
GENEZEEN HANFORD
HANFORD CA
05 26 2017

architects

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: Premium Extracts Inc.,

Business Primary Contact: Jose Luis Rivas II

Contact Title: CEO

Contact's Mailing Address: 442 25th Ave #301, San Francisco CA, 94121

Phone #: 415-304-5626 E-mail: jose.rivas@premiumextracts.net

24-Hour Contact Information: 415-304-5626

Type of Permit Being Requested:

Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

- ☐ Cultivation
- ☐ Distribution
- ☒ Manufacturing
- ☐ Testing Labs
- ☐ Cannabis Business Park or Campus
- ☐ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

Attachment: Attachment 4: Premium Extracts Application and Site Plan (Cannabis Permit Award)

Phase II**Section A: Principal Background Information (Must be signed by all Principals)**

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Jose Luis Rivas II

Principal Title: CEO

Principal Home or Cell Phone: 415-304-5626

Principal Home Address: 442 25th ave #301, San Francisco CA, 94121

Principal Signature: _____ Date: _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: Michael Seramin

Principal Title: Vice President

Principal Home or Cell Phone: 415-304-5626

Principal Home Address: 442 25th Ave #301, San Francisco CA, 94121

Principal Signature: _____ Date: _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

Attachment: Attachment 4: Premium Extracts Application and Site Plan (Cannabis Permit Award)

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: _____

Principal Title: _____

Principal Home or Cell Phone: _____

Principal Home Address: _____

Principal Signature: _____ Date: _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

Attachment: Attachment 4: Premium Extracts Application and Site Plan (Cannabis Permit Award)

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

Premium Extracts Inc., is a registered S corp in the state of California

☐ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):

See attached statement of purpose

2. Proposed Location of Business:

APN# 018-242-033

3. Name and address of property owner: Matthew Marowitz

4. Name and address of school closest to Proposed Location: Garden Side Elementary

916 Temple Dr. Hanford, CA 93230-9560

5. Name and address of existing alcohol related establishment closest to Proposed Location:

El Ranchero Liquor 2 119998 S 10th Ave, Hanford, CA 93230

6. Have you received a Zoning Verification Letter? (Please check the appropriate response)

Yes ☒ (If yes, include documentation with this section of the application) No ☐

7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.

Premium Extracts knows that the city of Hanford, cares very much about the location of any cannabis business operation. We have scouted various locations and decided upon the lot at APN# 018-242-033

8. Site plan must be dimensioned and show the entire parcel including parking and additional structures. In addition, please, show elevations and photos of proposed location (Attach to application). If any exterior alterations are proposed for the existing building, also attach proposed site plans (accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location and elevations.
9. Floor Plans (Attach to application accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location). If any interior alterations are proposed for the existing building, also attach proposed floor plans.
10. Signage Plan.
11. Vicinity Map.
12. Photos of the site and building(s).

Section D: Required supplemental information

This information is required for this application to be considered complete. Attach the following reports to the application. For explanation about the information required, see the Implementation Procedures handout.

- ☐ Business Plan
- ☐ Neighborhood Compatibility Plan
- ☐ Safety and Security Plan

PHASE III

Section E: Final Location Information

Only one site per application can be considered at this point. Attach proof of ownership of the site OR signed and notarized statement from the owner.

Section F: Essential Supplemental Information

This information is required and you must submit this as part of meeting the requirements for a completed application. Check the box evidencing that you have read the Description of Evaluation Criteria related to these specific categories in the Implementation Procedures and attach the relative report(s) to the application.

- ☒ Enhanced Project Safety
- ☒ Environmental Benefits
- ☒ Community Benefits
- ☒ Labor and Employment
- ☒ Local Enterprise
- ☒ Qualifications of Principals

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

Staff use only:

Date of initial application: _____

Number assigned to application: _____

Date fee received for Phase II: _____

Date application reviewed for Phase II: _____

Points Awarded in Phase II: _____

☐

Continued to Phase III

☐

Denied

Date fee received for Phase III: _____

Date Proof of ownership was verified or a signed and notarized statement from the property owner was received for Phase III: _____

