

The City of Hanford
CALIFORNIA



City Council Meeting Agenda

February 16, 2021
7:00 PM – Regular Meeting
Council Chambers
400 N. Douty St.

The Council Chambers will be closed to the public and public comment can be made by video teleconference ONLY.
The meeting will also be lived streamed on the City's website:
<http://livestream.hanford.city/>

Video Teleconference via ZOOM. Council Members will attend remotely.

Zoom meeting information:

<https://us02web.zoom.us/j/89338462234?pwd=VERWQzUzNzRoU3pTZHFiMFpvR1ZwZz09>

(Limited virtual access)

5:00 PM CALL TO ORDER STUDY AND CLOSED SESSION:

ROLL CALL BY THE CITY CLERK :

PUBLIC COMMENT:

*Comments from the public are limited to items on the agenda (GC 54954.3a). A maximum of **three minutes** is allowed for each speaker. Please begin your comments by stating your name and providing your city of residence.*

STUDY SESSION :

- A. Public Works: Presentation and Discussion of the Downtown Pedestrian Safety & Traffic Circulation Study.

CLOSED SESSION FOR DISCUSSION OF THE FOLLOWING:

- A. CONFERENCE WITH LEGAL COUNSEL - REAL PROPERTY NEGOTIATIONS (gc 54956.8)

Property: 426 W. Lacey Blvd

Agency Negotiators: Mario Cifuentez, Ty Mizote

Negotiating Agency: Dirk Holkeboer, Habitat for Humanity

CALL TO ORDER REGULAR SESSION:

ROLL CALL:

INVOCATION:

Pastor Andrew Cromwell

FLAG SALUTE:

CLOSED SESSION ACTION REPORT :

STAFF COMMUNICATIONS:

COUNCIL REPORTS/COMMENTS:

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. PROCEDURAL WAIVER: Waive reading in full of resolution and ordinances and approval and adoption of same by reading title only.
- B. City Clerk: Denial of a claim for damages and authorization for the City Clerk to send out notification of such to Julia Padilla.
- C. City Clerk: Denial of a claim for damages and authorization for the City Clerk to send out notification of such to Arnold Avila.
- D. Administration: Reject notice of government claim.

- E. Parks and Community Services: Approval of a new 3-year Ground Lease Agreement with Framework Racing for the Hanford BMX Track.
- F. Parks and Community Services: Adoption of Resolution No. 21-06-R, Authorizing the City Manager to submit an application for funding under the Proposition 68 Statewide Park and Development Community Revitalization Program.
- G. Public Works: Authorization for Reimbursements to Presidio JJR Bella Vista 128, LLC., in the amount of \$35,702.33, for the construction of off-site street improvements along the development frontage of Tract No. 918, Unit No. 2 (Centennial Drive and Devon Street), \$4,960.24, for the oversizing of the sewer main within Centennial Drive from an 8 inch to a 12 inch, and \$6,839.34, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch. .
- H. Public Works: Authorization to reimburse Presidio JJR Bella Vista 128, LLC., \$159,517.84 for the construction of off-site street improvements, along the development frontage of Tract No. 919, authorize an additional appropriation of \$163,943.21 from the Transportation Impact Fee Reserves, and reimburse Presidio JJR Bella Vista 128, LLC., \$15,378.95, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch. (Centennial Drive and Fargo Avenue)

PUBLIC HEARINGS:

- A. Public Works: Conduct a public hearing for the formation of Landscape Assessment District No. 20-01 at NEC of 13th Avenue and Devon Street, and adopt Resolution 21-05-R establishing the formation of the district and confirming the levy and collection of annual assessment.

GENERAL BUSINESS:

- A. Administration: Authorization to enter into a contract with Integrated Avian Solutions to provide Falconer services to reduce the Crow Population in Downtown Hanford for an amount not to exceed \$47,600 for Calendar Year 2021.
- B. Council: Appointment of new members to fill vacancies and Reappointment of existing members to serve new terms on the various City Commissions.

COUNCIL FUTURE AGENDA ITEMS:

- A. Council Future Agenda Items

Upcoming Dates

February 17: Fire Department: Badge Pinning - Civic Auditorium 4:00 p.m.
February 19: Goals and Objectives Meeting
March 2: City Council Meeting
March 11: City Employee Appreciation Luncheon
March 16: City Council Meeting

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. Douty 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. Douty 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: 2/16/2021	AGENDA SECTION: A
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SUBJECT:

Public Works: Presentation and Discussion of the Downtown Pedestrian Safety & Traffic Circulation Study

DISCUSSION:

Staff along with the City's consultant, Peters Engineering, will be presenting the Council with the results of the Downtown Committee's recommendations for the Downtown Pedestrian Safety & Traffic Circulation Study.

FISCAL IMPACT:**ATTACHMENTS:**

Downtown Ped Safety and Traffic Circulation (1-27-21)



City of Hanford

Downtown Pedestrian Safety & Traffic Circulation Project

January 27, 2021



Peters Engineering Group

BACKGROUND

The project includes identifying intersections in the Central Parking and Business District that can potentially benefit from pedestrian safety and accessibility improvements. The analysis will include consideration of traffic calming (bulb-outs), evaluation of one-way streets downtown for traffic flow and parking/pedestrian safety, evaluation of conversion of Douty Street and Seventh Street to one lane with traffic calming, and design of intersection improvements for pedestrian safety/ADA compliance.

Figure 1 presents the boundary of the downtown area which includes twenty eight (28) intersections and nine (9) mid-block crosswalks.



Figure 1 – Study Area

DOWNTOWN COMMITTEE / PUBLIC MEETINGS

During the course of the preparation of this report, Peters Engineering Group participated in several meetings with the City of Hanford Downtown Committee. The purpose of the meetings was to collaborate with members of the downtown community and receive input on the analysis and recommendations being developed. The three coordination meetings and a brief summary of discussion items are presented below:

December 13, 2018 – A meeting was held in person with the Committee at the City Hall training room. The purpose of the meeting was to introduce the scope of the project and receive initial feedback from members regarding the study.

February 21, 2019 – A meeting was held in person with the Committee at the City Hall training room. The purpose of the meeting was to present the initial traffic analysis related to mid-block crosswalks, roadway operations and traffic signal operations.

August 27, 2020 – A virtual meeting was held with the Committee utilizing Zoom. The Committee was presented with findings and recommendations regarding mid-block crosswalks, proposals for roadway modifications, and the recommendations regarding signalized intersections.

Throughout the process the Committee provided feedback and recommendations that in some instances are contrary to Peters Engineering Group recommendations. The feedback from the Committee will be presented in this report in addition to the traffic recommendations herein.

CIRCULATION ANALYSIS

A traffic analysis was performed to evaluate the following proposed circulation modifications:

1. Conversion of Seventh Street and Sixth Street to one-way traffic in the downtown area to potentially create additional parking on the street.
2. Conversion of Douty Street and Seventh Street to single lane with angled parking in the downtown area.

Twenty-four-hour traffic counts were performed on each approach to the various study intersections in order to perform the analysis. Manual traffic counts, including turning movements, were performed at all intersections between the hours of 7:00 a.m. and 9:00 a.m. and between the hours of 4:00 p.m. and 6:00 p.m. on a weekday. Pedestrian and vehicle counts were performed at mid-block crosswalks between the hours of 7:00 a.m. and 9:00 a.m., between the hours of 11:00 a.m. and 2:00 p.m. and between the hours of 4:00 p.m. and 6:00 p.m.

The results of the PM peak hour analysis is presented in Table 1.

DOWNTOWN PEDESTRIAN SAFETY & TRAFFIC CIRCULATION PROJECT

Table 1 – PM Peak Hour Analysis

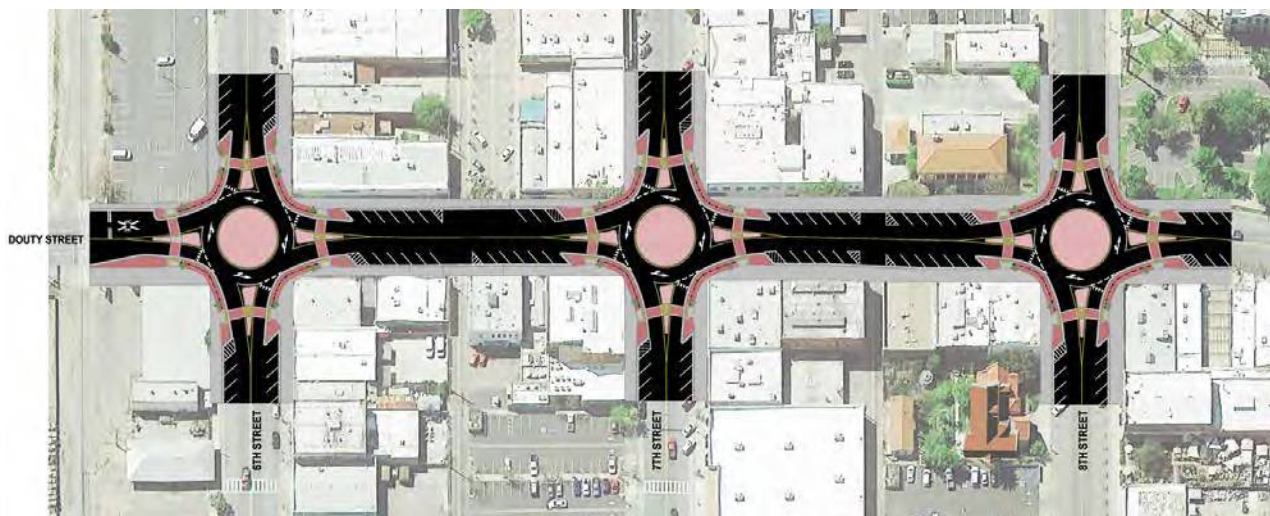
EXISTING					2040				
	Redington	Irwin	Douty	Harris		Redington	Irwin	Douty	Harris
7th Street	A	B	A	A	7th Street	B	B	B	B
6th Street	B	B	C	B	6th Street	C	C	E	C
EXISTING (Existing traffic signals removed)					2040 (Existing traffic signals removed)				
	Redington	Irwin	Douty	Harris		Redington	Irwin	Douty	Harris
7th Street	B	B	C	B	7th Street	D	B	D	C
6th Street	B	B	C	B	6th Street	C	C	E	C
ONE-WAY, ONE LANE (Existing traffic signals removed)					ONE-WAY, ONE LANE (Existing traffic signals removed)				
	Redington	Irwin	Douty	Harris		Redington	Irwin	Douty	Harris
7th Street	D	C	F	E	7th Street	F	F	F	F
6th Street	F	C	F	F	6th Street	F	E	F	F
ONE-WAY, TWO LANES (Existing traffic signals removed)					ONE-WAY, TWO LANES (Existing traffic signals removed)				
	Redington	Irwin	Douty	Harris		Redington	Irwin	Douty	Harris
7th Street	B	B	C	C	7th Street	C	C	E	D
6th Street	C	C	C	F	6th Street	E	C	E	F

The analysis concluded that Seventh Street and Sixth Street operate within acceptable levels of service without one-way conversion. Furthermore, if the streets were to be converted to one-way operation, two lanes would be required which would not allow for additional parking to be developed.

Douty Street and Seventh Street were analyzed to determine if a reduction in the number of lanes in each direction, otherwise known as a “lane diet,” would provide adequate capacity and allow for the development of angled parking. The analysis concluded that the street segment portions of the roadways would operate at acceptable levels of service with a single lane in each direction until the year 2040. However, the intersections will require additional lanes to operate efficiently. Because the intersections are relatively closely spaced, very little of the roadway, if any, would be available for angled parking. Therefore, reducing these streets to one-lane in each direction is not a long-term solution.

Another alternative considered in the analysis was the construction of compact roundabouts on Douty Street at Sixth Street, Seventh Street, and Eighth Street. Figure 2 presents the proposed compact roundabouts on Douty Street.

Figure 2 – Douty Street Compact Roundabouts



The proposed Douty Street compact roundabouts will operate at an acceptable level of service through the year 2040 and will provide opportunities for development of angled parking between intersections.

It is recommended that the streets remain two-way operation and that the roundabouts are pursued at a time in the future when funding can be secured for construction of the facilities.

An interim alternative was identified that includes reducing Douty Street to one lane in each direction with the addition of angled parking between Sixth Street and Eighth Street. While not a permanent solution, implementing this alternative would only allow for implementation of additional parking along this segment until funding for the roundabouts can be secured. Only a single approach lane on Douty at the 6th / 7th and 8th Street intersections would be provided under this alternative. This would require modifications to the signalization at 7th Street to provide for split phasing on the Douty Street approached so that left turning vehicles do not impair through movements.

The Downtown Committee concurred with maintaining the two-way operation on both Seventh and Sixth Streets, pursuing the interim alternative of reducing Douty Street to one lane in each direction with angled parking, and supported pursuing the roundabout alternatives in the future if/when funding becomes available.

Traffic analysis calculations are included in the Appendix.

TRAFFIC SIGNAL WARRANT ANALYSIS

The study performed intersection analyses to ascertain the operational conditions at following five (5) existing signalized intersections:

1. Seventh Street / Harris Street
2. Seventh Street / Irwin Street
3. Seventh Street / Douty Street
4. Seventh Street / Redington Street
5. Lacey Boulevard / Redington Street

The purpose of the analysis was to determine which, if any, of the multi-way stop sign and traffic signal criteria presented in the most recent California Manual on Uniform Traffic Control Devices (CMUTCD) are satisfied. The intent of this task is to determine whether traffic signals or multi-way stop control is the preferred intersection control.

The traffic analysis concluded that traffic signals should be removed at the following intersections due to the fact that they do not currently meet warrants and are non-standard signal installations:

1. Seventh Street / Harris Street
2. Seventh Street / Irwin Street
3. Seventh Street / Douty Street (possibly replaced with a roundabout)

Traffic signal warrants are met at both the Seventh Street / Redington Street and Lacey Boulevard / Redington Street intersections. It is recommended to maintain traffic signals at both locations due to the intersections meeting warrants and the traffic signals being mostly in compliance with modern standards. The Downtown Committee concurred with this recommendation.

MID-BLOCK CROSSWALKS

Several mid-block crosswalks were analyzed to determine the safety and effectiveness of these facilities. Warrants for installation of mid-block crosswalks are as follows:

- Pedestrian volume (>10/hr)
- Speed Limit (<45 mph)
- Nearest crosswalk (>800 feet)
- If minimum criteria are met further evaluation is necessary
 - i. Number of pedestrians
 - ii. Effectiveness of crosswalk (visibility, channelization, etc.)
 - iii. Available gaps in traffic

DOWNTOWN PEDESTRIAN SAFETY & TRAFFIC CIRCULATION PROJECT

A summary of the mid-block crosswalk metrics is presented in Table 2.

Table 2
Mid-Block Crosswalk Summary

Location	Street	Adjacent Streets	Near Alley?	Pedestrian Peak Hour Volume	Conflicting Vehicular Peak-Hour Volume	Time Period	Special Notes
A	Lacey Blvd.	Redington / Irwin	No	7	530	Mid-day	Curb in median blocks accessibility
B	Eighth St.	Phillips / Redington	No	26	228	Mid-day	Relatively good access exists
C	Eighth St.	Redington / Irwin	No	13	309	Mid-day	Relatively good access exists
D	Irwin St.	7th / 8th	Yes	15	305	Mid-day	No ramps, difficult access
E	Douty St.	7th / 8th	Yes	17	558	PM	No ramps, difficult access, fire hydran
F	Seventh St.	Phillips / Redington	No	14	609	Mid-day	Relatively good access exists
G	Seventh St.	Douty / Harris	No	15	460	PM	Relatively good access exists
H	Irwin St.	6th / 7th	Yes	27	126	PM	No ramps, difficult access, fire hydran
I	Douty St.	6th / 7th	Yes	18	590	PM	No ramps, difficult access, poles
J	Sixth St.	Redington / Irwin	No	5	427	Mid-day	Relatively good access exists
K	Sixth St.	Irwin / Douty	No	19	418	Mid-day	Relatively good access exists
L	Sixth St.	Douty / Harris	No	4	523	PM	No curb ramp on north side

The analysis focused on determining whether each individual crosswalk was warranted and, if so, if improvements could be made to enhance safety. If the crosswalk was not warranted and exhibited safety deficiencies it would be identified to be removed. An example of a crosswalk that met warrants and included sufficient safety features, such as ramps and sufficient sight distance, is shown in Figure 3.

Figure 3
Sixth Street between Irwin Street and Douty Street



An example of a crosswalk that did not meet warrants and exhibited deficiencies, such as inadequate ramps and insufficient sight distance, is shown in Figure 4.

Figure 4
Sixth Street between Douty Street and Harris Street.



A summary of recommendations at the seven mid-block crosswalks analyzed is presented in Table 3.

Table 3
Mid-Block Crosswalk Recommendations

Location	Recommendation
Irwin Street (6 th / 7 th)	Remove
Irwin Street (7 th / 8 th)	Remove
Douty Street (6 th / 7 th)	Remove
Douty Street (7 th / 8 th)	Remove
Sixth (Douty / Harris)	Remove
Lacey (Redington / Irwin)	Maintain
Sixth (Redington / Irwin)	Maintain

The Downtown Committee reviewed these recommendations and disagreed with the recommendation to remove both of the mid-block crosswalks on Irwin Street as well as the removal of the mid-block crosswalk on Douty Street between 6th and 7th streets. The remaining recommendations were accepted by the Committee. For the three mid-block crosswalks that the committee wishes to maintain, it is recommended that the additional safety improvements be considered at the crosswalks:

Rapid Flashing Beacons (RFB) – Install RFB's at the crosswalks to alert approaching traffic of pedestrian activity. Additionally, install led warning signs that activate on alley approaches similar to Figure 5 below.

Figure 5
RFB Application



Speed Tables – The City could consider installing low-profile speed tables at the crosswalk locations to slow approaching vehicles. An example of a speed table is shown in Figure 6 below.

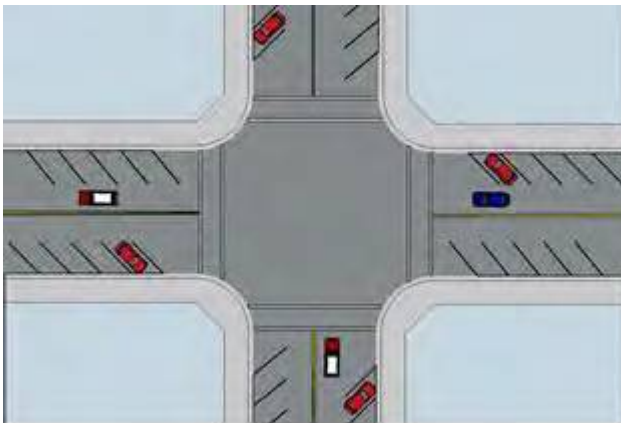
Figure 6 – Speed Table



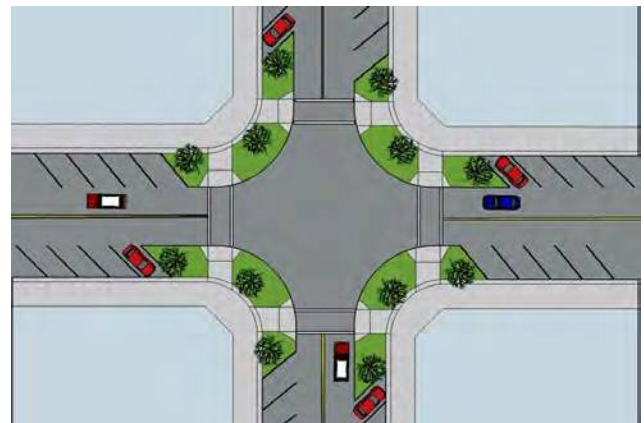
INTERSECTION PEDESTRIAN IMPROVEMENTS

In an effort to provide a more walkable pedestrian friendly environment in the downtown area, intersections were evaluated to determine improvements which would promote pedestrian travel and improve safety. Figure 7 presents curb extension improvements proposed at twenty eight (28) intersections in downtown:

Figure 7
Pedestrian Intersection Treatment



Existing Intersection



Proposed Intersection

The Downtown Committee concurred with the benefits of the proposed pedestrian improvements and concurred with the recommendation to pursue these improvements.