Date application reviewed for Phase III: _____

☐

Approved

☐

Denied

Date fee received for Phase IV: _____

Date application reviewed for Phase IV: _____

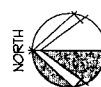
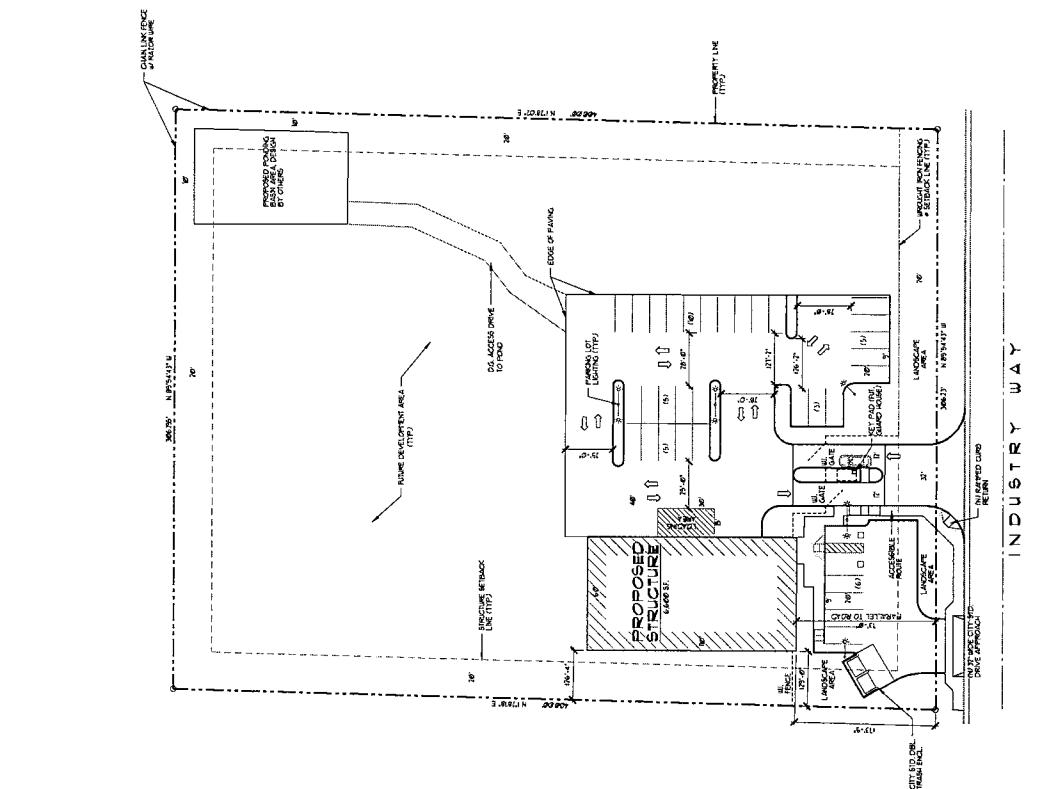
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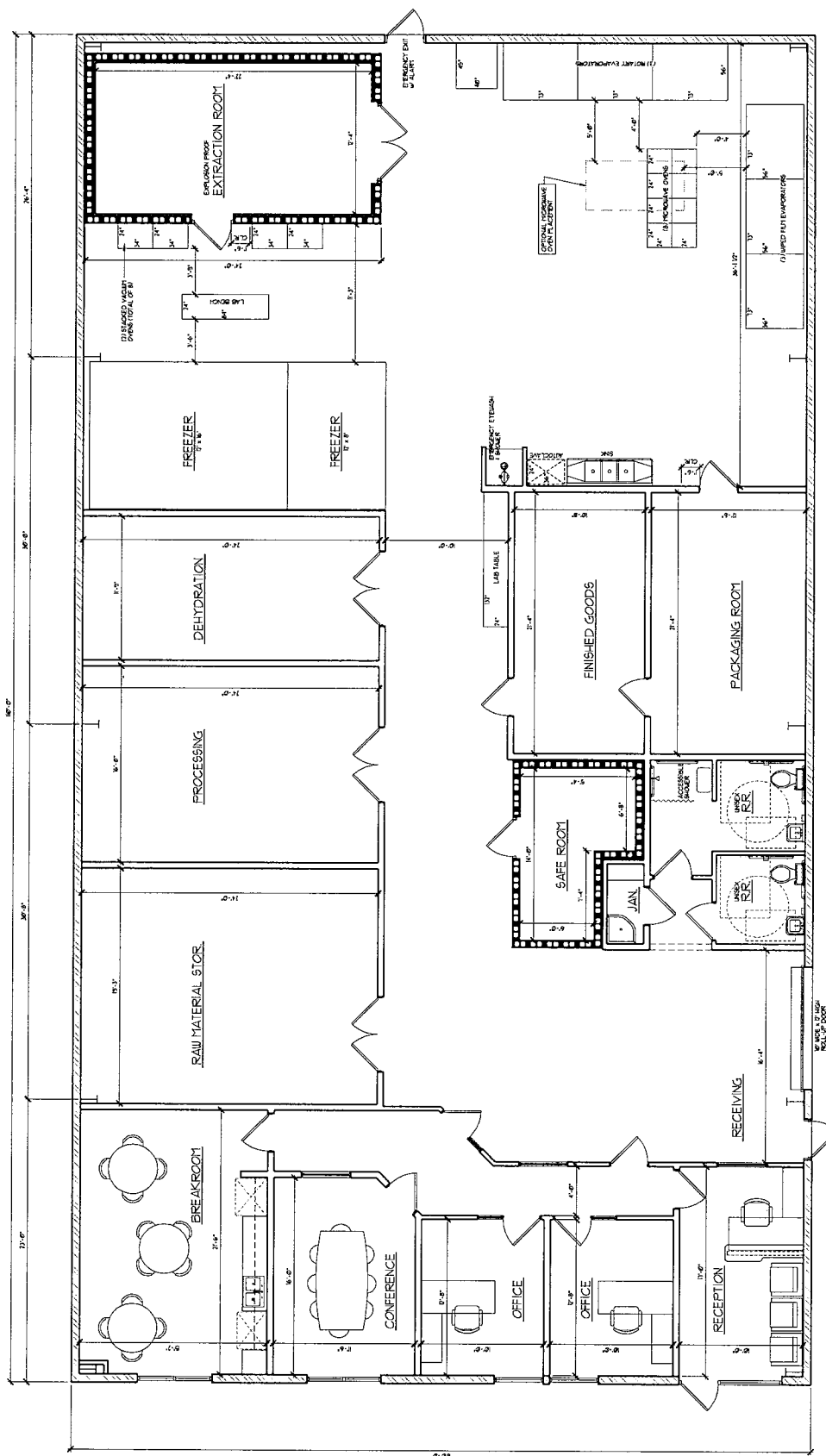
Approved

☐

Denied

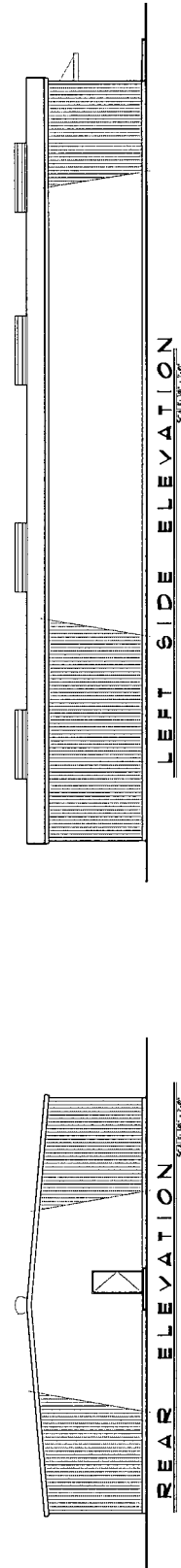
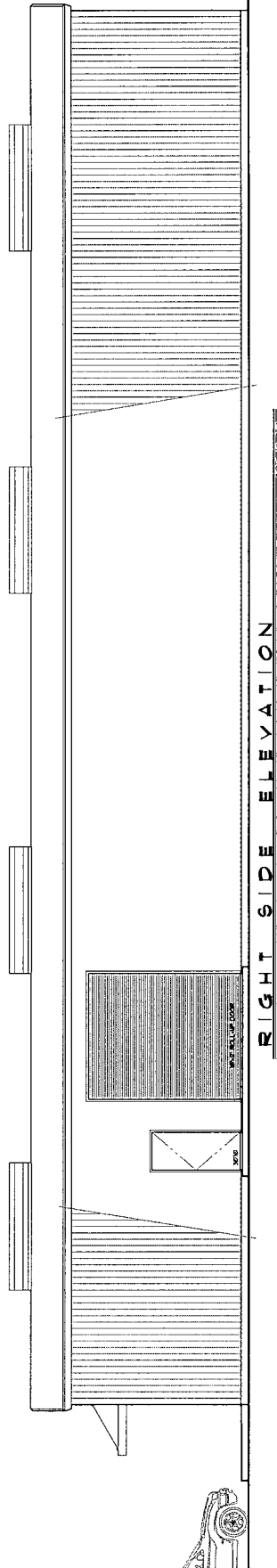
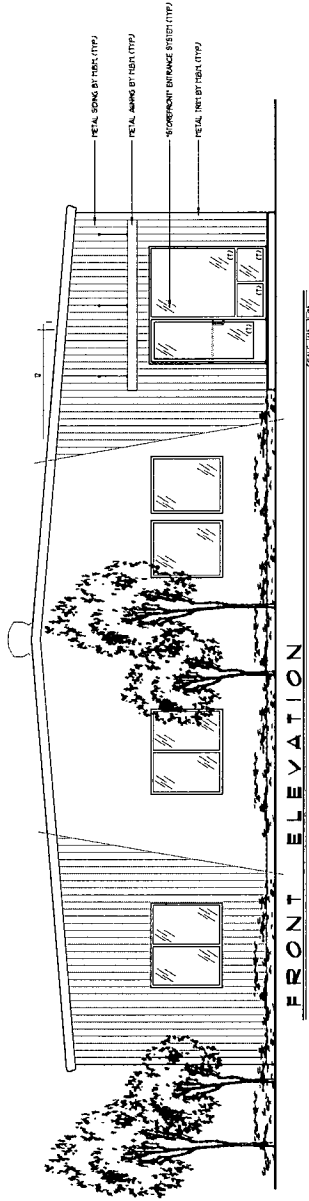
Attachment: Attachment 4: Premium Extracts Application and Site Plan (Cannabis Permit Award)



[illegible]