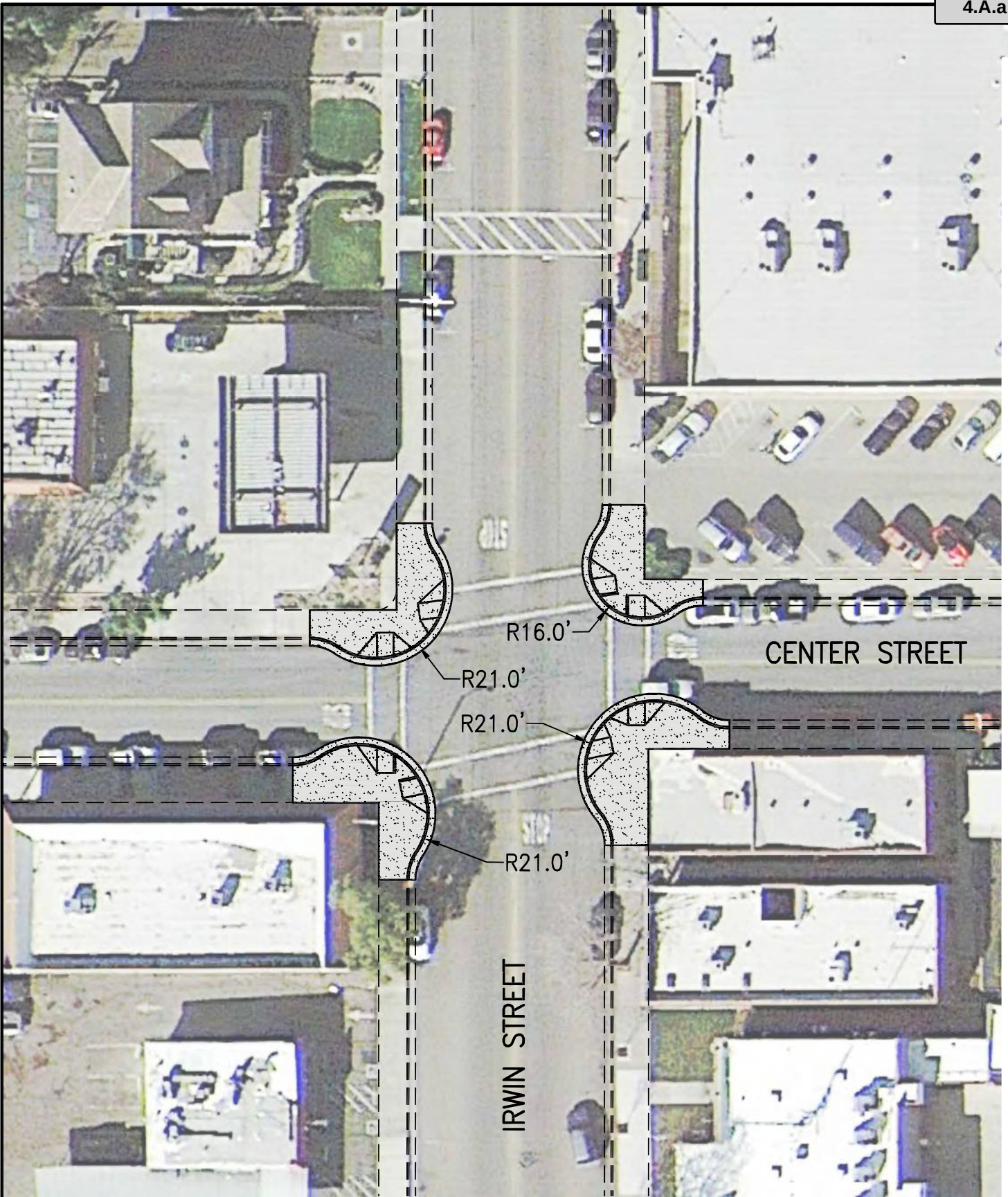
Preliminary layouts of curb extension improvements for each of the twenty eight intersections are included in the Appendix.

CONCLUSIONS/SUMMARY OF RECOMMENDATIONS

The study conclusions and recommendations are summarized as follows:

Recommendation	Committee Response
Sixth Street and Seventh Street should be maintained as two-way streets	Concurred.
Compact roundabouts should be considered on Douty Street at Sixth Street, Seventh Street, and Eighth Street in the future if/when funding becomes available.	Concurred.
As in interim project, Douty Street between 6 th Street and 8 th Street should be reduced to one-lane in each direction and angled parking should be developed along this segment. This will require split phase signal operations at Douty / 7 th .	Concurred.
Traffic signals should be removed at Seventh Street / Harris Street, Seventh Street / Irwin Street, and Seventh Street / Douty Street and maintained at Seventh Street / Redington Street and Lacey Boulevard / Redington.	Concurred.
Pedestrian curb extensions should be installed at twenty eight (28) intersections included in the study area.	Concurred.
Remove mid-block crosswalk on Irwin Street between 6 th /7 th .	Maintain crosswalk – install safety improvements.
Remove mid-block crosswalk on Irwin Street between 7th/8th.	Maintain crosswalk – install safety improvements.
Remove mid-block crosswalk on Douty Street between 6th/7th.	Maintain crosswalk – install safety improvements.
Remove mid-block crosswalk on Douty Street between 7th/8th.	Concurred.
Remove mid-block crosswalk on Sixth Street between Douty / Harris.	Concurred.
Maintain mid-block crosswalk on Lacey Blvd between Redington/Irwin.	Concurred.
Maintain mid-block crosswalk on Sixth Street between Redington/Irwin.	Concurred.

APPENDIX

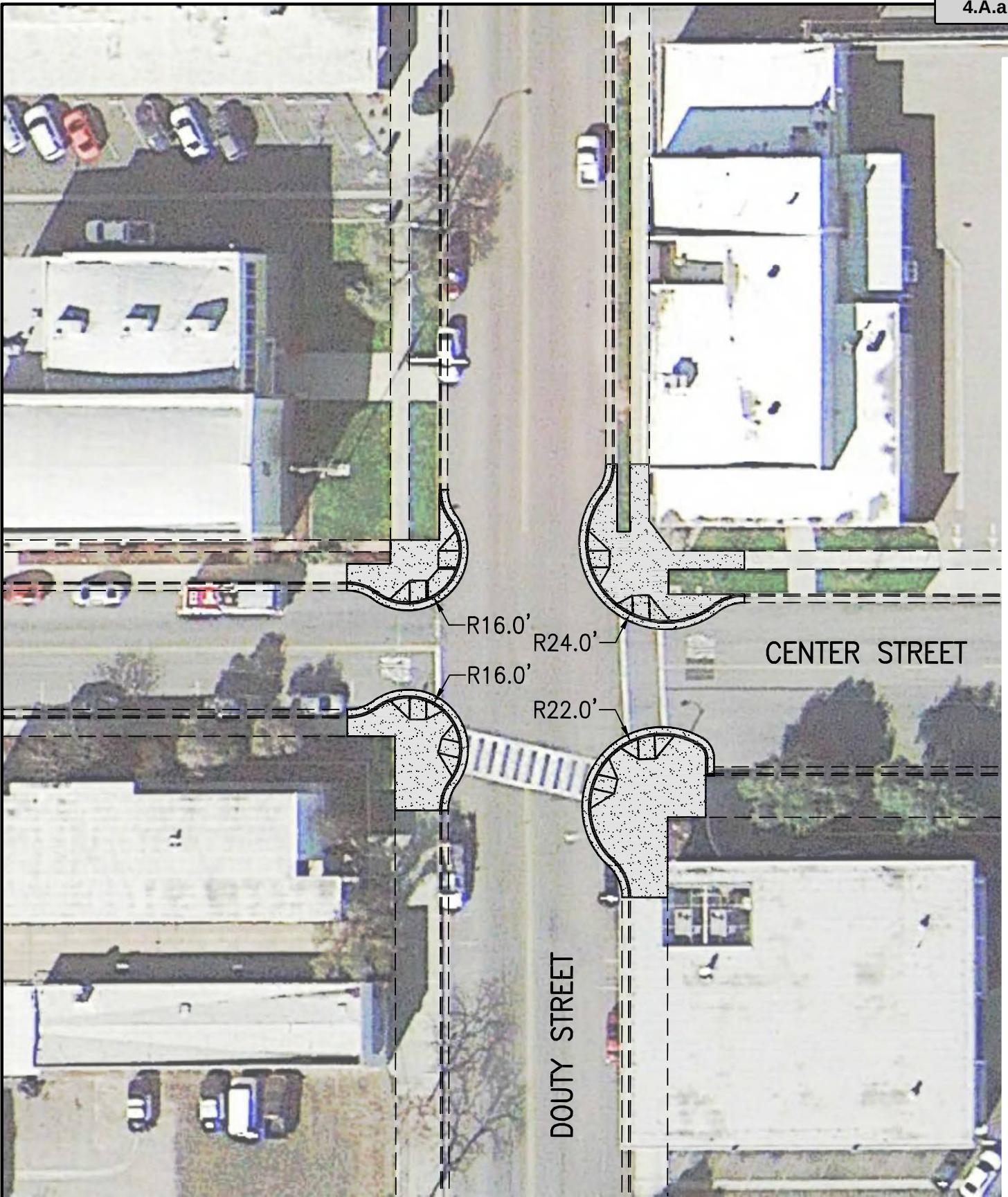


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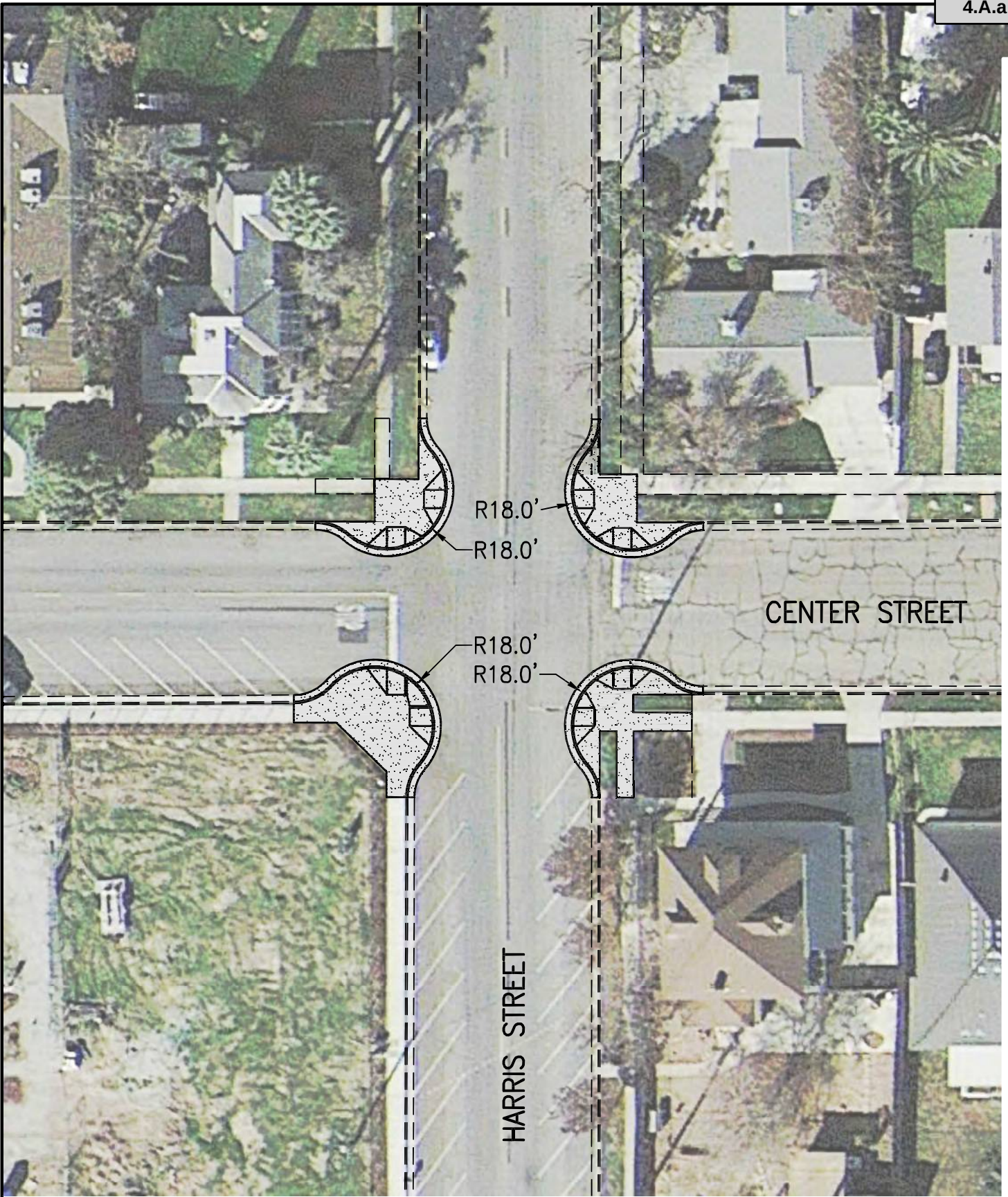
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CENTER STREET & IRWIN STREET



CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
CENTER STREET & DOUTY STREET



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CITY OF HANFORD
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CENTER STREET & HARRIS STREET



DEWEY STREET

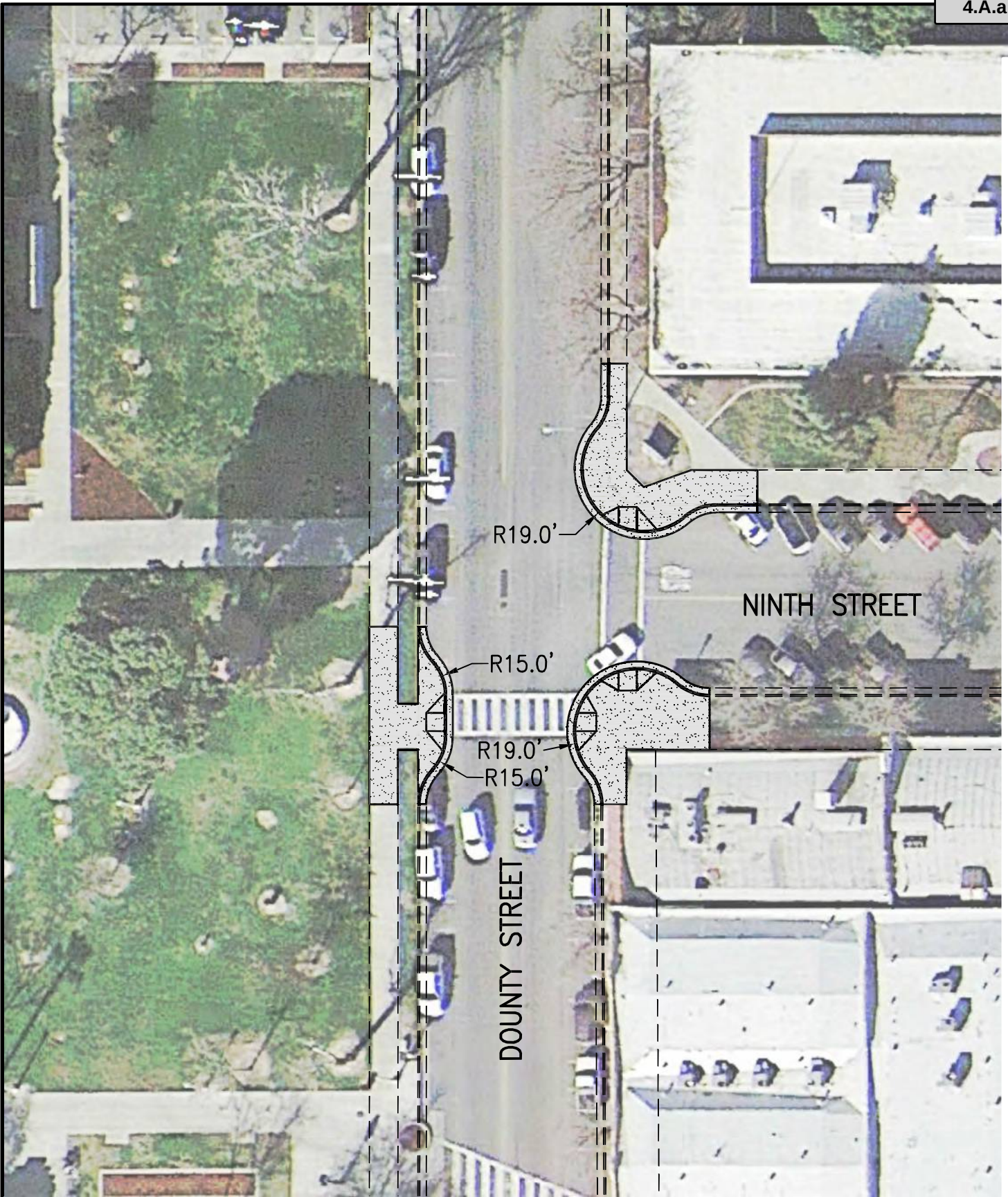
IRWIN STREET

CITY OF HANFORD

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DEWEY STREET & IRWIN STREET



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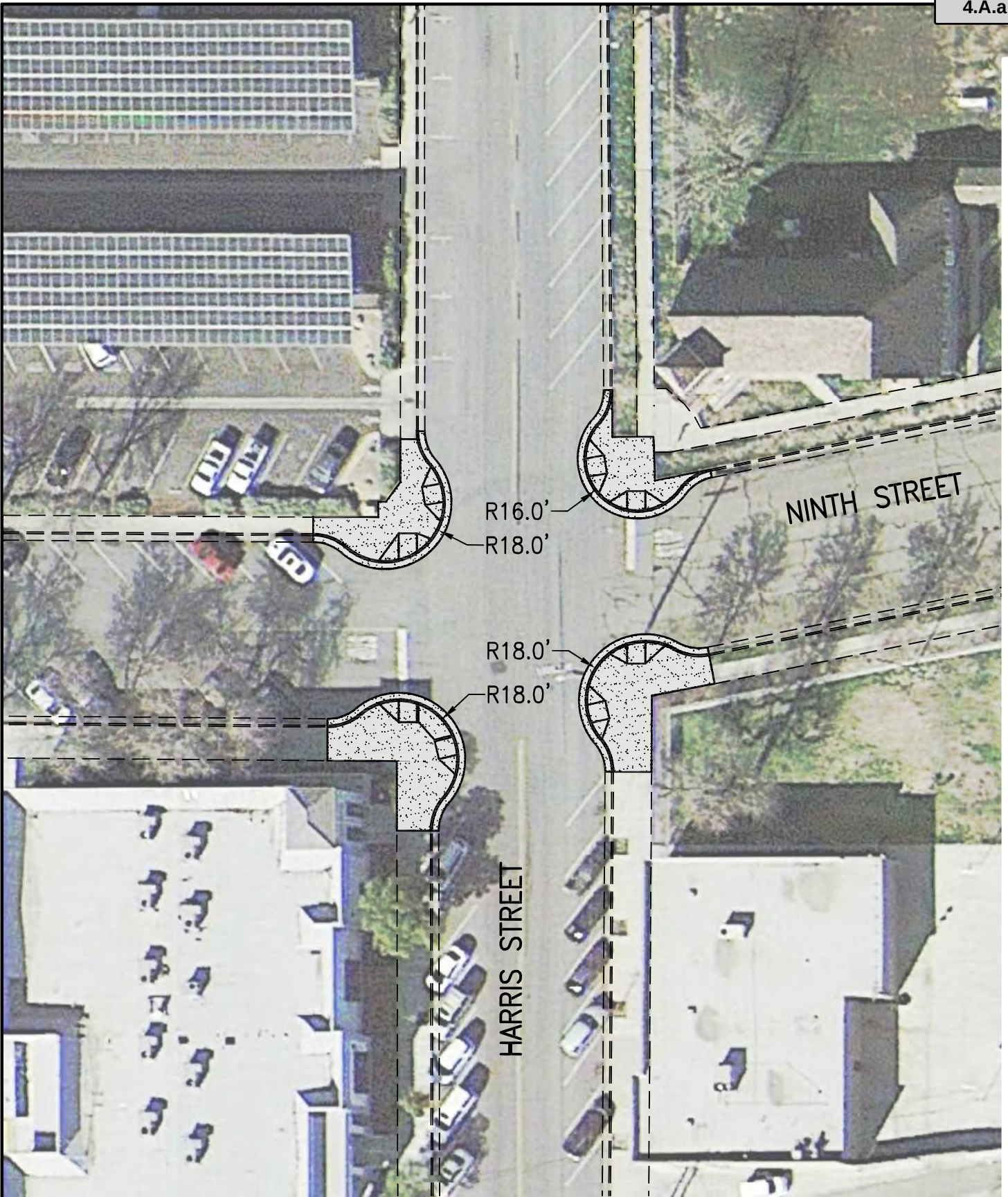
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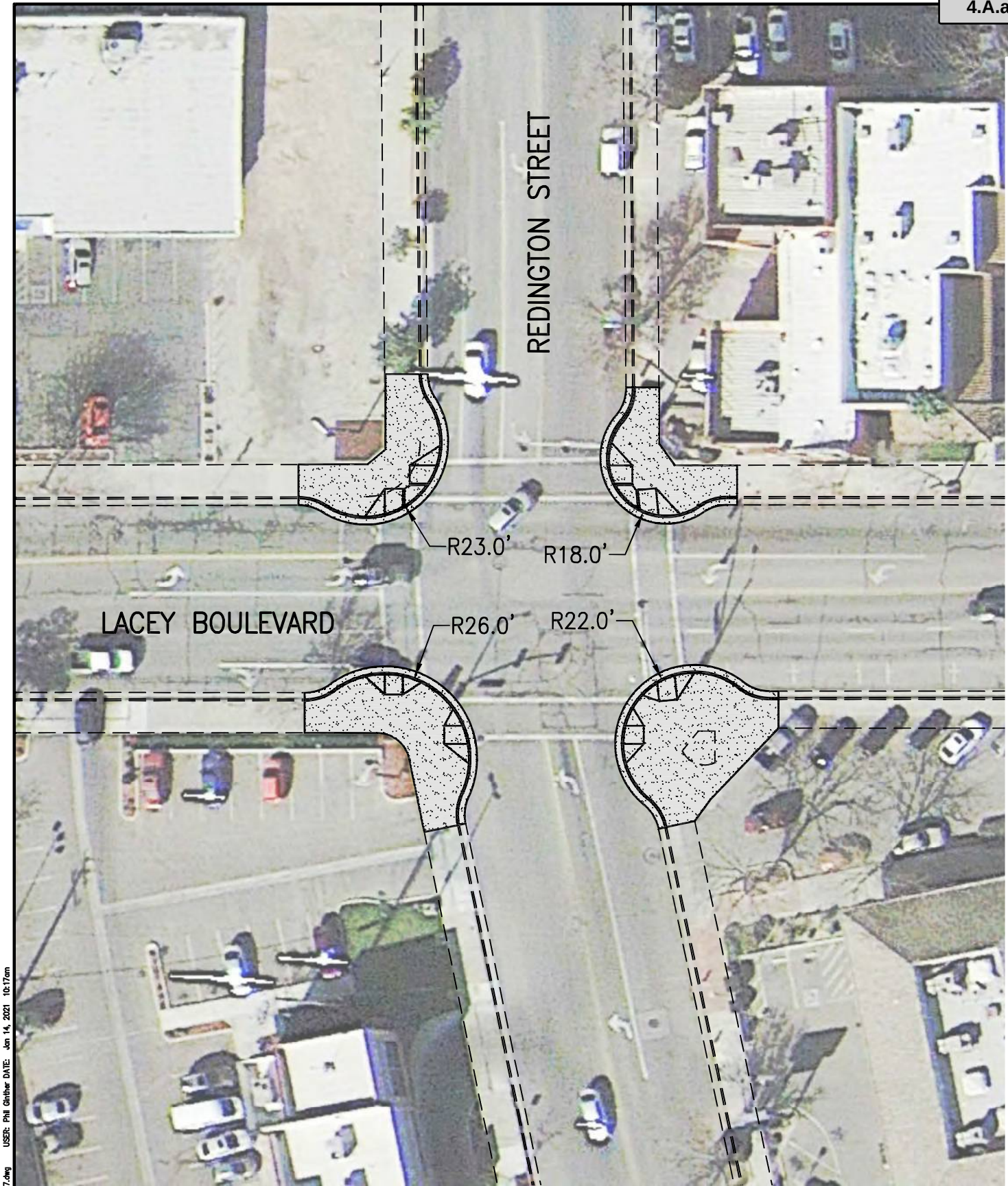
CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
NINTH STREET & DOUTY STREET

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)



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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
NINTH STREET & HARRIS STREET



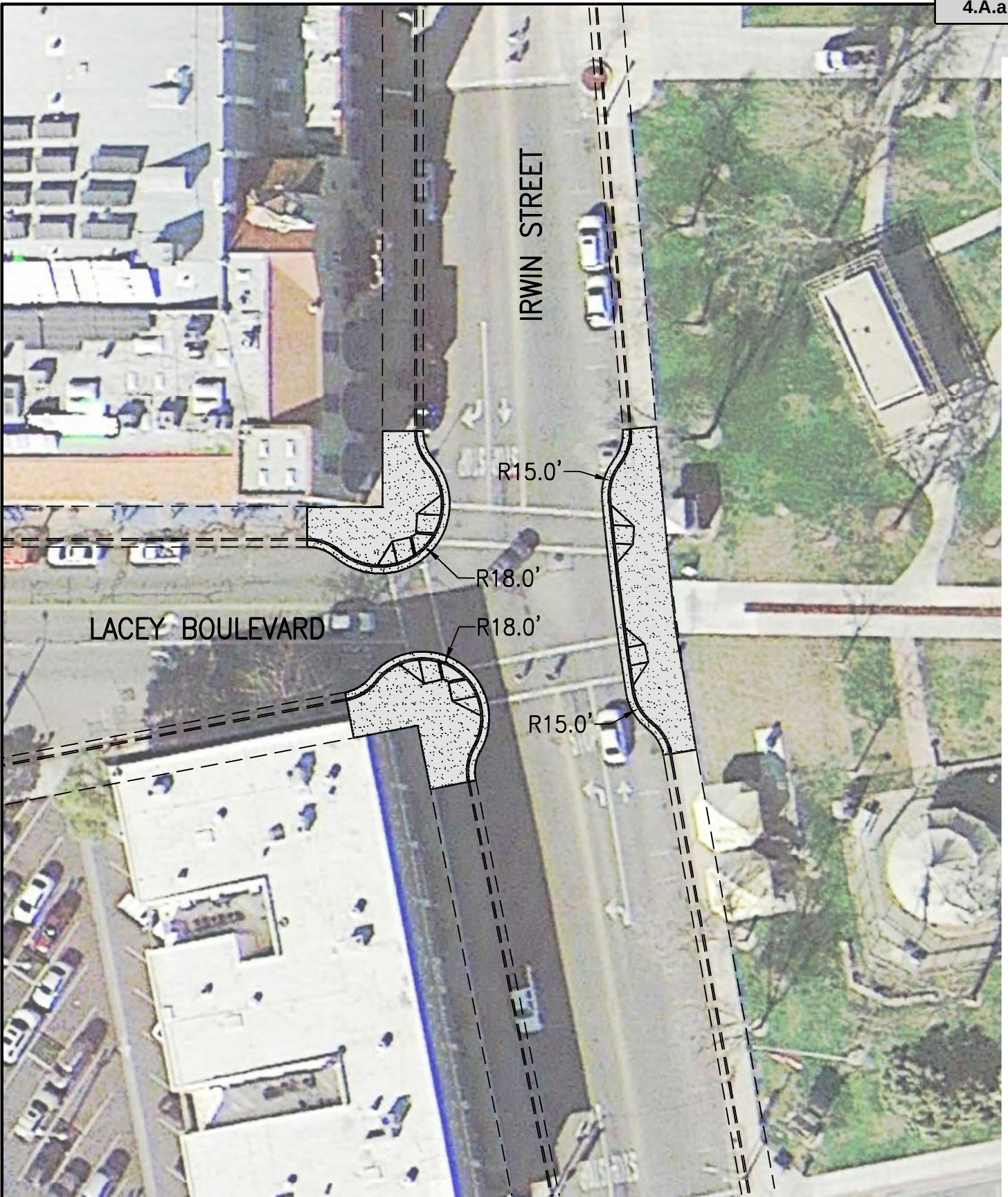
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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
LACEY BOULEVARD & REDINGTON STREET

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)



CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
LACEY BOULEVARD & IRWIN STREET

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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
EIGHT STREET & PHILLIP STREET



EIGHT STREET

REDINGTON STREET

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R20.0'

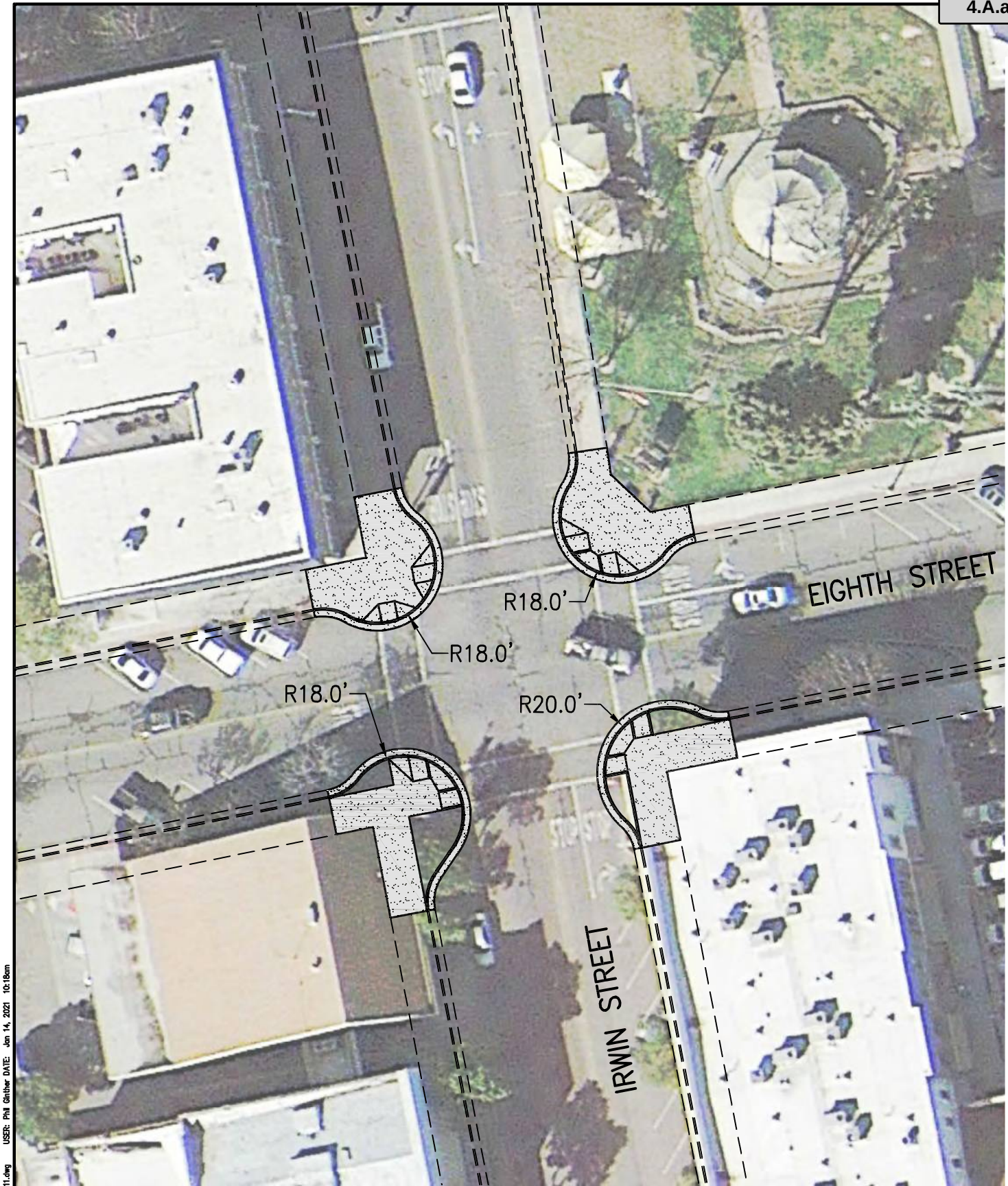
R20.0'

R20.0'

CITY OF HANFORD
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EIGHT STREET & REDINGTON STREET



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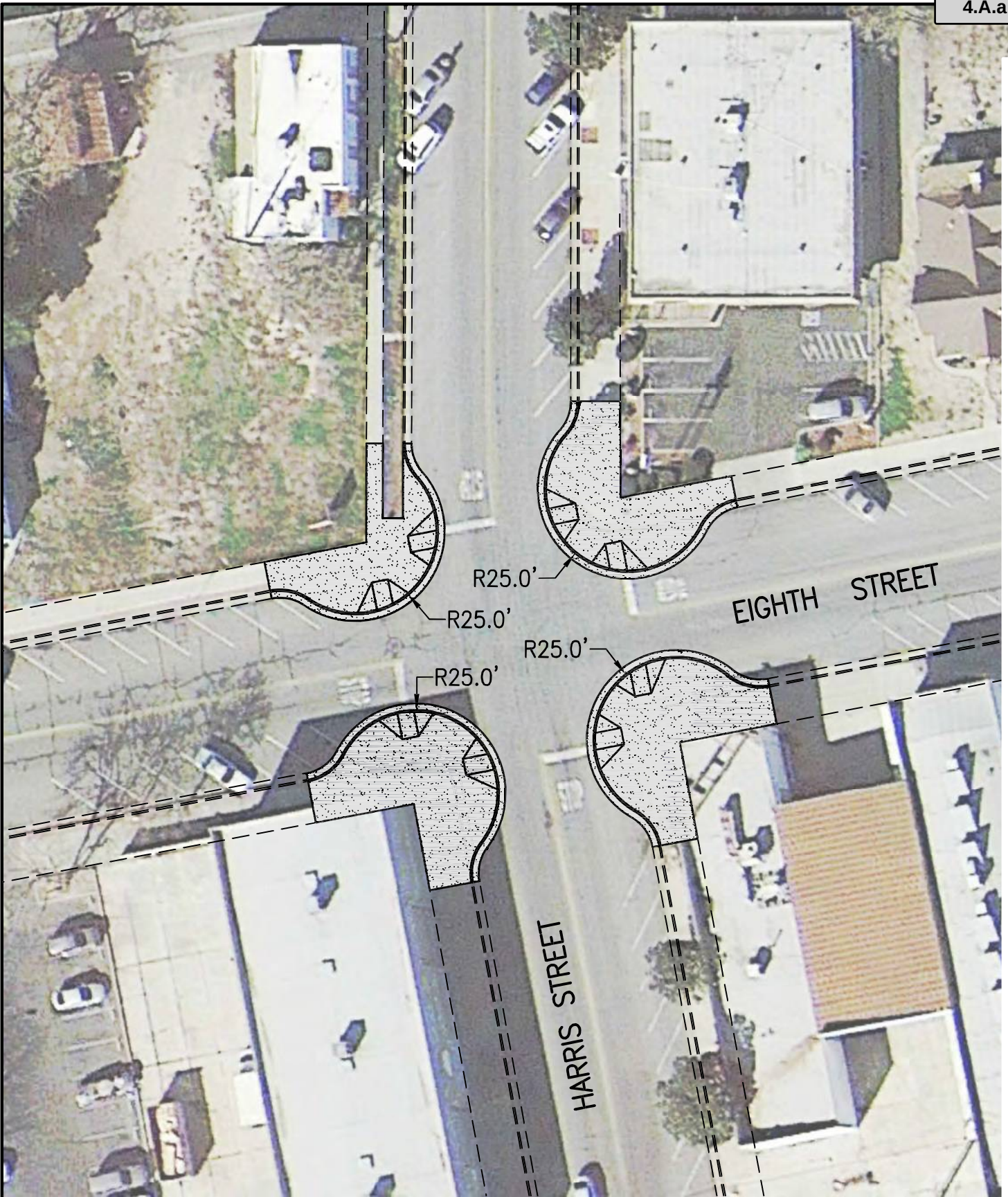
CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
EIGHTH STREET & IRWIN STREET

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)



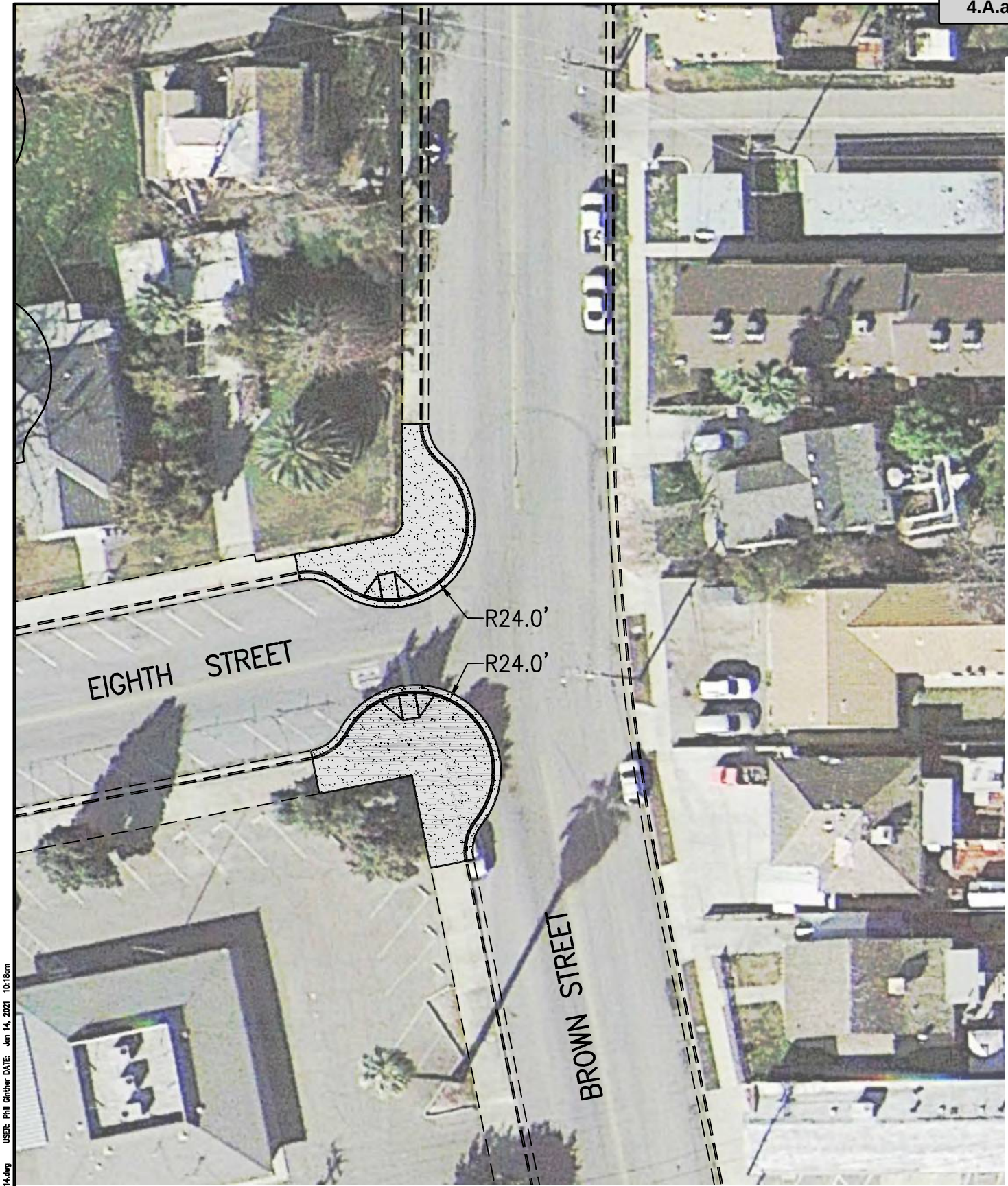
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CITY OF HANFORD
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EIGHTH STREET & DOUTY STREET



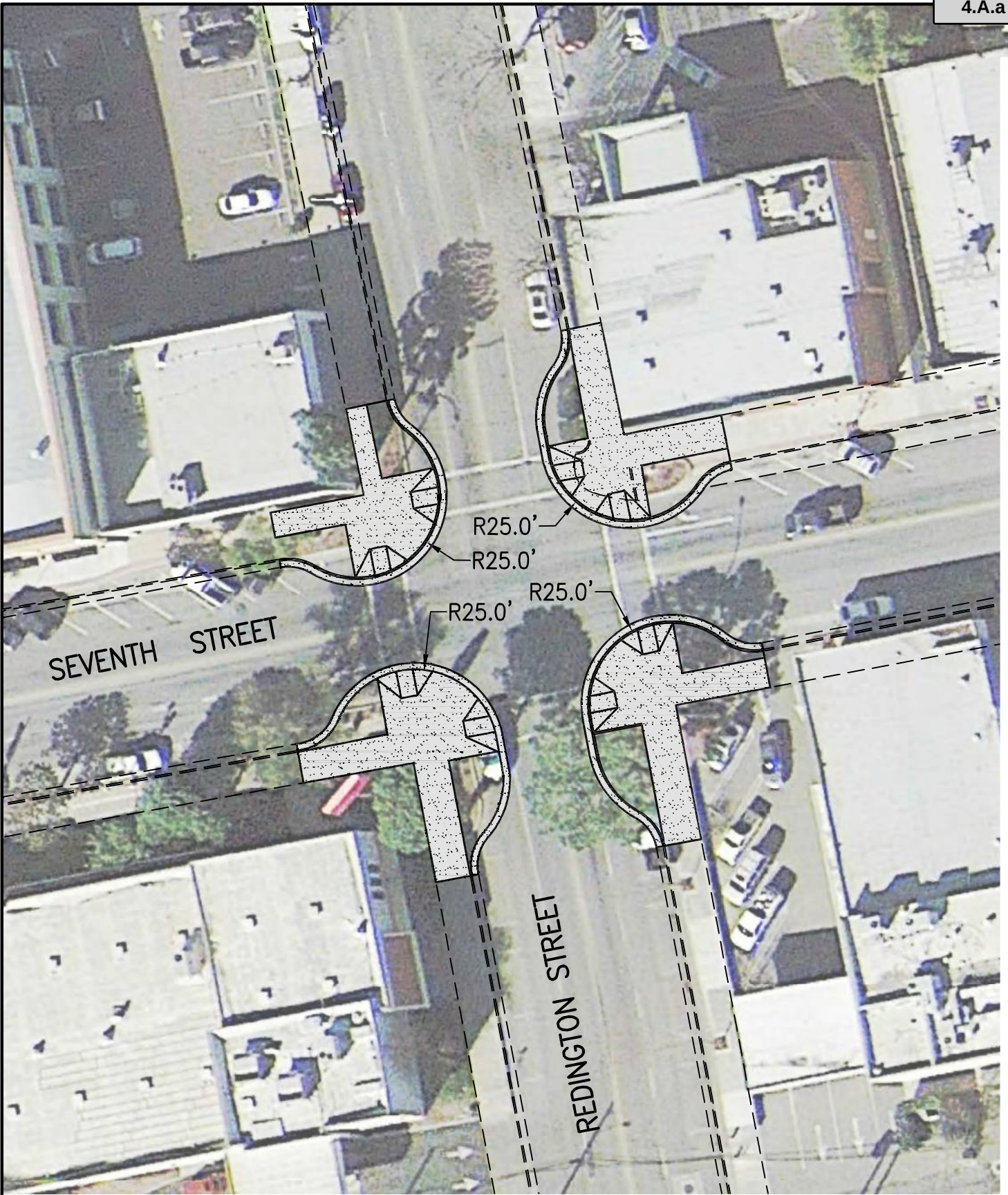
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EIGHTH STREET & HARRIS STREET