FLOOR PLAN

TAE ARCHITECTURE AND PLANNING 100 N. 1ST STREET TULSA, OKLAHOMA 74103 TEL: 918.596.1234 FAX: 918.596.1235 WWW.TAEARCHITECTS.COM		ARCHITECT: KATHY H. HENRICKS CDR. & ARCHITECT, AIA, LEEDS		PROJECT: PREMIUM EXTRACTS INC.		HANFORD, CALIFORNIA	
ASSISTANTS: • JESSICA M. GARDNER • JESSICA M. GARDNER • JESSICA M. GARDNER		CONSULTANT:		A NEW FACILITY FOR:		DATE: _____ REVISION: _____	
SHEET DESCRIPTION: EXTERIOR ELEVATIONS		SHEET NUMBER: A3		SHEET TOTALS: 1 OF 1		SHEET INDEX:	



EXTERIOR ELEVATIONS

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: Essential Farms
Business Primary Contact: Christopher Greaves
Contact Title: CFO
Contact's Mailing Address: 4591 Brentwood Ct.
Zionsville IN 46077
Phone #: 317-727-0348 E-mail: redtrainchris@gmail.com
24-Hour Contact Information: Same as above

Type of Permit Being Requested:

Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

- ☒ Cultivation
- ☒ Distribution
- ☒ Manufacturing
- ☐ Testing Labs
- ☐ Cannabis Business Park or Campus
- ☐ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

Business Permit Application

Page 2 of 7

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Phase II

Section A: Principal Background Information (Must be signed by all Principals)

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Christopher GreavesPrincipal Title: CFOPrincipal Home or Cell Phone: 317-727-0348Principal Home Address: 4591 Brentwood Ct. Zionsville IN 46077Principal Signature: [Signature] Date: 9/30/17Attachments: (see appendix)

___ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

___ Receipt from background check (Live Scan) ↳ Not operational until 2018

___ Picture of applicant (two passport quality photographs 2X2)

___ Copy of Social Security Card

___ Copy of Driver's License, DMV issued ID Card or Passport

___ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ SignaturePrincipal Name: Thomas James AltonPrincipal Title: master grower / consultantPrincipal Home or Cell Phone: 231-878-6990Principal Home Address: 9493 N M37 Mesick MI 49668Principal Signature: [Signature] Date: 9/30/17Attachments: (see appendix)

___ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

___ Receipt from background check (Live Scan) ↳ Not operational until 2018

___ Picture of applicant (two passport quality photographs 2X2)

___ Copy of Social Security Card

___ Copy of Driver's License, DMV issued ID Card or Passport

Attachment: Attachment 5: Essential Farms Application and Site Plan (Cannabis Permit Award)

Business Permit Application

Page 3 of 7

COMMERCIAL MEDICAL CANNABIS BUSINESS PERMIT APPLICATION

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: Jeremy Lill

Principal Title: VP Finance

Principal Home or Cell Phone: 317-296-0199

Principal Home Address: 9264 Sea Pine Ln. Indianapolis IN 46250

Principal Signature: *Jeremy Lill* Date: 09/30/17

Attachments: (see appendix)

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan) ↳ Not operational until 2018

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)

N/A

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

N/A

Attachment: Attachment 5: Essential Farms Application and Site Plan (Cannabis Permit Award)

Business Permit Application

Page 4 of 7

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

Currently Essential Farms is Non-Profit with
intentions to restructure as for profit in
2018. (see appendix)

- ☒ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):

Essential Farms is applying for a campus license with
the intent to use the license for the purpose of cultivating,
manufacturing and distribution. (see business plan)

2. Proposed Location of Business: 10757 Energy St Hanford CA 93230
APN: 018-242-070

3. Name and address of property owner: Keith Lavarney: 5309 Brandywine
Ct, Evans, GA 30809

4. Name and address of school closest to Proposed Location: Gardenside Elementary
School: 9615 Temple Dr., Hanford CA 93230
Martin Luther King Jr Elementary: 820 Hume Ave, Hanford CA
93230

5. Name and address of existing alcohol related establishment closest to Proposed Location:
El Ranchero Liquor 2: 11998 S 10th Ave, Hanford, CA 93230

6. Have you received a Zoning Verification Letter? (Please check the appropriate response)

Yes ☒ (If yes, include documentation with this section of the application) No ☐

7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.

Heavy Industrial Zone (see appendix for further description)

Attachment: Attachment 5: Essential Farms Application and Site Plan (Cannabis Permit Award)

Business Permit Application

Page 5 of 7

8. Site plan must be dimensioned and show the entire parcel including parking and additional structures. In addition, please, show elevations and photos of proposed location (Attach to application). If any exterior alterations are proposed for the existing building, also attach proposed site plans (accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location and elevations.
9. Floor Plans (Attach to application accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location). If any interior alterations are proposed for the existing building, also attach proposed floor plans.
10. Signage Plan.
11. Vicinity Map.
12. Photos of the site and building(s).