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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
EIGHTH STREET & BROWN STREET



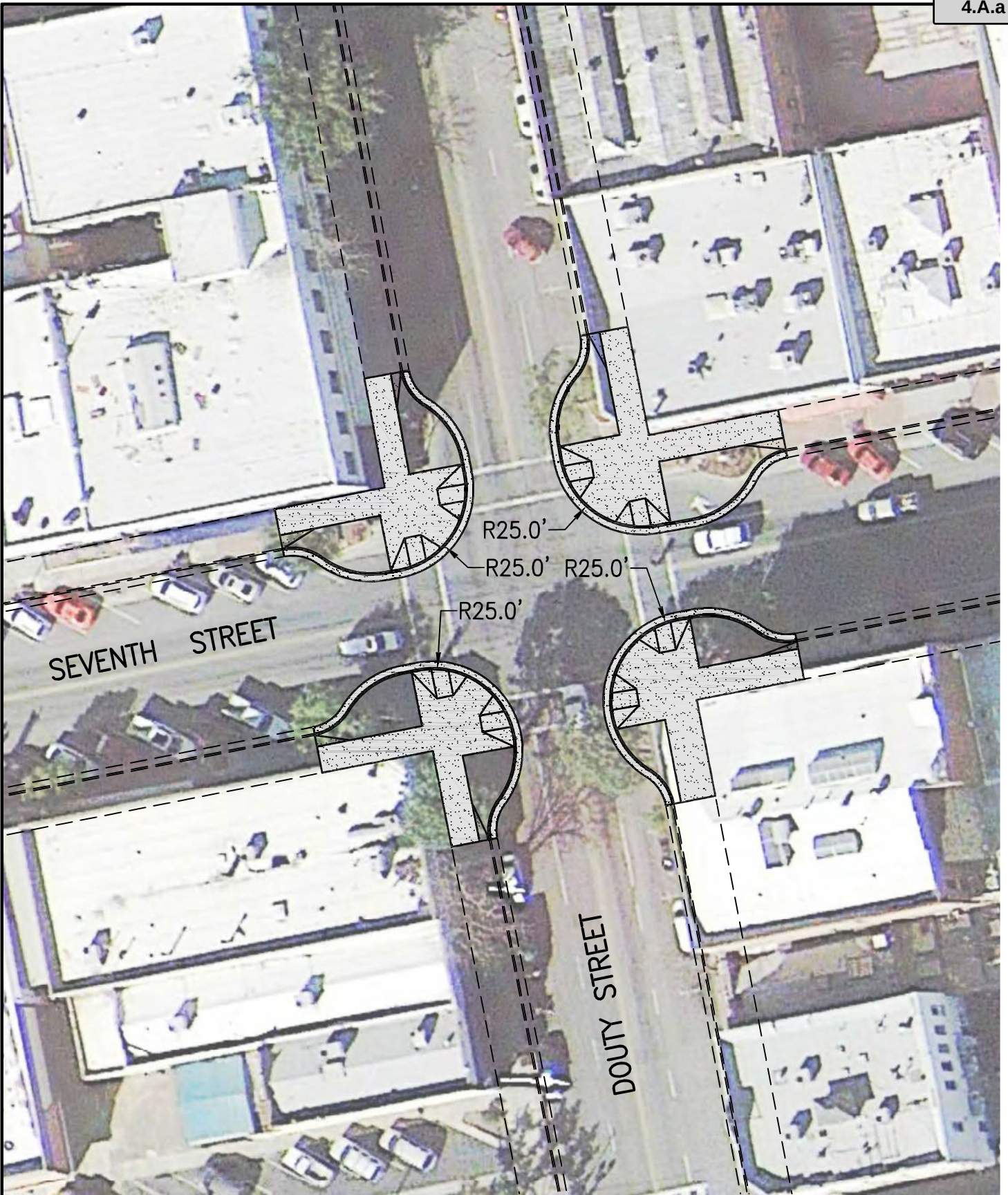
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SEVENTH STREET & REDINGTON STREET



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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SEVENTH STREET & IRWIN STREET



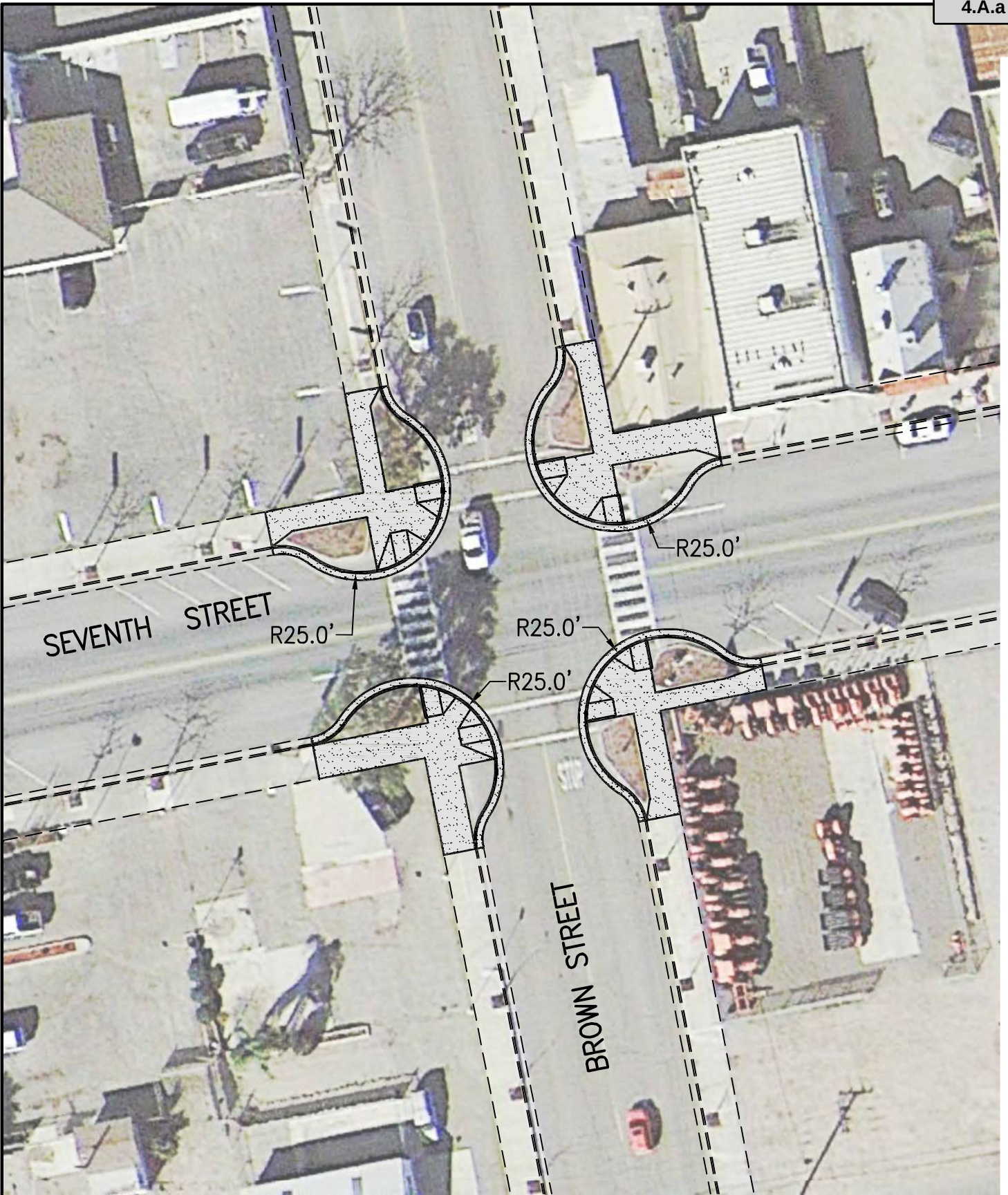
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CITY OF HANFORD
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SEVENTH STREET & DOUTY STREET



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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SEVENTH STREET & HARRIS STREET



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SEVENTH STREET & BROWN STREET

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)



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CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SEVENTH STREET & GREEN STREET

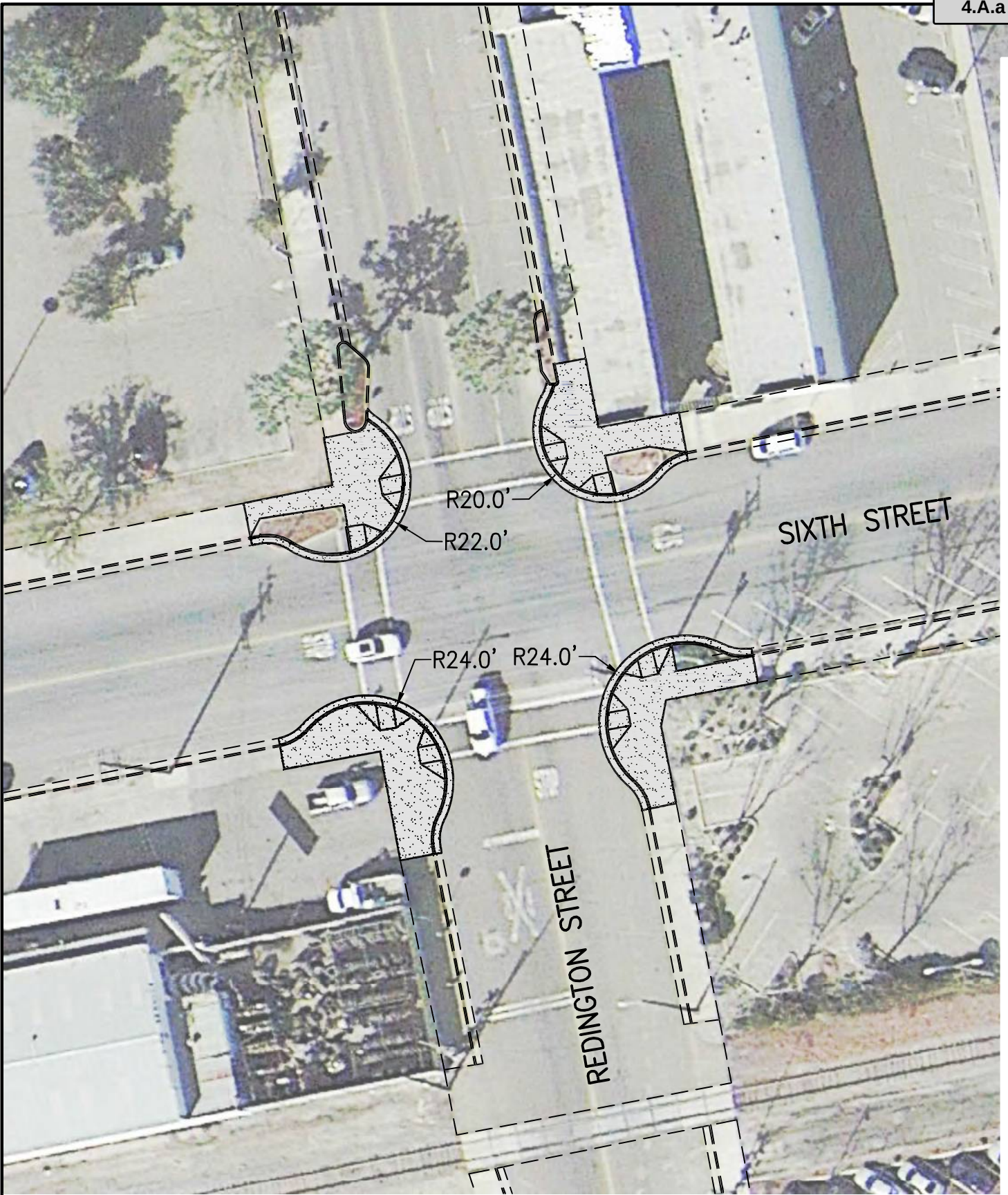
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SEVENTH STREET & WHITE STREET

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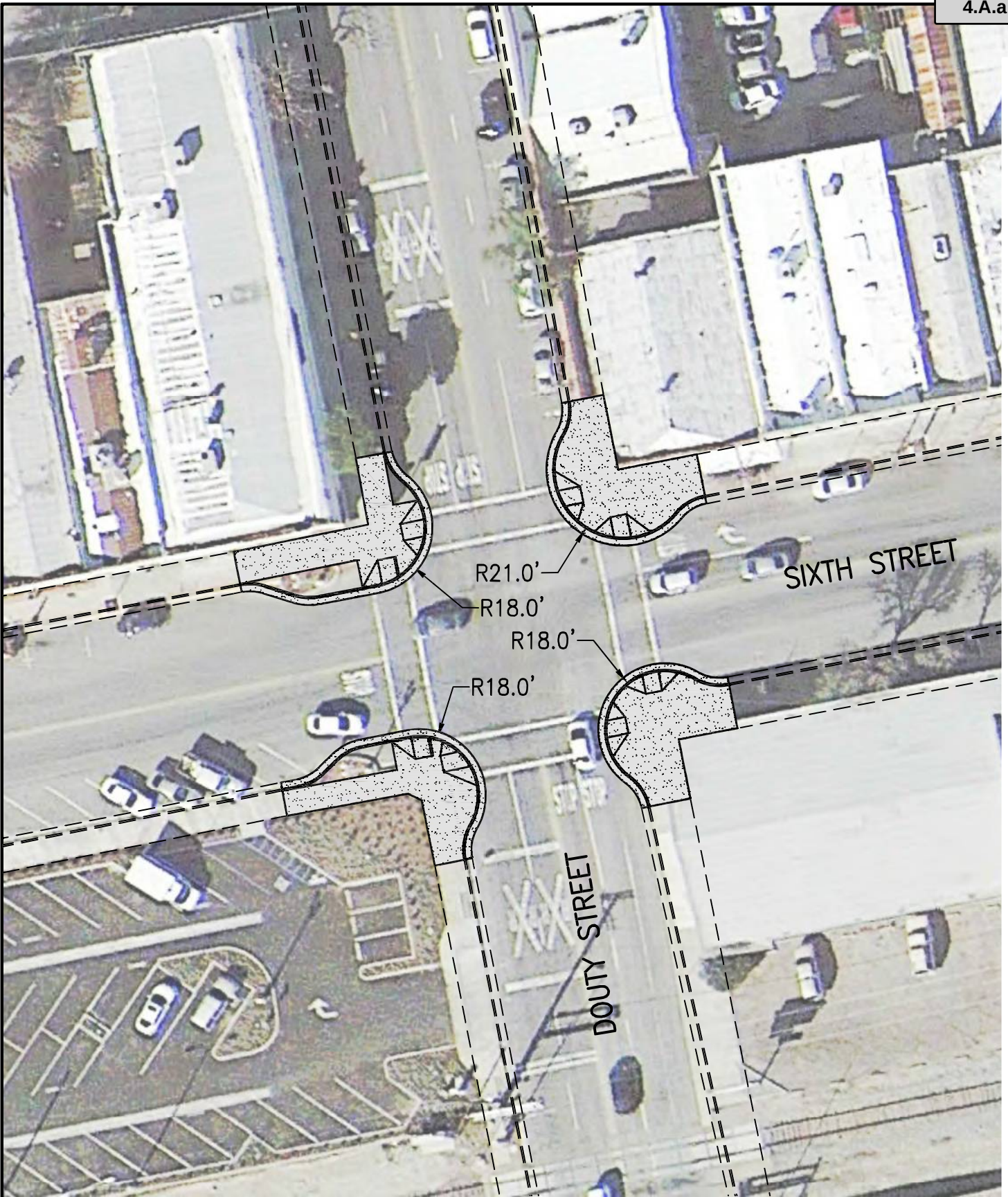
CITY OF HANFORD
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SIXTH & REDINGTON STREET



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & IRWIN STREET

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & DOUTY STREET



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & HARRIS STREET



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & BROWN STREET

DWG: S:\2018\18-058\Acad\Planest\INTERSECTION_26.dwg USER: Phil Gantner DATE: Jan 14, 2021 10:18am



CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & GREEN STREET

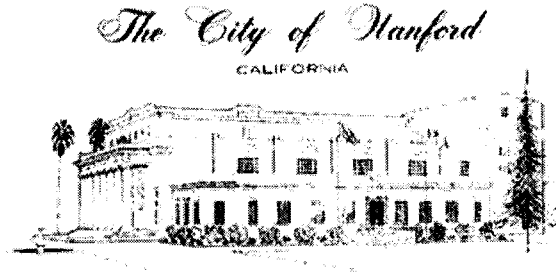


SCALE: 1" = 40'



SCALE: 1" = 40'

CITY OF HANFORD
BULB OUT INTERSECTION LAYOUT
SIXTH STREET & WHITE STREET



AGENDA
DOWNTOWN COMMITTEE
 of the
CITY OF HANFORD

TRAINING ROOM
319 N. Douty
6:00 PM, Thursday, February 21, 2019

CALL TO ORDER

ROLL CALL

FLAG SALUTE

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

GENERAL BUSINESS

Evaluate existing mid-block crosswalks to determine if warranted and if so what safety improvements should be constructed.

Conversion of 6th & 7th to one-way streets

Conversion of Douty & 7th to single lane in each direction w/ angled parking

Evaluate traffic signal warrants at existing signalized intersections

FUTURE MEETING DATE

ADJOURNMENT



AGENDA
DOWNTOWN COMMITTEE
 of the
CITY OF HANFORD

VIDEO TELECONFERENCE
 via Zoom
12:15 PM, Thursday, August 27, 2020

Zoom meeting information:

<https://us02web.zoom.us/j/81723195509?pwd=MHBTa2MxbE0xT1RTZEJ5L1RlRllnQT09>

(Limited virtual access)

CALL TO ORDER

ROLL CALL

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

GENERAL BUSINESS

- A. Summary of Traffic Evaluation Findings (Review)**
- B. Discussion of Recommendations**
 - a. Douty Road Diet
 - b. Maintaining Mid-Block Crosswalks
 - c. Removal of Traffic Signals
 - d. Douty Roundabouts
- C. Draft Report**
- D. Schedule**

FUTURE MEETING DATE

AJOURNMENT



Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230
800-975-6938 Phone/Fax
www.metrotrafficdata.com

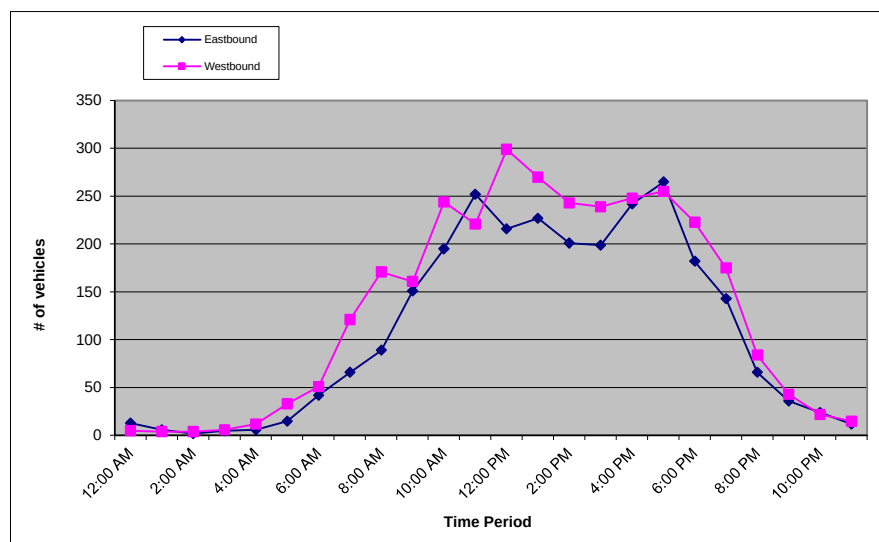
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St LATITUDE 36.3266289
SEGMENT e/o Douly St LONGITUDE -119.6456703
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	6	4	2	1	13	3	0	2	0	5	18
1:00 AM	1	1	2	2	6	1	0	1	2	4	10
2:00 AM	0	1	1	0	2	0	1	1	2	4	6
3:00 AM	2	1	0	2	5	1	1	3	1	6	11
4:00 AM	2	2	0	2	6	2	1	4	5	12	18
5:00 AM	2	2	4	7	15	8	8	8	9	33	48
6:00 AM	5	10	6	21	42	4	7	18	22	51	93
7:00 AM	9	8	17	32	66	21	22	31	47	121	187
8:00 AM	21	19	25	24	89	50	39	36	46	171	260
9:00 AM	42	27	32	50	151	35	38	46	42	161	312
10:00 AM	47	38	47	63	195	48	55	70	71	244	439
11:00 AM	75	54	60	63	252	49	47	61	64	221	473
12:00 PM	60	55	55	46	216	75	73	83	68	299	515
1:00 PM	52	51	53	71	227	69	66	72	63	270	497
2:00 PM	53	52	58	38	201	61	54	60	68	243	444
3:00 PM	53	48	52	46	199	56	59	65	59	239	438
4:00 PM	72	60	59	51	242	65	50	67	66	248	490
5:00 PM	64	71	60	70	265	58	70	74	53	255	520
6:00 PM	50	45	36	51	182	55	60	53	55	223	405
7:00 PM	40	40	32	31	143	53	45	44	33	175	318
8:00 PM	36	8	12	10	66	27	21	15	21	84	150
9:00 PM	13	9	9	5	36	12	13	11	7	43	79
10:00 PM	9	5	6	4	24	7	6	7	2	22	46
11:00 PM	2	3	4	3	12	8	1	4	2	15	27
Total	45.7%				2655	54.3%				3149	
	5804										

AM% 32.3% AM Peak 480 10:45 am to 11:45 am AM P.H.F. 0.90
PM% 67.7% PM Peak 520 5:00 pm to 6:00 pm PM P.H.F. 0.92





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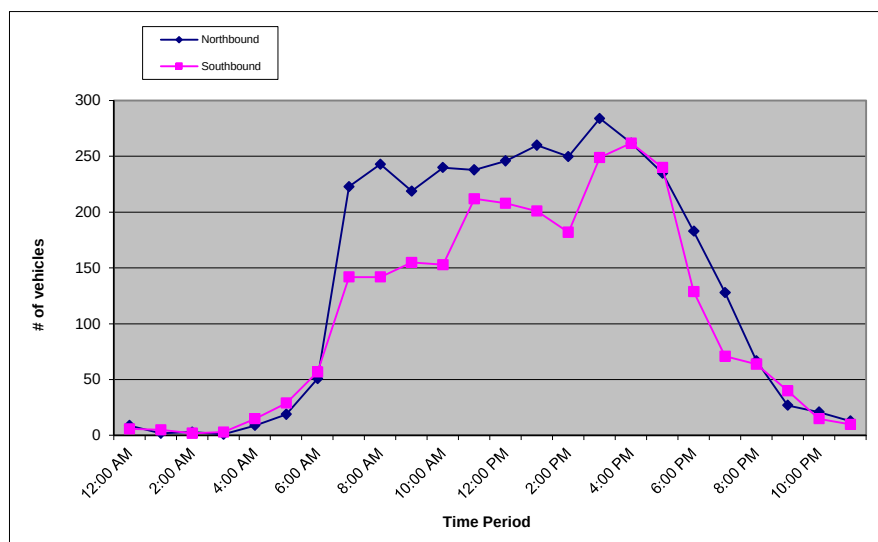
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Douty St LATITUDE 36.3266289
SEGMENT n/o 7th St LONGITUDE -119.6456703
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 4

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	4	2	3	0	9	2	0	0	4	6	15
1:00 AM	0	1	1	0	2	0	3	1	1	5	7
2:00 AM	1	1	0	1	3	1	0	1	0	2	5
3:00 AM	1	0	0	0	1	1	2	0	0	3	4
4:00 AM	2	2	1	4	9	3	2	4	6	15	24
5:00 AM	3	2	6	8	19	4	10	7	8	29	48
6:00 AM	10	11	7	23	51	15	12	11	19	57	108
7:00 AM	27	42	74	80	223	18	27	46	51	142	365
8:00 AM	69	56	50	68	243	46	32	32	32	142	385
9:00 AM	54	52	64	49	219	40	29	40	46	155	374
10:00 AM	52	64	57	67	240	40	27	43	43	153	393
11:00 AM	70	62	54	52	238	40	56	65	51	212	450
12:00 PM	57	62	52	75	246	57	56	40	55	208	454
1:00 PM	62	64	57	77	260	56	47	43	55	201	461
2:00 PM	49	51	67	83	250	52	43	48	39	182	432
3:00 PM	73	66	71	74	284	63	68	66	52	249	533
4:00 PM	72	51	73	66	262	58	58	71	75	262	524
5:00 PM	69	48	48	70	235	88	50	60	42	240	475
6:00 PM	41	51	38	53	183	33	30	34	32	129	312
7:00 PM	62	23	26	17	128	23	14	14	20	71	199
8:00 PM	19	15	16	17	67	26	11	11	16	64	131
9:00 PM	6	9	9	3	27	14	7	6	13	40	67
10:00 PM	10	2	6	3	21	4	3	6	2	15	36
11:00 PM	4	3	5	1	13	1	6	2	1	10	23
Total	55.5%				3233	44.5%				2592	
	5825										

AM% 37.4% AM Peak 457 10:45 am to 11:45 am AM P.H.F. 0.96
PM% 62.6% PM Peak 533 3:00 pm to 4:00 pm PM P.H.F. 0.97





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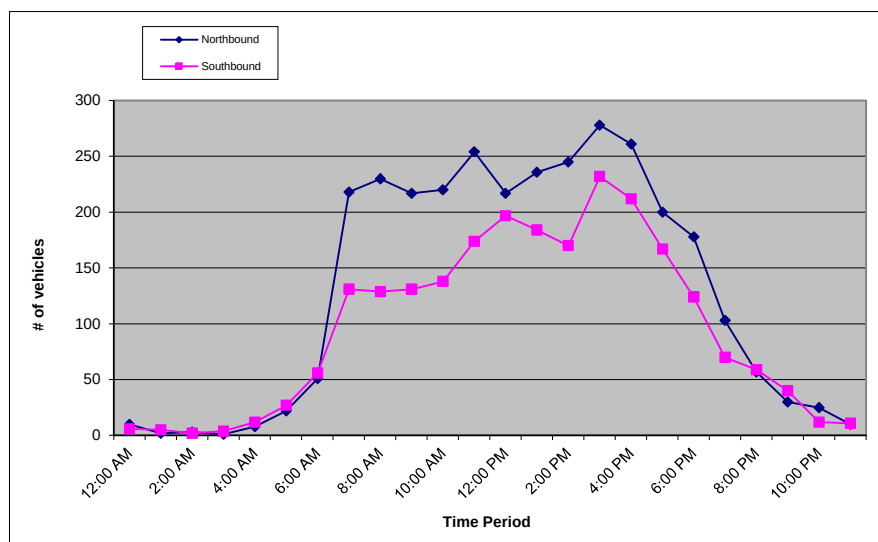
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Douty St LATITUDE 36.3266289
SEGMENT s/o 7th St LONGITUDE -119.6456703
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 4

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	4	3	3	0	10	1	0	1	4	6	16
1:00 AM	0	1	1	0	2	0	3	1	1	5	7
2:00 AM	1	1	0	1	3	1	0	1	0	2	5
3:00 AM	1	0	0	0	1	1	2	0	1	4	5
4:00 AM	2	2	1	3	8	3	2	1	6	12	20
5:00 AM	4	2	6	10	22	4	10	5	8	27	49
6:00 AM	11	10	9	21	51	17	11	10	18	56	107
7:00 AM	24	39	74	81	218	18	25	40	48	131	349
8:00 AM	61	54	50	65	230	37	33	26	33	129	359
9:00 AM	56	50	60	51	217	35	20	38	38	131	348
10:00 AM	60	53	47	60	220	35	22	40	41	138	358
11:00 AM	81	65	54	54	254	33	46	55	40	174	428
12:00 PM	52	53	46	66	217	54	46	45	52	197	414
1:00 PM	54	62	49	71	236	59	38	39	48	184	420
2:00 PM	61	43	69	72	245	49	35	47	39	170	415
3:00 PM	71	71	66	70	278	59	60	62	51	232	510
4:00 PM	73	53	72	63	261	47	47	54	64	212	473
5:00 PM	60	43	24	73	200	75	29	29	34	167	367
6:00 PM	45	50	38	45	178	26	35	34	29	124	302
7:00 PM	40	19	24	20	103	22	16	16	16	70	173
8:00 PM	20	10	13	14	57	28	10	7	14	59	116
9:00 PM	7	11	8	4	30	13	8	8	11	40	70
10:00 PM	13	2	6	4	25	5	3	3	1	12	37
11:00 PM	3	2	4	1	10	3	4	3	1	11	21
Total	57.3%				3076	42.7%				2293	
	5369										

AM% 38.2% AM Peak 435 10:45 am to 11:45 am AM P.H.F. 0.95
PM% 61.8% PM Peak 510 3:00 pm to 4:00 pm PM P.H.F. 0.97





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24 Hour Count Report

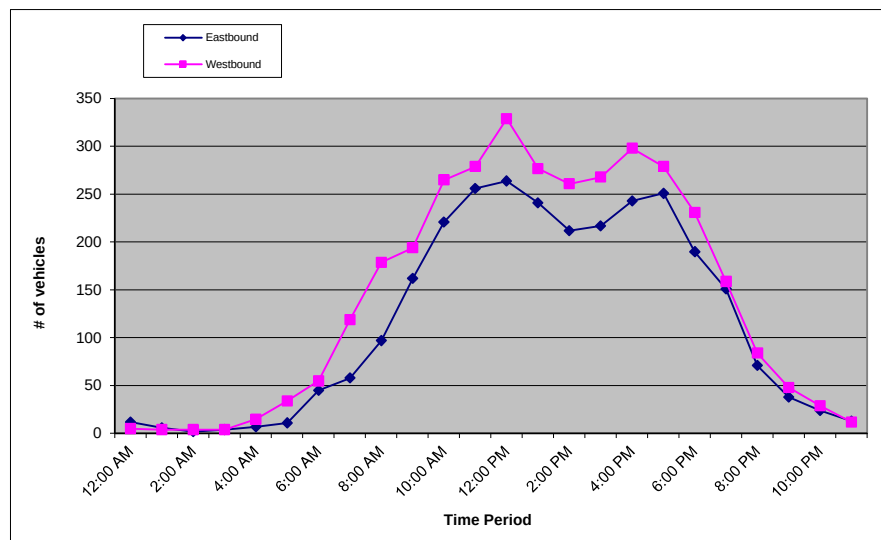
Prepared For: **Peters Engineering Group**
 952 Pollasky Avenue
 Clovis, CA 93612

STREET 7th St
 SEGMENT w/o Douty St
 COLLECTION DATE Tuesday, October 23, 2018
 NUMBER OF LANES 2

LATITUDE 36.3266289
 LONGITUDE -119.6456703
 WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	5	4	2	1	12	3	1	1	0	5	17
1:00 AM	1	1	2	2	6	1	0	1	2	4	10
2:00 AM	0	1	1	0	2	0	1	1	2	4	6
3:00 AM	1	1	0	2	4	0	1	3	0	4	8
4:00 AM	2	2	0	3	7	2	1	7	5	15	22
5:00 AM	1	1	3	6	11	8	7	9	10	34	45
6:00 AM	6	9	7	23	45	4	6	22	23	55	100
7:00 AM	9	10	14	25	58	18	23	34	44	119	177
8:00 AM	19	25	22	31	97	49	42	39	49	179	276
9:00 AM	45	28	36	53	162	45	46	48	55	194	356
10:00 AM	49	50	53	69	221	63	61	69	72	265	486
11:00 AM	71	57	71	57	256	63	63	82	71	279	535
12:00 PM	70	63	65	66	264	83	82	82	82	329	593
1:00 PM	62	53	54	72	241	68	75	69	65	277	518
2:00 PM	53	52	60	47	212	76	54	65	66	261	473
3:00 PM	59	48	57	53	217	64	72	69	63	268	485
4:00 PM	77	63	48	55	243	82	66	72	78	298	541
5:00 PM	61	63	61	66	251	59	78	82	60	279	530
6:00 PM	50	51	39	50	190	66	60	56	49	231	421
7:00 PM	44	40	36	31	151	36	39	44	40	159	310
8:00 PM	38	11	11	11	71	28	20	15	21	84	155
9:00 PM	12	9	11	6	38	13	14	10	11	48	86
10:00 PM	9	6	6	3	24	9	7	10	3	29	53
11:00 PM	2	3	5	3	13	5	2	3	2	12	25
Total	44.9%				2796	55.1%				3432	
	6228										

AM% 32.7% AM Peak 548 10:45 am to 11:45 am AM P.H.F. 0.90
 PM% 67.3% PM Peak 593 12:00 pm to 1:00 pm PM P.H.F. 0.97





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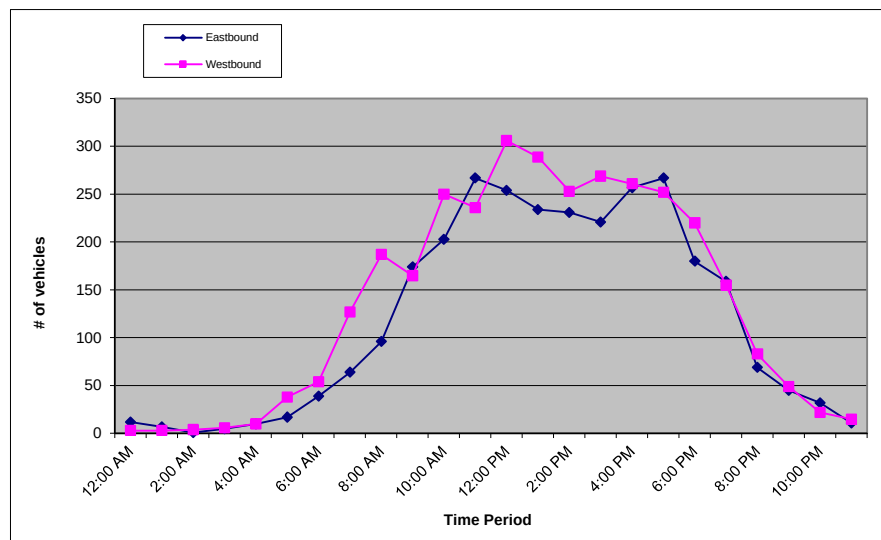
Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St
SEGMENT e/o Harris St
COLLECTION DATE Tuesday, October 23, 2018
NUMBER OF LANES 2

LATITUDE 36.3268753
LONGITUDE -119.6440771
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	5	4	2	1	12	2	0	1	0	3	15
1:00 AM	1	1	2	3	7	1	0	0	2	3	10
2:00 AM	0	1	0	0	1	0	1	1	2	4	5
3:00 AM	2	1	0	2	5	1	1	3	1	6	11
4:00 AM	1	2	4	3	10	2	0	4	4	10	20
5:00 AM	2	3	6	6	17	9	8	10	11	38	55
6:00 AM	5	7	7	20	39	7	7	18	22	54	93
7:00 AM	10	8	19	27	64	20	27	29	51	127	191
8:00 AM	21	22	28	25	96	56	44	37	50	187	283
9:00 AM	44	34	39	57	174	38	41	46	40	165	339
10:00 AM	45	43	47	68	203	44	59	70	77	250	453
11:00 AM	73	60	73	61	267	57	46	68	65	236	503
12:00 PM	69	62	62	61	254	80	76	86	64	306	560
1:00 PM	50	52	57	75	234	66	69	78	76	289	523
2:00 PM	52	71	64	44	231	72	58	60	63	253	484
3:00 PM	56	61	55	49	221	74	70	61	64	269	490
4:00 PM	67	69	59	62	257	62	60	77	62	261	518
5:00 PM	79	66	61	61	267	58	61	75	58	252	519
6:00 PM	51	45	42	42	180	62	55	50	53	220	400
7:00 PM	44	42	33	40	159	45	40	38	32	155	314
8:00 PM	22	20	11	16	69	28	26	13	16	83	152
9:00 PM	13	15	11	6	45	16	12	11	10	49	94
10:00 PM	12	7	7	6	32	9	6	6	1	22	54
11:00 PM	1	3	3	4	11	8	2	3	2	15	26
Total	46.7%				2855	53.3%				3257	
	6112										

AM% 32.4% AM Peak 522 10:45 am to 11:45 am AM P.H.F. 0.90
PM% 67.6% PM Peak 560 12:00 pm to 1:00 pm PM P.H.F. 0.94





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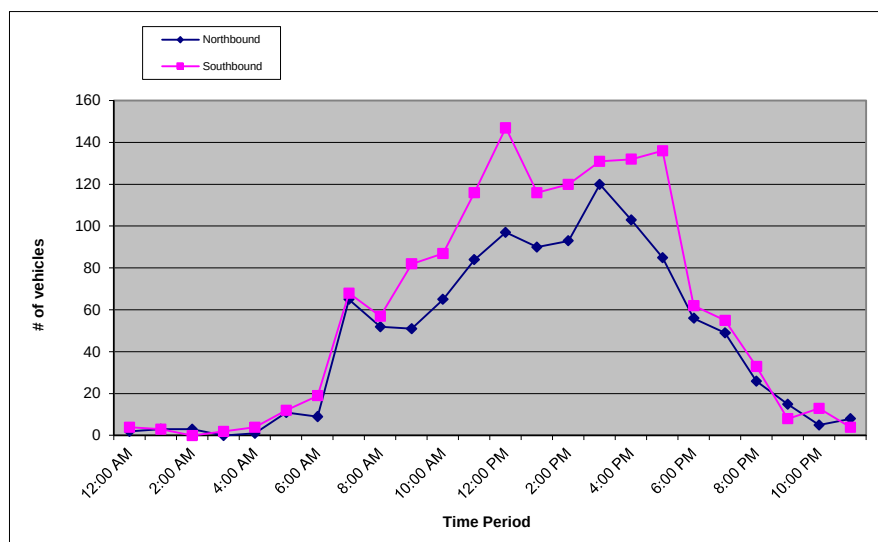
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Harris St LATITUDE 36.3268753
SEGMENT n/o 7th St LONGITUDE -119.6440771
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	1	1	0	0	2	0	1	3	0	4	6
1:00 AM	2	1	0	0	3	1	0	1	1	3	6
2:00 AM	0	2	1	0	3	0	0	0	0	0	3
3:00 AM	0	0	0	0	0	0	1	0	1	2	2
4:00 AM	1	0	0	0	1	0	1	1	2	4	5
5:00 AM	3	2	4	2	11	3	3	3	3	12	23
6:00 AM	1	1	4	3	9	4	4	3	8	19	28
7:00 AM	1	13	15	36	65	6	6	27	29	68	133
8:00 AM	12	20	8	12	52	15	13	11	18	57	109
9:00 AM	9	16	11	15	51	21	19	24	18	82	133
10:00 AM	15	10	20	20	65	17	22	22	26	87	152
11:00 AM	21	17	23	23	84	22	28	42	24	116	200
12:00 PM	21	25	27	24	97	35	29	38	45	147	244
1:00 PM	17	27	23	23	90	26	30	26	34	116	206
2:00 PM	23	17	28	25	93	25	34	33	28	120	213
3:00 PM	41	25	31	23	120	46	35	26	24	131	251
4:00 PM	31	26	28	18	103	38	33	27	34	132	235
5:00 PM	19	16	29	21	85	51	36	30	19	136	221
6:00 PM	17	12	16	11	56	18	9	17	18	62	118
7:00 PM	11	11	14	13	49	19	14	12	10	55	104
8:00 PM	5	9	8	4	26	10	6	8	9	33	59
9:00 PM	6	3	3	3	15	3	2	2	1	8	23
10:00 PM	3	2	0	0	5	4	4	3	2	13	18
11:00 PM	5	1	1	1	8	0	1	2	1	4	12
Total	43.7%				1093	56.3%				1411	
	2504										

AM% 31.9% AM Peak 200 11:00 am to 12:00 pm AM P.H.F. 0.77
PM% 68.1% PM Peak 261 2:30 pm to 3:30 pm PM P.H.F. 0.75