Section D: Required supplemental information

This information is required for this application to be considered complete. Attach the following reports to the application. For explanation about the information required, see the Implementation Procedures handout.

- ☒ Business Plan
- ☒ Neighborhood Compatibility Plan
- ☒ Safety and Security Plan

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

PHASE III

Section E: Final Location Information

Only one site per application can be considered at this point. Attach proof of ownership of the site OR signed and notarized statement from the owner.

Section F: Essential Supplemental Information

This information is required and you must submit this as part of meeting the requirements for a completed application. Check the box evidencing that you have read the Description of Evaluation Criteria related to these specific categories in the Implementation Procedures and attach the relative report(s) to the application.

- ☒ Enhanced Project Safety
- ☒ Environmental Benefits
- ☒ Community Benefits
- ☒ Labor and Employment
- ☒ Local Enterprise
- ☒ Qualifications of Principals

Business Permit Application

Page 7 of 7

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Staff use only:

Date of initial application: _____

Number assigned to application: _____

Date fee received for Phase II: _____

Date application reviewed for Phase II: _____

Points Awarded in Phase II: _____

☐ Continued to Phase III
 ☐ Denied

Date fee received for Phase III: _____

Date Proof of ownership was verified or a signed and notarized statement from the property owner was received for Phase III: _____

Date application reviewed for Phase III: _____

☐ Approved
 ☐ Denied

Date fee received for Phase IV: _____

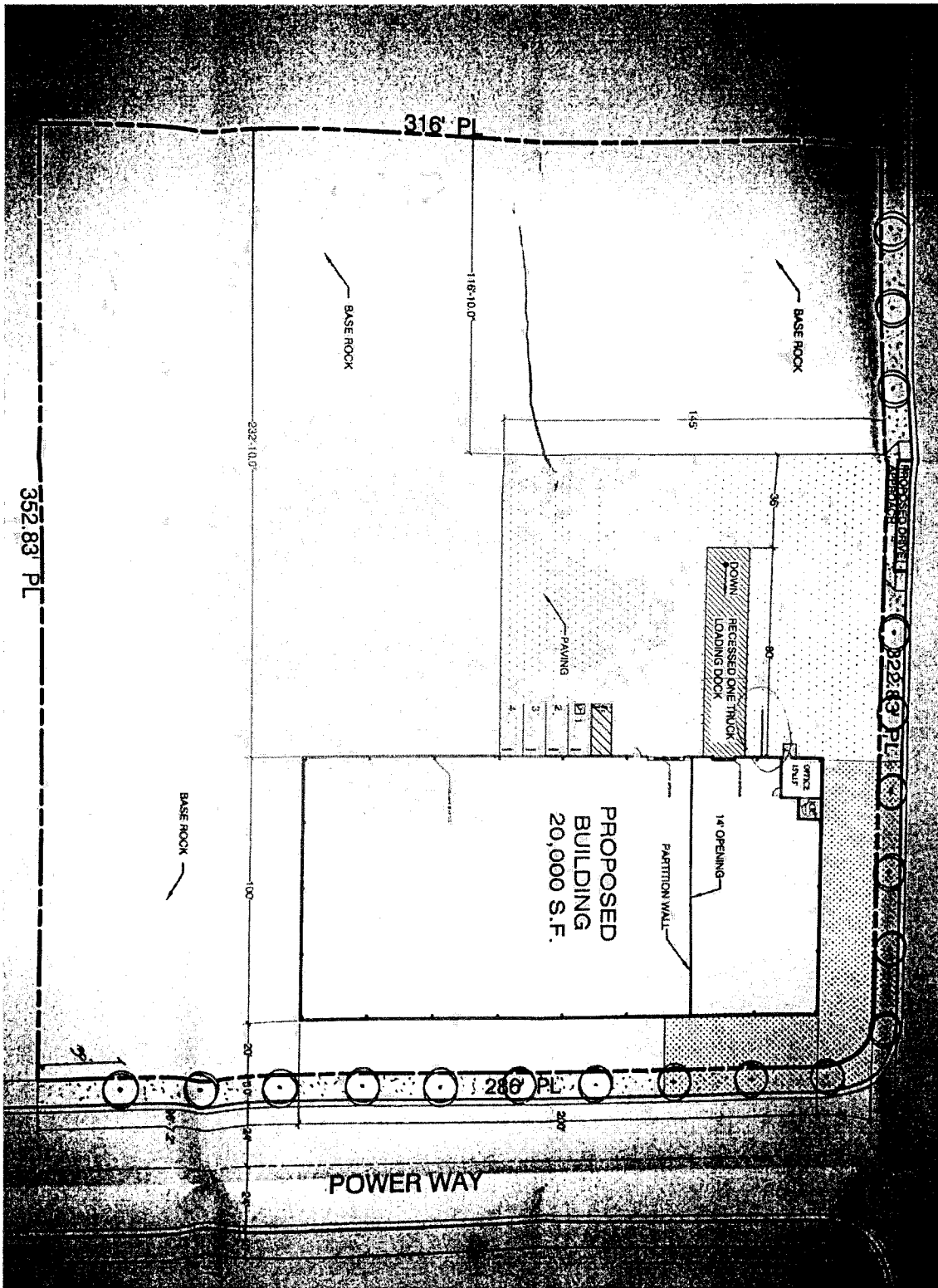
Date application reviewed for Phase IV: _____

☐ Approved
 ☐ Denied

Attachment: Attachment 5: Essential Farms Application and Site Plan (Cannabis Permit Award)

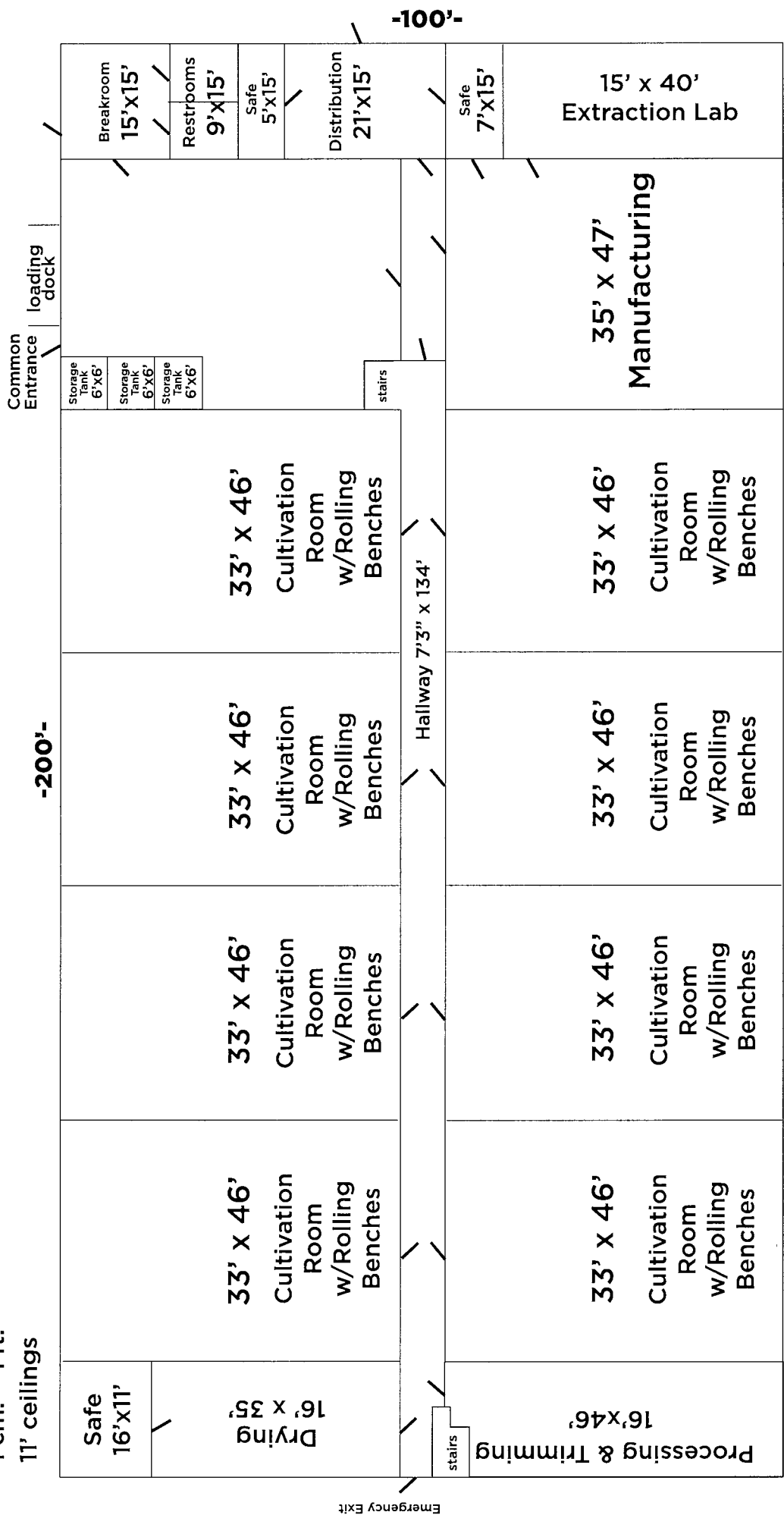
APPENDIX

Site Plan 3



Attachment: Attachment 5: Essential Farms Application and Site Plan (Cannabis Permit Award)

\ = 36" doors
1 cm. = 1 ft.
11' ceilings



20' x 134' Vegetative

Upstairs

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: Bridge the Gap Solutions, L.L.C.