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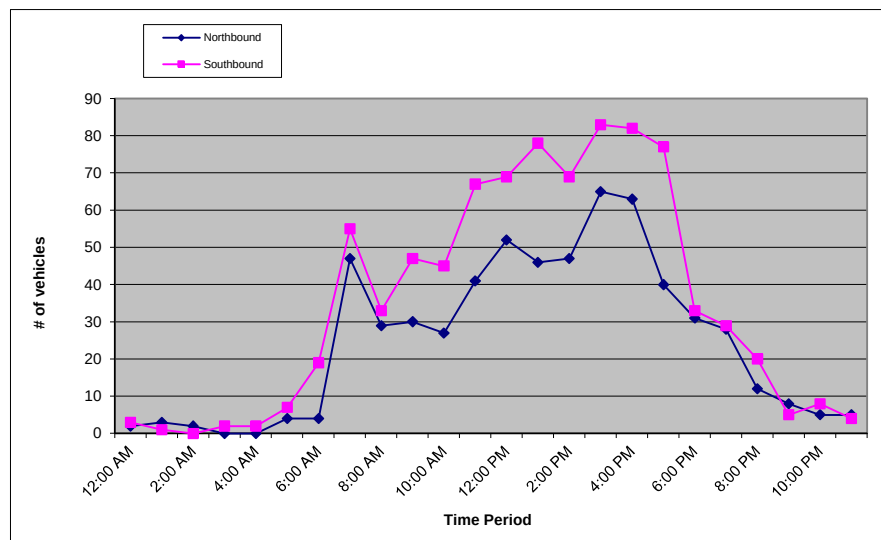
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Harris St LATITUDE 36.3268753
SEGMENT s/o 7th St LONGITUDE -119.6440771
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	1	1	0	0	2	0	1	2	0	3	5
1:00 AM	2	1	0	0	3	1	0	0	0	1	4
2:00 AM	0	2	0	0	2	0	0	0	0	0	2
3:00 AM	0	0	0	0	0	0	1	0	1	2	2
4:00 AM	0	0	0	0	0	0	1	1	0	2	2
5:00 AM	1	2	1	0	4	2	1	1	3	7	11
6:00 AM	0	0	3	1	4	5	4	3	7	19	23
7:00 AM	1	8	10	28	47	5	5	19	26	55	102
8:00 AM	5	14	6	4	29	12	7	4	10	33	62
9:00 AM	4	9	7	10	30	11	14	16	6	47	77
10:00 AM	9	5	8	5	27	11	12	14	8	45	72
11:00 AM	9	10	11	11	41	12	21	22	12	67	108
12:00 PM	14	10	15	13	52	20	12	16	21	69	121
1:00 PM	14	13	10	9	46	19	21	20	18	78	124
2:00 PM	7	7	15	18	47	20	16	19	14	69	116
3:00 PM	18	15	20	12	65	34	20	19	10	83	148
4:00 PM	20	15	11	17	63	22	19	19	22	82	145
5:00 PM	13	7	10	10	40	34	13	18	12	77	117
6:00 PM	7	11	7	6	31	9	6	10	8	33	64
7:00 PM	6	6	8	8	28	14	3	9	3	29	57
8:00 PM	0	4	4	4	12	5	4	8	3	20	32
9:00 PM	2	0	3	3	8	0	3	0	2	5	13
10:00 PM	3	1	0	1	5	4	2	1	1	8	13
11:00 PM	3	1	0	1	5	0	1	2	1	4	9
Total	41.4%				591	58.6%				838	
	1429										

AM% 32.9% AM Peak 108 11:00 am to 12:00 pm AM P.H.F. 0.82
PM% 67.1% PM Peak 158 2:45 pm to 3:45 pm PM P.H.F. 0.76





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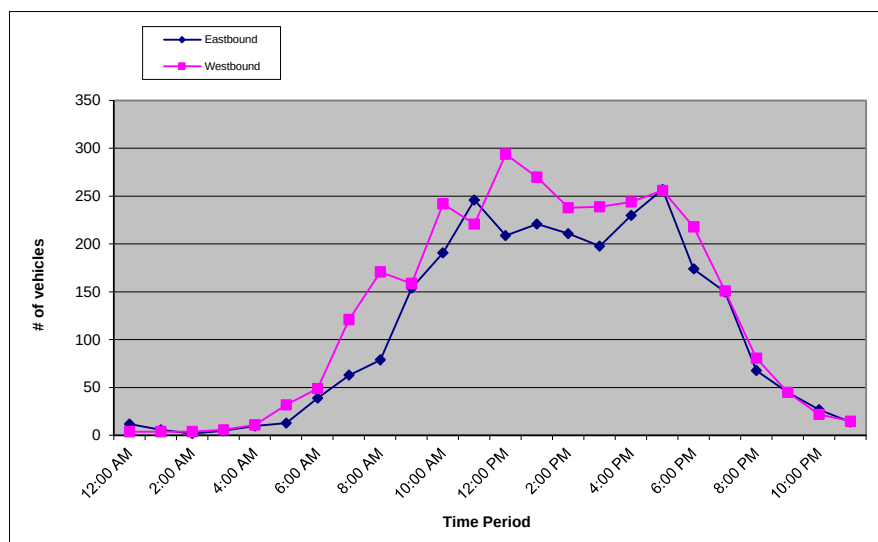
24 Hour Count Report

Prepared For: **Peters Engineering Group**
 952 Pollasky Avenue
 Clovis, CA 93612

STREET 7th St LATITUDE 36.3268753
 SEGMENT w/o Harris St LONGITUDE -119.6440771
 COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
 NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	5	4	2	1	12	2	0	2	0	4	16
1:00 AM	1	1	2	2	6	1	0	1	2	4	10
2:00 AM	0	1	1	0	2	0	1	1	2	4	6
3:00 AM	2	1	0	2	5	1	1	3	1	6	11
4:00 AM	2	2	4	2	10	2	0	4	5	11	21
5:00 AM	1	2	4	6	13	7	9	7	9	32	45
6:00 AM	5	7	7	20	39	5	6	17	21	49	88
7:00 AM	9	8	16	30	63	20	23	29	49	121	184
8:00 AM	18	18	22	21	79	49	40	36	46	171	250
9:00 AM	39	31	33	51	154	38	36	44	41	159	313
10:00 AM	47	38	44	62	191	46	59	63	74	242	433
11:00 AM	71	55	60	60	246	53	41	63	64	221	467
12:00 PM	56	56	48	49	209	75	72	82	65	294	503
1:00 PM	50	46	56	69	221	70	58	70	72	270	491
2:00 PM	55	60	59	37	211	64	55	56	63	238	449
3:00 PM	53	50	50	45	198	60	64	52	63	239	437
4:00 PM	62	62	56	50	230	62	56	65	61	244	474
5:00 PM	68	63	61	65	257	58	72	68	58	256	513
6:00 PM	48	44	38	44	174	58	56	44	60	218	392
7:00 PM	40	40	34	36	150	41	44	36	30	151	301
8:00 PM	21	20	14	13	68	27	23	12	19	81	149
9:00 PM	13	16	9	7	45	15	9	11	10	45	90
10:00 PM	10	6	6	5	27	7	6	7	2	22	49
11:00 PM	3	3	4	4	14	8	2	3	2	15	29
Total	45.9%				2624	54.1%				3097	
	5721										

AM% 32.2% AM Peak 479 10:45 am to 11:45 am AM P.H.F. 0.88
 PM% 67.8% PM Peak 513 5:00 pm to 6:00 pm PM P.H.F. 0.95





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24 Hour Count Report

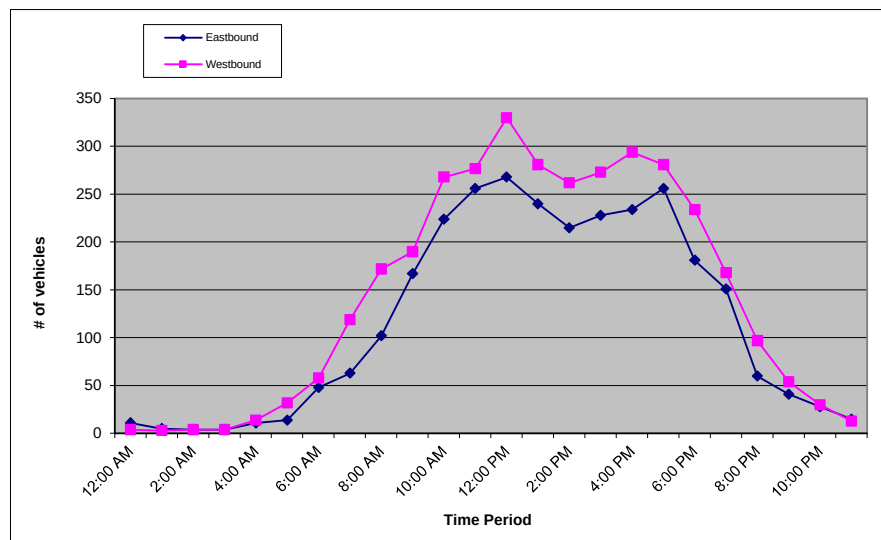
Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St
SEGMENT e/o Irwin St
COLLECTION DATE Tuesday, October 23, 2018
NUMBER OF LANES 2

LATITUDE 36.3263826
LONGITUDE -119.6472582
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	4	4	2	1	11	2	1	1	0	4	15
1:00 AM	1	1	2	1	5	1	0	1	1	3	8
2:00 AM	0	1	1	2	4	0	1	1	2	4	8
3:00 AM	1	1	0	2	4	0	0	4	0	4	8
4:00 AM	2	2	4	3	11	2	1	7	4	14	25
5:00 AM	4	1	3	6	14	9	7	9	7	32	46
6:00 AM	6	8	10	24	48	8	6	21	23	58	106
7:00 AM	9	8	14	32	63	19	23	34	43	119	182
8:00 AM	21	26	24	31	102	49	39	39	45	172	274
9:00 AM	47	29	37	54	167	45	46	49	50	190	357
10:00 AM	52	54	54	64	224	60	67	69	72	268	492
11:00 AM	71	60	67	58	256	64	55	87	71	277	533
12:00 PM	68	64	67	69	268	76	88	83	83	330	598
1:00 PM	61	51	54	74	240	70	67	76	68	281	521
2:00 PM	59	46	61	49	215	75	62	60	65	262	477
3:00 PM	60	54	60	54	228	66	76	70	61	273	501
4:00 PM	65	62	54	53	234	82	61	76	75	294	528
5:00 PM	61	68	60	67	256	57	82	78	64	281	537
6:00 PM	54	43	39	45	181	68	64	52	50	234	415
7:00 PM	46	40	38	27	151	42	38	46	42	168	319
8:00 PM	18	20	12	10	60	31	24	19	23	97	157
9:00 PM	12	15	8	6	41	18	14	10	12	54	95
10:00 PM	11	6	6	5	28	10	7	9	4	30	58
11:00 PM	3	3	5	4	15	5	3	3	2	13	28
Total	44.9%				2826	55.1%				3462	
	6288										

AM% 32.7% AM Peak 540 10:45 am to 11:45 am AM P.H.F. 0.88
PM% 67.3% PM Peak 598 12:00 pm to 1:00 pm PM P.H.F. 0.98





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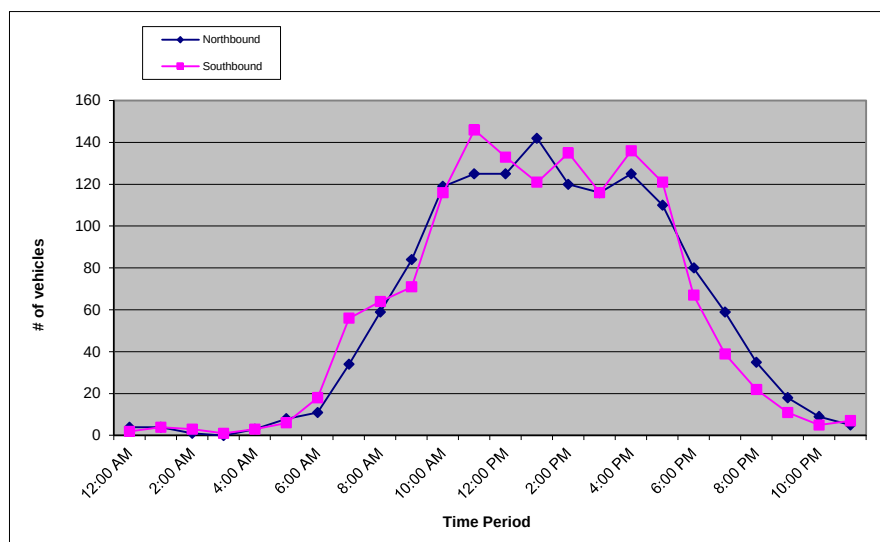
24 Hour Count Report

Prepared For: **Peters Engineering Group**
 952 Pollasky Avenue
 Clovis, CA 93612

STREET Irwin St LATITUDE 36.3263826
 SEGMENT n/o 7th St LONGITUDE -119.6472582
 COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
 NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	2	1	1	0	4	1	0	1	0	2	6
1:00 AM	0	2	2	0	4	3	0	1	0	4	8
2:00 AM	0	1	0	0	1	0	0	1	2	3	4
3:00 AM	0	0	0	0	0	1	0	0	0	1	1
4:00 AM	0	0	0	3	3	0	0	1	2	3	6
5:00 AM	4	1	2	1	8	1	0	3	2	6	14
6:00 AM	2	4	1	4	11	5	3	5	5	18	29
7:00 AM	7	8	9	10	34	9	9	14	24	56	90
8:00 AM	22	11	12	14	59	14	16	10	24	64	123
9:00 AM	16	23	23	22	84	14	16	12	29	71	155
10:00 AM	29	32	26	32	119	27	33	27	29	116	235
11:00 AM	35	24	33	33	125	31	40	44	31	146	271
12:00 PM	28	27	26	44	125	37	35	29	32	133	258
1:00 PM	45	37	33	27	142	31	30	30	30	121	263
2:00 PM	39	32	26	23	120	38	26	36	35	135	255
3:00 PM	36	25	23	32	116	26	29	24	37	116	232
4:00 PM	25	26	37	37	125	41	37	30	28	136	261
5:00 PM	27	34	26	23	110	29	30	25	37	121	231
6:00 PM	24	16	17	23	80	22	16	10	19	67	147
7:00 PM	21	13	7	18	59	14	8	11	6	39	98
8:00 PM	8	7	9	11	35	8	7	3	4	22	57
9:00 PM	5	5	3	5	18	5	3	1	2	11	29
10:00 PM	2	2	4	1	9	2	1	1	1	5	14
11:00 PM	2	0	2	1	5	1	3	1	2	7	12
Total	49.9%				1396	50.1%				1403	
	2799										

AM% 33.7% AM Peak 271 11:00 am to 12:00 pm AM P.H.F. 0.88
 PM% 66.3% PM Peak 282 0:45 pm to 1:45 pm PM P.H.F. 0.93





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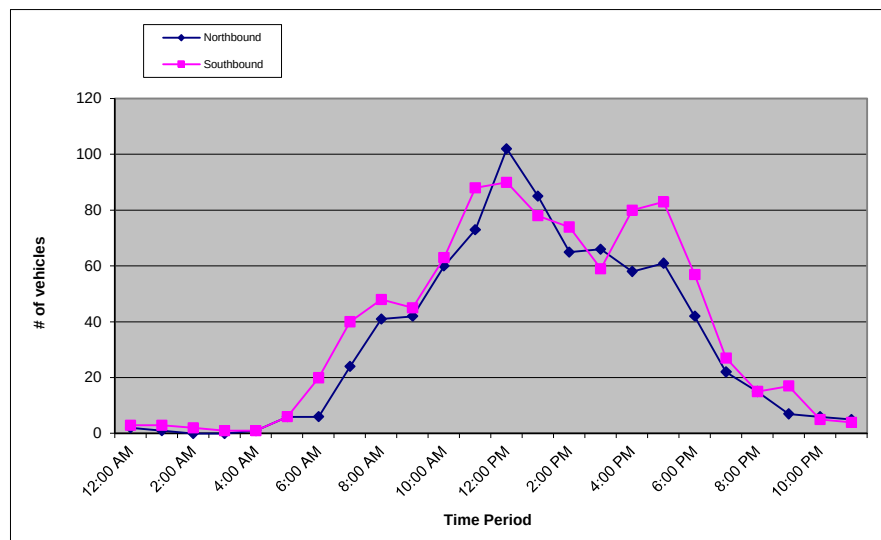
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Irwin St LATITUDE 36.3263826
SEGMENT s/o 7th St LONGITUDE -119.6472582
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	1	0	1	0	2	2	0	1	0	3	5
1:00 AM	0	0	1	0	1	1	0	2	0	3	4
2:00 AM	0	0	0	0	0	0	1	0	1	2	2
3:00 AM	0	0	0	0	0	0	0	1	0	1	1
4:00 AM	0	0	0	1	1	0	0	1	0	1	2
5:00 AM	1	2	2	1	6	2	0	1	3	6	12
6:00 AM	0	2	3	1	6	6	3	6	5	20	26
7:00 AM	5	4	6	9	24	9	5	10	16	40	64
8:00 AM	10	9	12	10	41	9	9	8	22	48	89
9:00 AM	12	5	15	10	42	8	9	13	15	45	87
10:00 AM	16	11	15	18	60	13	15	18	17	63	123
11:00 AM	21	17	20	15	73	28	21	26	13	88	161
12:00 PM	22	15	28	37	102	30	22	16	22	90	192
1:00 PM	34	23	17	11	85	20	20	19	19	78	163
2:00 PM	22	13	14	16	65	20	16	19	19	74	139
3:00 PM	20	11	20	15	66	17	10	14	18	59	125
4:00 PM	13	16	14	15	58	27	16	16	21	80	138
5:00 PM	18	16	17	10	61	24	24	18	17	83	144
6:00 PM	12	11	10	9	42	14	16	10	17	57	99
7:00 PM	6	5	3	8	22	8	7	5	7	27	49
8:00 PM	3	2	6	4	15	7	3	1	4	15	30
9:00 PM	1	2	3	1	7	8	5	2	2	17	24
10:00 PM	0	2	1	3	6	0	1	0	4	5	11
11:00 PM	1	3	1	0	5	0	1	2	1	4	9
Total	46.5%				790	53.5%				909	
	1699										

AM% 33.9% AM Peak 168 10:45 am to 11:45 am AM P.H.F. 0.86
PM% 66.1% PM Peak 200 12:30 pm to 1:30 pm PM P.H.F. 0.85





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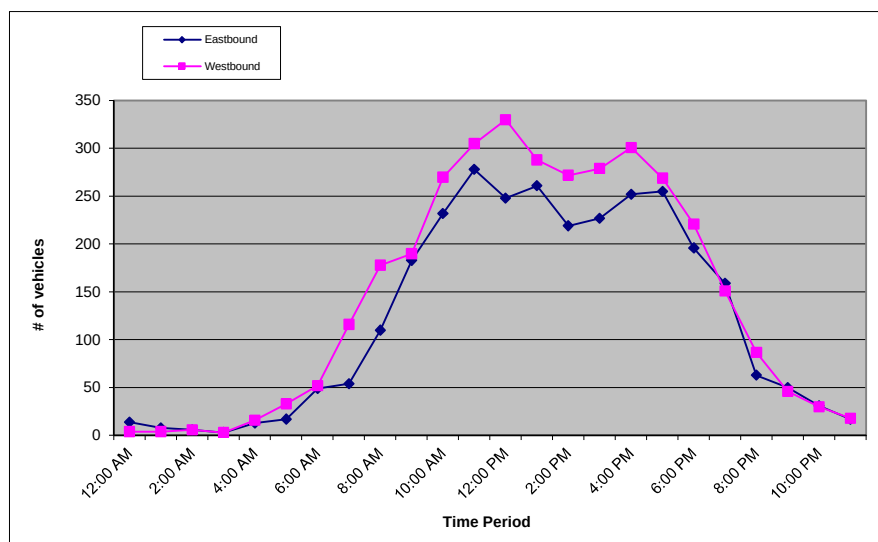
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St LATITUDE 36.3263826
SEGMENT w/o Irwin St LONGITUDE -119.6472582
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	6	4	3	1	14	2	0	2	0	4	18
1:00 AM	1	3	3	1	8	3	0	0	1	4	12
2:00 AM	0	2	1	3	6	0	0	2	4	6	12
3:00 AM	0	1	0	2	3	0	0	3	0	3	6
4:00 AM	2	2	4	5	13	2	1	7	6	16	29
5:00 AM	6	1	3	7	17	7	8	11	7	33	50
6:00 AM	8	11	7	23	49	7	7	19	19	52	101
7:00 AM	10	10	10	24	54	18	25	31	42	116	170
8:00 AM	26	24	24	36	110	47	42	41	48	178	288
9:00 AM	48	37	42	56	183	48	43	45	54	190	373
10:00 AM	52	58	59	63	232	61	68	72	69	270	502
11:00 AM	77	62	71	68	278	59	69	96	81	305	583
12:00 PM	68	63	49	68	248	77	88	80	85	330	578
1:00 PM	63	62	58	78	261	72	74	75	67	288	549
2:00 PM	55	50	60	54	219	72	57	64	79	272	491
3:00 PM	62	51	54	60	227	61	78	71	69	279	506
4:00 PM	60	65	56	71	252	79	75	69	78	301	553
5:00 PM	67	67	57	64	255	59	69	73	68	269	524
6:00 PM	51	49	42	54	196	61	65	48	47	221	417
7:00 PM	50	45	36	28	159	37	36	46	32	151	310
8:00 PM	18	18	12	15	63	27	21	18	21	87	150
9:00 PM	14	19	9	8	50	13	13	10	10	46	96
10:00 PM	12	5	8	6	31	11	6	9	4	30	61
11:00 PM	4	1	7	5	17	6	6	3	3	18	35
Total	45.9%				2945	54.1%				3469	
	6414										