Business Primary Contact: Jeff Fontes

Contact Title: Co-Owner

Contact's Mailing Address: 105 N. Fairfax Ave. Clovis, CA 93612

Phone #: 559-579-7140 E-mail: j.a.fontes79@gmail.com

24-Hour Contact Information: Okay to use phone #

Type of Permit Being Requested:

Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

- ☒ Cultivation
- ☐ Distribution
- ☐ Manufacturing
- ☐ Testing Labs
- ☐ Cannabis Business Park or Campus
- ☐ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

Phase II**Section A: Principal Background Information (Must be signed by all Principals)**

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Jeff Fontes

Principal Title: _____

Principal Home or Cell Phone: 559-579-7140

Principal Home Address: 105 N. Fairfax Ave. Clovis, CA 93612

Principal Signature: _____ **Date:** _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: Jacob Yparrea

Principal Title: Managing Member, Co-Owner

Principal Home or Cell Phone: 559-707-4898

Principal Home Address: 1596 E. Omaha Ave. Fresno, CA 93720

Principal Signature: _____ **Date:** _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

Attachment: Attachment 6: Bridge the Gap Application (Cannabis Permit Award)

COMMERCIAL MEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: _____

Principal Title: _____

Principal Home or Cell Phone: _____

Principal Home Address: _____

Principal Signature: _____ Date: _____

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan)

____ Picture of applicant (two passport quality photographs 2X2)

____ Copy of Social Security Card

____ Copy of Driver's License, DMV issued ID Card or Passport

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)

N/A

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

N/A

Attachment: Attachment 6: Bridge the Gap Application (Cannabis Permit Award)

	City of Hanford Community Development Department	FEE PAID \$ _____
	Hanford Community Development Department 317 North Douty Street, Hanford, CA 93230 Tel: 559-585-2590 Email: DMata@cityofhanfordca.com	DATE STAMP HERE

COMMERCIAL CANNABIS BUSINESS PERMIT APPLICATION

Business Name: BRIDGE the Gap Solutions, LLC
Business Primary Contact: Jeff Fortes
Contact Title: Co-Founder managing member
Contact's Mailing Address: 105 N. FINEBAK Ave Clovis, CA 93612
Phone #: 559-579-7140 E-mail: jeff.fortes71@gmail.com
24-Hour Contact Information: SAME AS ABOVE

Type of Permit Being Requested:

Please select from one of the following categories for which you are applying for a Commercial Cannabis Business Permit Application. A separate application must be completed for each category type in which you are submitting for consideration along with a separate fee (Cultivation, Distribution, Manufacturing, Testing Lab and Transportation).

- ☒ Cultivation
☐ Distribution
☐ Manufacturing
☐ Testing Labs
☐ Cannabis Business Park or Campus
☐ Please check this box to indicate whether there are other applications you are applying for on the same premise.

For details about the information required as part of the application process, please see the Implementation Procedures to Operate a Commercial Cannabis Business in Hanford, Ordinance No. 17-08 and additional requirements to complete the application process. All these documents can be found on the City of Hanford webpage: www.cityofhanfordca.com

COMMERCIAL MEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

Phase II

Section A: Principal Background Information (Must be signed by all Principals)

Under penalty of perjury, I acknowledge that I have personal knowledge of the information stated in this application and that the information contained herein is true. I also understand that the information provided in this application, except the Safety and Security Plan in Section C and certain confidential information such as driver's license and social security number which can be redacted, may be public information and subject to disclosure under the California Public Records Act.

Principal Name: Raymond Maskant
 Principal Title: Member / Manager
 Principal Home or Cell Phone: 559-288-3428
 Principal Home Address: 2565 E. Portland Ave. 93701
 Principal Signature: Raymond Maskant Date: 10-11-2017

Attachments:

☐ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

☐ Receipt from background check (Live Scan) Operations in 2018

☐ Picture of applicant (two passport quality photographs 2X2)

☒ Copy of Social Security Card

☒ Copy of Driver's License, DMV issued ID Card or Passport

☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: Jeff Fontes
 Principal Title: Managing Member
 Principal Home or Cell Phone: 559-579-7140
 Principal Home Address: 105 N. Fairfax Ave, Clovis, CA 93612
 Principal Signature: Jeff Fontes Date: 10-11-17

Attachments:

☐ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

☐ Receipt from background check (Live Scan) not active until 2018

☐ Picture of applicant (two passport quality photographs 2X2)

☐ Copy of Social Security Card

☐ Copy of Driver's License, DMV issued ID Card or Passport

Attachment: Attachment 6: Bridge the Gap Application (Cannabis Permit Award)

COMMERCIAL MEDICAL CANNABIS BUSINESS PERMIT APPLICATION

Page 2 of 6

____ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

Principal Name: Darrel Brian Brooks

Principal Title: Managing member

Principal Home or Cell Phone: 559-299-8483

Principal Home Address: 1453 University Ave, Hanford, CA 93230

Principal Signature: [Signature] Date: 10-11-2017

Attachments:

____ Proof of status as a qualified patient or primary caregiver (State card or doctor recommendation)

____ Receipt from background check (Live Scan) not separately sent

____ Picture of applicant (two passport quality photographs 2X2)

☒ Copy of Social Security Card

☒ Copy of Driver's License, DMV issued ID Card or Passport

☒ Proof of address (DMV-issued ID/driver's license, and/or recent utility bill under Principal's name)

Staff use only: Pass background check ☐ Signature

ADD MORE PAGES AS NECESSARY TO ACCOMMODATE SIGNATURES OF ALL MEDICAL MARIJUANA BUSINESS PRINCIPALS.

1. List whether, the applicant(s) has other licenses and/or permits issued to and/or revoked from the applicant, in the three years prior to the year of the permit application, such other licenses and or permits relating to similar business activities as in the permit application. If yes, please list the type, current status, issuing/denying for each license/permit. (Please attach a separate document explanation if necessary)

2. List any and all partners who have been found guilty of a violent felony, a felony or misdemeanor involving fraud, deceit, embezzlement, or moral turpitude, or the illegal use, possession, transportation, distribution or similar activities related to controlled substances, as defined in the Federal Controlled Substance Act, with the exception of medical cannabis related offenses for which the conviction occurred after the passage of the Compassionate Use Act of 1996. (Please attach a separate document explanation if necessary)

Attachment: Attachment 6: Bridge the Gap Application (Cannabis Permit Award)

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

BRIDGE THE GAP SOLUTIONS is a California LLC
 filed with The ~~State~~ State
 SEE ATTACH

☐ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):

2. Proposed Location of Business:

3. Name and address of property owner: _____

4. Name and address of school closest to Proposed Location: _____

5. Name and address of existing alcohol related establishment closest to Proposed Location:

6. Have you received a Zoning Verification Letter? (Please check the appropriate response)

Yes ☐ (If yes, include documentation with this section of the application) No ☐

7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.

Section B: Business Organization Status

1. Describe the Commercial Cannabis Business organizational status:

Bridge the Gap Solutions, is a registered Limited Liability Company (LLC) with the State of California.

The business is owned equally by two individuals (principles) whom, as managing members, will actively control and oversee business operations.

Attached as exhibit A, articles of organization and operating agreement

- ☐ Attach proof of status, such as articles of incorporation, by-laws, partnership agreements, and other documentation as may be appropriate or required by the City.

Section C: Commercial Cannabis Business Description and Location

1. Statement of Purpose of Commercial Cannabis Business (a separate sheet may be attached):

See attached exhibit B

2. Proposed Location of Business:

3. Name and address of property owner:

4. Name and address of school closest to Proposed Location:

5. Name and address of existing alcohol related establishment closest to Proposed Location:

6. Have you received a Zoning Verification Letter? (Please check the appropriate response)

Yes ☒ (If yes, include documentation with this section of the application) No ☐

7. Description of neighborhood around the proposed location (surrounding uses, nearby sensitive uses (such as schools, churches, parks, daycares, or libraries), transit access to site, etc. A separate sheet may be attached.

Attached as exhibit C

8. Site plan must be dimensioned and show the entire parcel including parking and additional structures. In addition, please, show elevations and photos of proposed location (Attach to application). If any exterior alterations are proposed for the existing building, also attach proposed site plans (accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location and elevations.
9. Floor Plans (Attach to application accurate, dimensioned and to-scale [minimum scale of 1/4"] should be included for each potential location). If any interior alterations are proposed for the existing building, also attach proposed floor plans.
10. Signage Plan.
11. Vicinity Map.
12. Photos of the site and building(s).

Section D: Required supplemental information

This information is required for this application to be considered complete. Attach the following reports to the application. For explanation about the information required, see the Implementation Procedures handout.

- ☐ Business Plan
- ☐ Neighborhood Compatibility Plan
- ☐ Safety and Security Plan

PHASE III

Section E: Final Location Information

Only one site per application can be considered at this point. Attach proof of ownership of the site OR signed and notarized statement from the owner.

Section F: Essential Supplemental Information

This information is required and you must submit this as part of meeting the requirements for a completed application. Check the box evidencing that you have read the Description of Evaluation Criteria related to these specific categories in the Implementation Procedures and attach the relative report(s) to the application.

- ☐ Enhanced Project Safety
- ☐ Environmental Benefits
- ☐ Community Benefits
- ☐ Labor and Employment
- ☐ Local Enterprise
- ☐ Qualifications of Principals

COMMERCIALMEDICAL CANNABIS BUSINESS PERMIT APPLICATION

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Staff use only:

Date of initial application: _____

Number assigned to application: _____

Date fee received for Phase II: _____

Date application reviewed for Phase II: _____

Points Awarded in Phase II: _____

☐

Continued to Phase III

☐

Denied

Date fee received for Phase III: _____

Date Proof of ownership was verified or a signed and notarized statement from the property owner was received for Phase III: _____

Date application reviewed for Phase III: _____

☐

Approved

☐

Denied

Date fee received for Phase IV: _____

Date application reviewed for Phase IV: _____

☐

Approved

☐

Denied