AM% 33.4% AM Peak 583 11:00 am to 12:00 pm AM P.H.F. 0.87
PM% 66.6% PM Peak 578 12:00 pm to 1:00 pm PM P.H.F. 0.94





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24 Hour Count Report

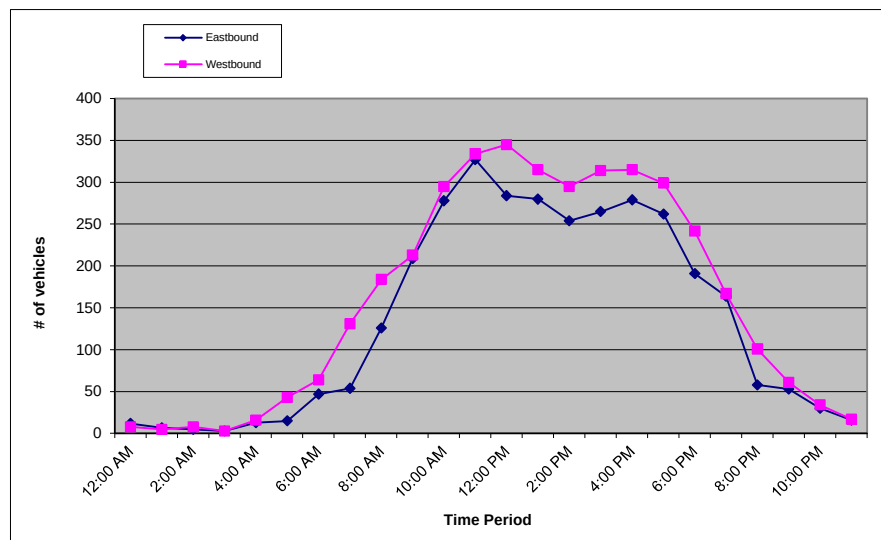
Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St
SEGMENT e/o Redington St
COLLECTION DATE Tuesday, October 23, 2018
NUMBER OF LANES 2

LATITUDE 36.3261406
LONGITUDE -119.6488997
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	5	3	3	1	12	2	1	3	2	8	20
1:00 AM	2	1	3	1	7	2	1	1	1	5	12
2:00 AM	1	1	1	2	5	0	1	3	4	8	13
3:00 AM	0	1	0	2	3	0	0	3	0	3	6
4:00 AM	2	2	4	5	13	2	1	7	6	16	29
5:00 AM	2	1	3	9	15	16	6	12	9	43	58
6:00 AM	6	14	6	21	47	7	13	21	23	64	111
7:00 AM	11	10	8	25	54	23	30	34	44	131	185
8:00 AM	29	28	30	39	126	46	49	44	45	184	310
9:00 AM	51	39	56	63	209	49	45	55	64	213	422
10:00 AM	64	66	78	70	278	70	81	68	76	295	573
11:00 AM	87	77	83	80	327	81	71	86	96	334	661
12:00 PM	83	62	61	78	284	88	88	78	91	345	629
1:00 PM	63	71	74	72	280	81	82	77	75	315	595
2:00 PM	68	47	73	66	254	73	75	63	84	295	549
3:00 PM	68	59	71	67	265	70	74	87	83	314	579
4:00 PM	65	70	69	75	279	88	68	77	82	315	594
5:00 PM	66	71	61	64	262	64	78	77	80	299	561
6:00 PM	49	46	45	51	191	70	71	53	48	242	433
7:00 PM	55	43	37	29	164	47	40	46	34	167	331
8:00 PM	14	19	12	13	58	31	23	19	28	101	159
9:00 PM	13	21	10	9	53	19	17	12	13	61	114
10:00 PM	12	5	7	6	30	11	9	9	5	34	64
11:00 PM	4	1	7	4	16	7	4	2	4	17	33
Total	45.9%				3232	54.1%				3809	
	7041										

AM% 34.1% AM Peak 661 11:00 am to 12:00 pm AM P.H.F. 0.94
PM% 65.9% PM Peak 629 12:00 pm to 1:00 pm PM P.H.F. 0.92





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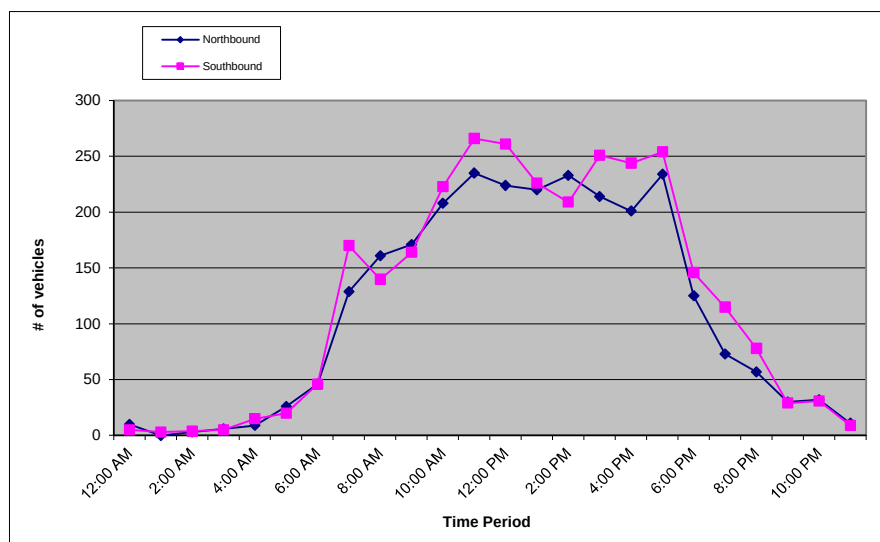
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Redington St LATITUDE 36.3261406
SEGMENT n/o 7th St LONGITUDE -119.6488997
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 4

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	4	2	0	4	10	2	1	0	2	5	15
1:00 AM	0	0	0	0	0	2	1	0	0	3	3
2:00 AM	0	1	2	0	3	1	0	3	0	4	7
3:00 AM	4	0	2	0	6	0	1	2	2	5	11
4:00 AM	1	2	3	3	9	5	2	3	5	15	24
5:00 AM	11	1	9	5	26	1	2	10	7	20	46
6:00 AM	6	8	13	19	46	8	9	11	18	46	92
7:00 AM	19	21	42	47	129	27	37	43	63	170	299
8:00 AM	34	44	38	45	161	43	27	35	35	140	301
9:00 AM	47	34	39	51	171	38	39	44	43	164	335
10:00 AM	55	53	38	62	208	52	61	58	52	223	431
11:00 AM	58	54	49	74	235	59	63	61	83	266	501
12:00 PM	67	46	73	38	224	65	64	64	68	261	485
1:00 PM	56	59	59	46	220	58	62	57	49	226	446
2:00 PM	39	61	71	62	233	54	46	59	50	209	442
3:00 PM	52	40	58	64	214	82	69	51	49	251	465
4:00 PM	53	55	48	45	201	50	57	72	65	244	445
5:00 PM	62	56	70	46	234	78	66	56	54	254	488
6:00 PM	35	38	22	30	125	47	42	33	24	146	271
7:00 PM	20	19	16	18	73	34	35	27	19	115	188
8:00 PM	15	14	14	14	57	28	23	14	13	78	135
9:00 PM	14	3	8	5	30	10	9	6	4	29	59
10:00 PM	14	7	6	5	32	13	5	9	4	31	63
11:00 PM	2	6	2	1	11	4	2	3	0	9	20
Total	47.7%				2658	52.3%				2914	
	5572										

AM% 37.1% AM Peak 501 11:00 am to 12:00 pm AM P.H.F. 0.80
PM% 62.9% PM Peak 498 4:45 pm to 5:45 pm PM P.H.F. 0.89





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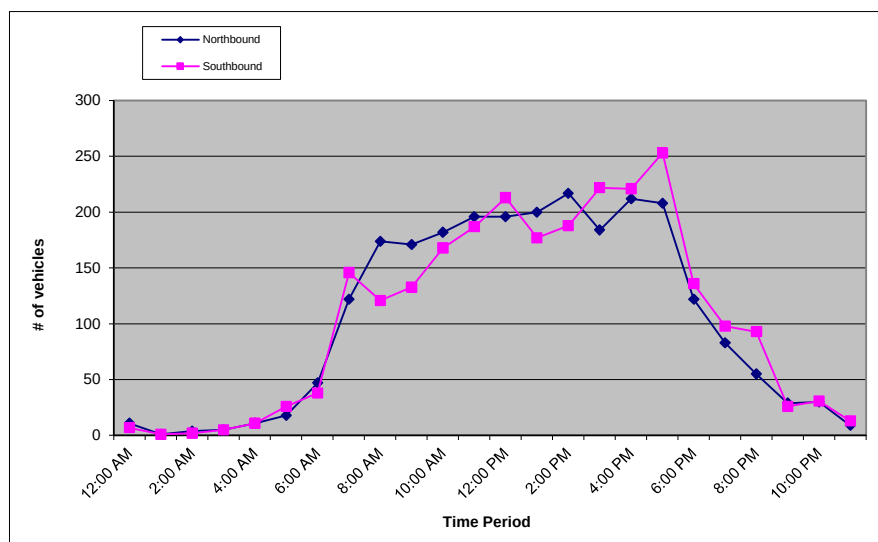
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET Redington St LATITUDE 36.3261406
SEGMENT s/o 7th St LONGITUDE -119.6488997
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 4

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	3	3	2	3	11	2	3	0	2	7	18
1:00 AM	1	0	0	0	1	1	0	0	0	1	2
2:00 AM	0	2	2	0	4	0	0	2	0	2	6
3:00 AM	3	0	2	0	5	0	2	2	1	5	10
4:00 AM	1	2	4	4	11	2	0	5	4	11	22
5:00 AM	3	2	8	5	18	2	4	12	8	26	44
6:00 AM	9	8	11	19	47	6	9	8	15	38	85
7:00 AM	18	22	33	49	122	25	34	38	49	146	268
8:00 AM	40	43	37	54	174	38	30	31	22	121	295
9:00 AM	44	34	43	50	171	35	30	27	41	133	304
10:00 AM	49	43	44	46	182	38	41	44	45	168	350
11:00 AM	39	51	51	55	196	35	52	38	62	187	383
12:00 PM	52	50	62	32	196	58	50	52	53	213	409
1:00 PM	49	54	50	47	200	45	40	45	47	177	377
2:00 PM	44	41	64	68	217	52	44	48	44	188	405
3:00 PM	48	42	52	42	184	70	60	54	38	222	406
4:00 PM	52	58	51	51	212	51	50	66	54	221	433
5:00 PM	45	55	68	40	208	72	68	60	53	253	461
6:00 PM	39	32	20	31	122	50	34	23	29	136	258
7:00 PM	23	22	21	17	83	32	27	24	15	98	181
8:00 PM	16	15	13	11	55	33	31	14	15	93	148
9:00 PM	11	6	6	6	29	11	7	5	3	26	55
10:00 PM	13	4	6	7	30	12	5	9	5	31	61
11:00 PM	1	5	2	1	9	6	2	3	2	13	22
Total	49.7%				2487	50.3%				2516	
	5003										

AM% 35.7% AM Peak 383 11:00 am to 12:00 pm AM P.H.F. 0.82
PM% 64.3% PM Peak 473 4:45 pm to 5:45 pm PM P.H.F. 0.92





Metro Traffic Data Inc.
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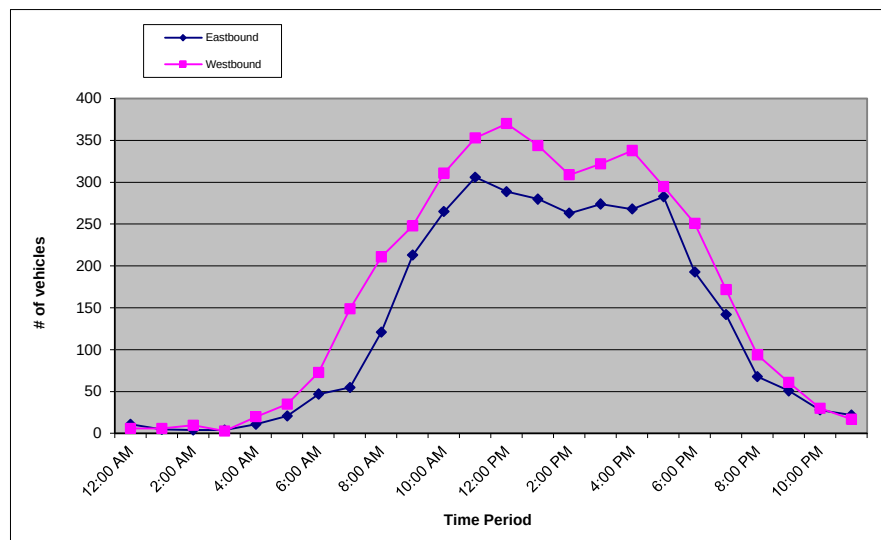
24 Hour Count Report

Prepared For: **Peters Engineering Group**
952 Pollasky Avenue
Clovis, CA 93612

STREET 7th St LATITUDE 36.3261406
SEGMENT w/o Redington St LONGITUDE -119.6488997
COLLECTION DATE Tuesday, October 23, 2018 WEATHER Clear
NUMBER OF LANES 2

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Totals
12:00 AM	4	4	2	1	11	0	1	4	1	6	17
1:00 AM	0	1	3	1	5	2	2	1	1	6	11
2:00 AM	0	1	1	2	4	0	2	4	4	10	14
3:00 AM	1	2	0	1	4	0	0	3	0	3	7
4:00 AM	2	2	3	4	11	5	3	5	7	20	31
5:00 AM	2	1	5	13	21	7	5	11	12	35	56
6:00 AM	4	12	9	22	47	10	11	25	27	73	120
7:00 AM	11	8	11	25	55	24	32	33	60	149	204
8:00 AM	28	32	28	33	121	56	49	45	61	211	332
9:00 AM	60	43	45	65	213	58	58	65	67	248	461
10:00 AM	62	57	70	76	265	76	82	80	73	311	576
11:00 AM	83	75	74	74	306	82	77	102	92	353	659
12:00 PM	86	56	66	81	289	83	100	84	103	370	659
1:00 PM	59	66	78	77	280	83	94	84	83	344	624
2:00 PM	72	54	77	60	263	84	64	71	90	309	572
3:00 PM	66	60	81	67	274	76	86	88	72	322	596
4:00 PM	69	67	66	66	268	90	75	83	90	338	606
5:00 PM	75	80	63	65	283	62	84	73	76	295	578
6:00 PM	54	45	37	57	193	76	72	53	50	251	444
7:00 PM	46	38	32	26	142	43	46	49	34	172	314
8:00 PM	17	23	14	14	68	30	20	20	24	94	162
9:00 PM	13	19	10	9	51	15	20	11	15	61	112
10:00 PM	11	7	6	4	28	10	8	8	4	30	58
11:00 PM	7	2	7	6	22	7	4	2	4	17	39
Total	44.5%				3224	55.5%				4028	
	7252										

AM% 34.3% AM Peak 659 11:00 am to 12:00 pm AM P.H.F. 0.94
PM% 65.7% PM Peak 659 12:00 pm to 1:00 pm PM P.H.F. 0.90





Metro Traffic Data Inc.

310 N. Irwin Street - Suite 20
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www.metrotrafficdata.com

Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION Lacey Blvd btwn Redington/Irwin LATITUDE 36.3280021

CITY Hanford LONGITUDE -119.6485754

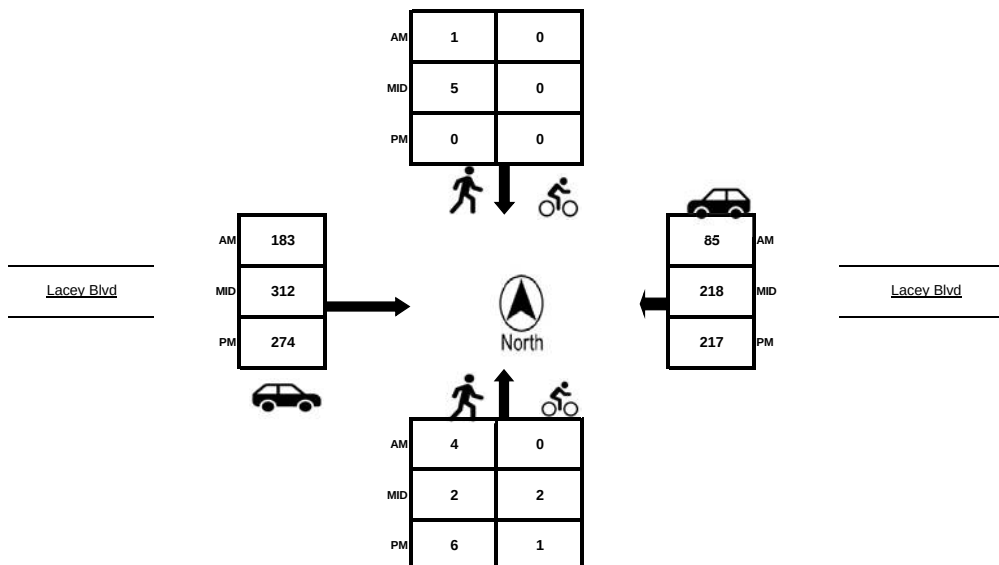
COLLECTION DATE Thursday, November 01, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	15	7	22	22
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	20	14	34	34
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	26	24	50	50
7:45 AM to 8:00 AM	1	0	1	0	0	0	1	36	29	65	66
8:00 AM to 8:15 AM	1	0	1	0	0	0	1	43	26	69	70
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	39	18	57	57
8:30 AM to 8:45 AM	1	1	2	0	0	0	2	49	21	70	72
8:45 AM to 9:00 AM	2	0	2	0	0	0	2	52	20	72	74
TOTAL	5	1	6	0	0	0	6	280	159	439	445

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	1	1	2	0	0	0	2	80	50	130	132
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	63	68	131	131
11:30 AM to 11:45 AM	0	0	0	0	1	1	1	67	39	106	107
11:45 AM to 12:00 PM	0	0	0	0	0	0	0	74	45	119	119
12:00 PM to 12:15 PM	1	2	3	0	0	0	3	78	55	133	136
12:15 PM to 12:30 PM	1	2	3	1	0	1	4	82	57	139	143
12:30 PM to 12:45 PM	0	0	0	0	0	0	0	75	51	126	126
12:45 PM to 1:00 PM	0	1	1	1	0	1	2	77	55	132	134
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	65	56	121	121
1:15 PM to 1:30 PM	0	1	1	0	0	0	1	74	50	124	125
1:30 PM to 1:45 PM	0	0	0	0	0	0	0	69	43	112	112
1:45 PM to 2:00 PM	2	0	2	0	1	1	3	81	53	134	137
TOTAL	5	7	12	2	2	4	16	885	622	1507	1523

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	0	0	0	2	0	2	2	73	38	111	113
4:15 PM to 4:30 PM	0	0	0	0	0	0	0	66	45	111	111
4:30 PM to 4:45 PM	2	0	2	1	0	1	3	82	75	157	160
4:45 PM to 5:00 PM	1	0	1	0	0	0	1	68	39	107	108
5:00 PM to 5:15 PM	3	0	3	0	0	0	3	58	58	116	119
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	67	35	102	102
5:30 PM to 5:45 PM	0	0	0	0	0	0	0	41	5	46	46
5:45 PM to 6:00 PM	0	0	0	0	0	0	0	58	23	81	81
TOTAL	6	0	6	3	0	3	9	513	318	831	840

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
8:00 AM to 9:00 AM	4	1	5	0	0	0	5	183	85	268	273
12:00 PM to 1:00 PM	2	5	7	2	0	2	9	312	218	530	539
4:15 PM to 5:15 PM	6	0	6	1	0	1	7	274	217	491	498





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 8th St btw Redington/Irwin LATITUDE 36.327356

CITY Hanford LONGITUDE -119.6481141

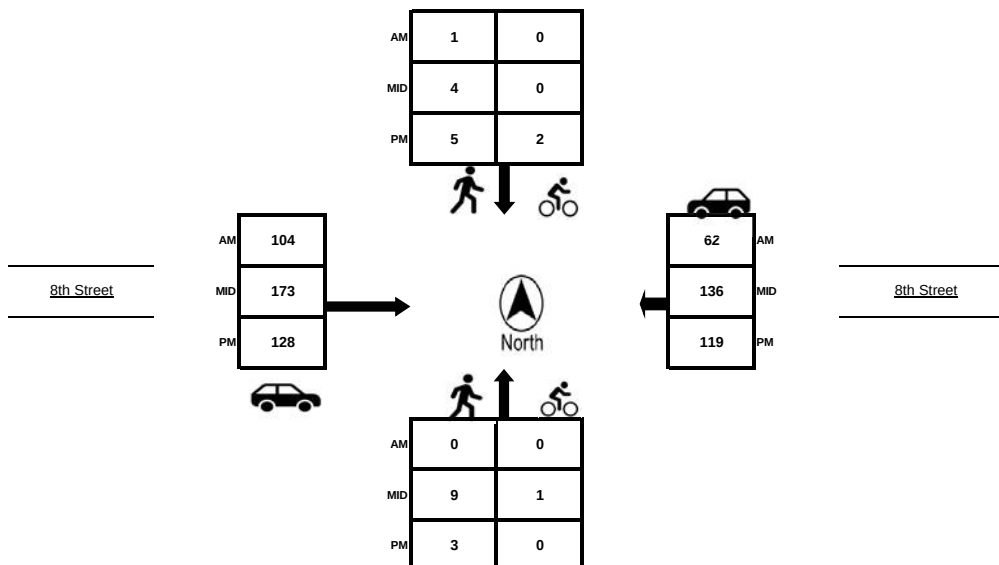
COLLECTION DATE Thursday, November 01, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	1	1	1	6	4	10	11
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	12	3	15	15
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	22	14	36	36
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	24	24	48	48
8:00 AM to 8:15 AM	0	1	1	0	0	0	1	29	13	42	43
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	22	15	37	37
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	29	10	39	39
8:45 AM to 9:00 AM	0	2	2	0	0	0	2	26	13	39	41
TOTAL	0	3	3	0	1	1	4	170	96	266	270

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	1	0	1	0	0	0	1	45	30	75	76
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	39	27	66	66
11:30 AM to 11:45 AM	2	0	2	1	0	1	3	51	30	81	84
11:45 AM to 12:00 PM	4	1	5	0	0	0	5	42	39	81	86
12:00 PM to 12:15 PM	3	2	5	0	0	0	5	40	34	74	79
12:15 PM to 12:30 PM	0	1	1	0	0	0	1	40	33	73	74
12:30 PM to 12:45 PM	4	0	4	0	0	0	4	26	33	59	63
12:45 PM to 1:00 PM	1	2	3	2	0	2	5	51	42	93	98
1:00 PM to 1:15 PM	1	3	4	0	0	0	4	38	29	67	71
1:15 PM to 1:30 PM	1	2	3	0	0	0	3	36	27	63	66
1:30 PM to 1:45 PM	2	6	8	0	0	0	8	38	35	73	81
1:45 PM to 2:00 PM	2	3	5	0	0	0	5	40	26	66	71
TOTAL	21	20	41	3	0	3	44	486	385	871	915

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	2	2	4	1	0	1	5	36	20	56	61
4:15 PM to 4:30 PM	1	1	2	0	0	0	2	37	31	68	70
4:30 PM to 4:45 PM	1	3	4	0	0	0	4	31	34	65	69
4:45 PM to 5:00 PM	0	1	1	0	0	0	1	27	27	54	55
5:00 PM to 5:15 PM	1	0	1	0	2	2	3	33	27	60	63
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	39	22	61	61
5:30 PM to 5:45 PM	2	1	3	0	0	0	3	29	20	49	52
5:45 PM to 6:00 PM	1	3	4	0	0	0	4	23	23	46	50
TOTAL	8	11	19	1	2	3	22	255	204	459	481

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:45 AM to 8:45 AM	0	1	1	0	0	0	1	104	62	166	167
11:30 AM to 12:30 PM	9	4	13	1	0	1	14	173	136	309	323
4:15 PM to 5:15 PM	3	5	8	0	2	2	10	128	119	247	257





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 7th St b/w Douty/Harris LATITUDE 36.3267273

CITY Hanford LONGITUDE -119.6449156

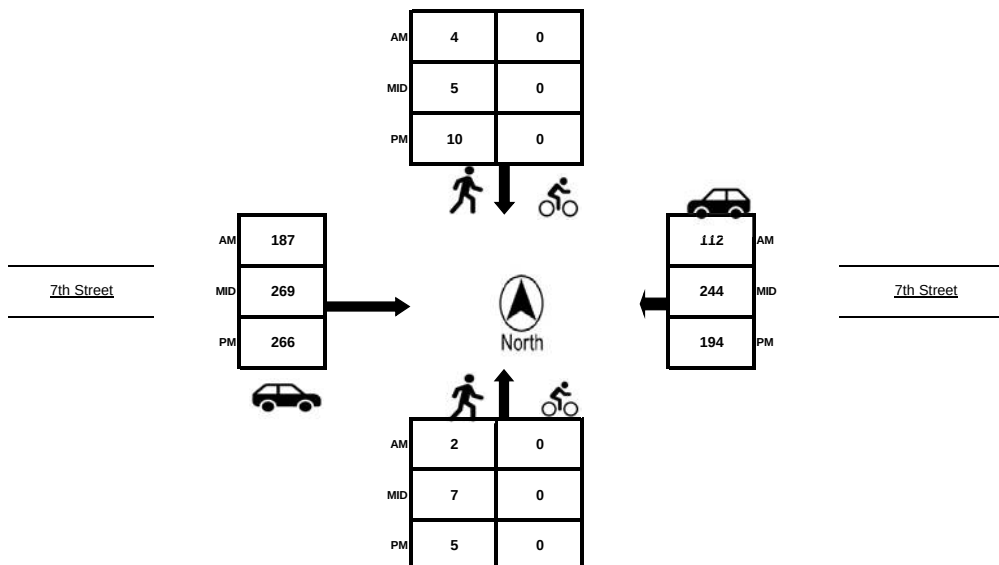
COLLECTION DATE Thursday, October 25, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	21	15	36	36
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	23	19	42	42
7:30 AM to 7:45 AM	0	1	1	0	0	0	1	43	17	60	61
7:45 AM to 8:00 AM	0	1	1	0	0	0	1	55	29	84	85
8:00 AM to 8:15 AM	0	2	2	0	0	0	2	43	29	72	74
8:15 AM to 8:30 AM	1	0	1	0	0	0	1	49	29	78	79
8:30 AM to 8:45 AM	1	1	2	0	0	0	2	40	25	65	67
8:45 AM to 9:00 AM	1	1	2	0	0	0	2	47	27	74	76
TOTAL	3	6	9	0	0	0	9	321	190	511	520

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	0	0	0	0	0	0	0	75	59	134	134
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	58	51	109	109
11:30 AM to 11:45 AM	2	0	2	0	0	0	2	65	53	118	120
11:45 AM to 12:00 PM	2	3	5	0	0	0	5	77	62	139	144
12:00 PM to 12:15 PM	1	1	2	0	0	0	2	69	65	134	136
12:15 PM to 12:30 PM	2	1	3	0	0	0	3	58	64	122	125
12:30 PM to 12:45 PM	1	4	5	0	0	0	5	66	49	115	120
12:45 PM to 1:00 PM	1	0	1	0	0	0	1	61	56	117	118
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	68	61	129	129
1:15 PM to 1:30 PM	6	1	7	0	0	0	7	85	54	139	146
1:30 PM to 1:45 PM	3	1	4	0	0	0	4	67	53	120	124
1:45 PM to 2:00 PM	0	0	0	0	0	0	0	51	53	104	104
TOTAL	18	11	29	0	0	0	29	800	680	1480	1509

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	1	0	1	0	0	0	1	73	42	115	116
4:15 PM to 4:30 PM	1	0	1	0	0	0	1	60	57	117	118
4:30 PM to 4:45 PM	2	2	4	0	0	0	4	67	47	114	118
4:45 PM to 5:00 PM	1	8	9	0	0	0	9	66	48	114	123
5:00 PM to 5:15 PM	0	2	2	0	0	0	2	67	41	108	110
5:15 PM to 5:30 PM	2	5	7	0	0	0	7	42	35	77	84
5:30 PM to 5:45 PM	7	2	9	0	0	0	9	66	29	95	104
5:45 PM to 6:00 PM	2	2	4	0	0	0	4	69	28	97	101
TOTAL	16	21	37	0	0	0	37	510	327	837	874

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:45 AM to 8:45 AM	2	4	6	0	0	0	6	187	112	299	305
11:30 AM to 12:30 PM	7	5	12	0	0	0	12	269	244	513	525
4:00 PM to 5:00 PM	5	10	15	0	0	0	15	266	194	460	475





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 6th St btw Redington/Irwin LATITUDE 36.3251701

CITY Hanford LONGITUDE -119.6477992

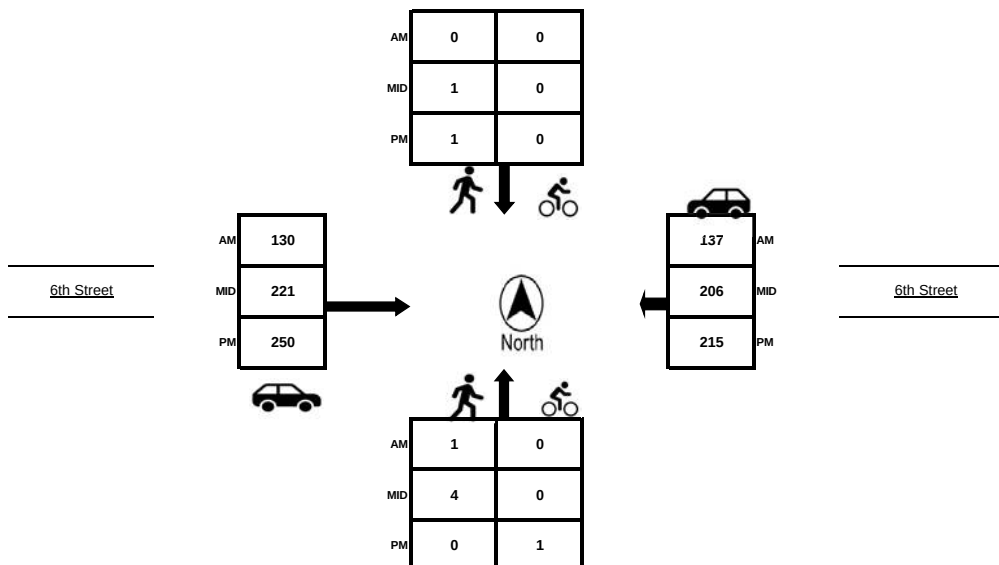
COLLECTION DATE Wednesday, October 24, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	14	18	32	32
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	18	31	49	49
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	24	25	49	49
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	39	38	77	77
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	31	31	62	62
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	28	31	59	59
8:30 AM to 8:45 AM	1	0	1	0	0	0	1	32	37	69	70
8:45 AM to 9:00 AM	2	0	2	0	0	0	2	32	34	66	68
TOTAL	3	0	3	0	0	0	3	218	245	463	466

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	0	1	1	0	0	0	1	48	40	88	89
11:15 AM to 11:30 AM	2	0	2	1	0	1	3	44	31	75	78
11:30 AM to 11:45 AM	0	0	0	0	0	0	0	44	34	78	78
11:45 AM to 12:00 PM	0	0	0	0	1	1	1	45	61	106	107
12:00 PM to 12:15 PM	0	0	0	0	0	0	0	53	52	105	105
12:15 PM to 12:30 PM	0	0	0	1	0	1	1	51	43	94	95
12:30 PM to 12:45 PM	1	2	3	0	0	0	3	40	42	82	85
12:45 PM to 1:00 PM	1	1	2	0	0	0	2	71	59	130	132
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	49	48	97	97
1:15 PM to 1:30 PM	0	0	0	0	0	0	0	50	45	95	95
1:30 PM to 1:45 PM	3	0	3	0	0	0	3	51	54	105	108
1:45 PM to 2:00 PM	0	0	0	0	0	0	0	57	52	109	109
TOTAL	7	4	11	2	1	3	14	603	561	1164	1178

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	0	0	0	0	0	0	0	44	47	91	91
4:15 PM to 4:30 PM	0	0	0	0	0	0	0	51	44	95	95
4:30 PM to 4:45 PM	0	0	0	1	0	1	1	57	48	105	106
4:45 PM to 5:00 PM	0	1	1	0	0	0	1	57	57	114	115
5:00 PM to 5:15 PM	0	0	0	0	0	0	0	73	64	137	137
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	63	46	109	109
5:30 PM to 5:45 PM	0	1	1	0	0	0	1	44	46	90	91
5:45 PM to 6:00 PM	0	1	1	0	0	0	1	43	39	82	83
TOTAL	0	3	3	1	0	1	4	432	391	823	827

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:45 AM to 8:45 AM	1	0	1	0	0	0	1	130	137	267	268
12:45 PM to 1:45 PM	4	1	5	0	0	0	5	221	206	427	432
4:30 PM to 5:30 PM	0	1	1	1	0	1	2	250	215	465	467





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

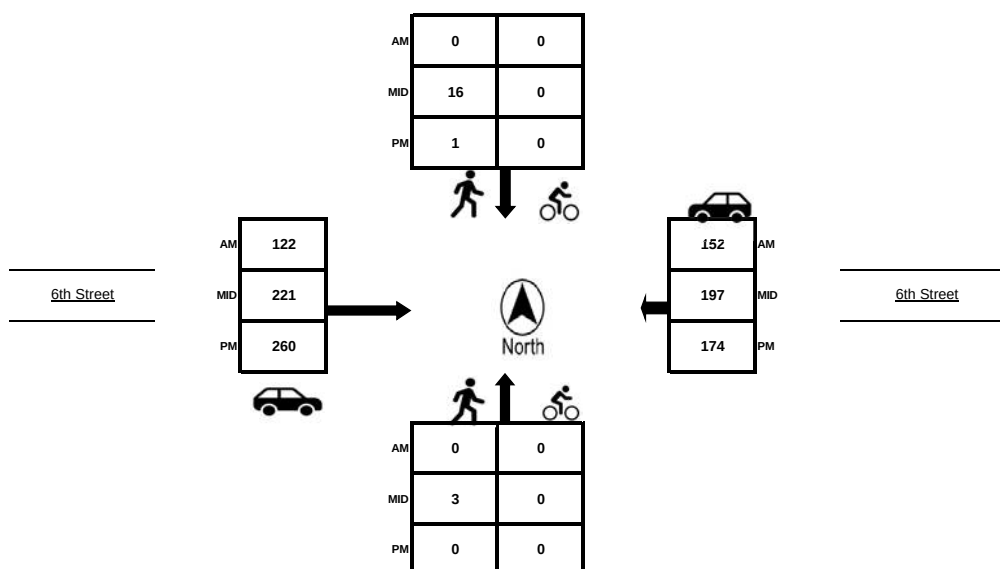
LOCATION	6th St btw Irwin/Douty	LATITUDE	36.3254068
CITY	Hanford	LONGITUDE	-119.6462381
COLLECTION DATE	Wednesday, October 24, 2018	WEATHER	Clear

	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK	Vehicle Cross-Traffic			ALL-MODES
Time	NB	SB	TOTAL	NB	SB	TOTAL	TOTAL	EB	WB	TOTAL	TOTAL
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	17	15	32	32
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	19	31	50	50
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	21	27	48	48
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	40	48	88	88
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	21	35	56	56
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	23	33	56	56
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	38	36	74	74
8:45 AM to 9:00 AM	1	0	1	0	0	0	1	31	38	69	70
TOTAL	1	0	1	0	0	0	1	210	263	473	474

		Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK	Vehicle Cross-Traffic			ALL-MODES
Time		NB	SB	Total	NB	SB	Total	TOTAL	EB	WB	Total	TOTAL
11:00 AM	to 11:15 AM	2	2	4	0	0	0	4	45	42	87	91
11:15 AM	to 11:30 AM	1	0	1	0	0	0	1	48	29	77	78
11:30 AM	to 11:45 AM	7	0	7	0	0	0	7	42	39	81	88
11:45 AM	to 12:00 PM	5	1	6	0	0	0	6	47	63	110	116
12:00 PM	to 12:15 PM	2	1	3	0	0	0	3	56	39	95	98
12:15 PM	to 12:30 PM	0	1	1	0	0	0	1	56	50	106	107
12:30 PM	to 12:45 PM	0	0	0	0	0	0	0	40	33	73	73
12:45 PM	to 1:00 PM	2	12	14	0	0	0	14	61	60	121	135
1:00 PM	to 1:15 PM	1	1	2	0	0	0	2	57	44	101	103
1:15 PM	to 1:30 PM	0	2	2	0	0	0	2	47	39	86	88
1:30 PM	to 1:45 PM	0	1	1	0	0	0	1	56	54	110	111
1:45 PM	to 2:00 PM	0	0	0	0	0	0	0	60	41	101	101
TOTAL		20	21	41	0	0	0	41	615	533	1148	1189

	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK	Vehicle Cross-Traffic			ALL-MODES
Time	NB	SB	Total	NB	SB	Total	TOTAL	EB	WB	Total	TOTAL
4:00 PM to 4:15 PM	0	0	0	0	0	0	0	48	54	102	102
4:15 PM to 4:30 PM	0	0	0	0	0	0	0	50	35	85	85
4:30 PM to 4:45 PM	0	0	0	0	0	0	0	58	45	103	103
4:45 PM to 5:00 PM	0	0	0	0	0	0	0	55	46	101	101
5:00 PM to 5:15 PM	0	1	1	0	0	0	1	87	39	126	127
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	60	44	104	104
5:30 PM to 5:45 PM	0	0	0	0	0	0	0	44	47	91	91
5:45 PM to 6:00 PM	0	0	0	0	0	0	0	48	41	89	89
TOTAL	0	1	1	0	0	0	1	450	351	801	802

		Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK	Vehicle Cross-Traffic			ALL-MODES
PEAK HOUR		NB	SB	Total	NB	SB	Total		TOTAL	EB	WB	
7:45 AM	to 8:45 AM	0	0	0	0	0	0	0	122	152	274	274
12:45 PM	to 1:45 PM	3	16	19	0	0	0	19	221	197	418	437
4:30 PM	to 5:30 PM	0	1	1	0	0	0	1	260	174	434	435





Metro Traffic Data Inc.

310 N. Irwin Street - Suite 20
Hanford, CA 93230800-975-6938 Phone/Fax
www.metrotrafficdata.com

Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 6th St b/w Douty/Harris LATITUDE 36.3256585

CITY Hanford LONGITUDE -119.6446717

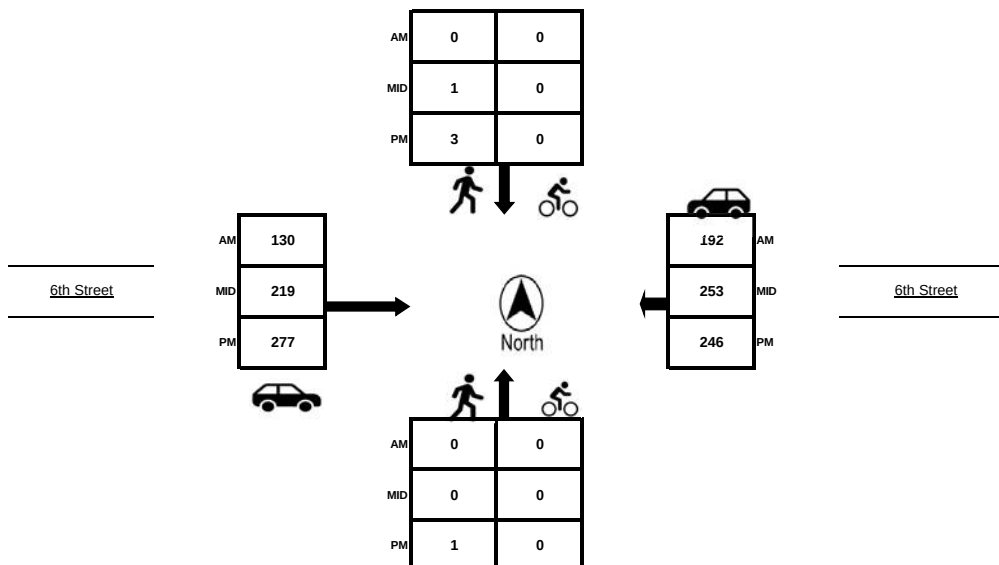
COLLECTION DATE Wednesday, October 24, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	22	19	41	41
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	31	34	65	65
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	29	34	63	63
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	38	67	105	105
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	24	45	69	69
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	32	45	77	77
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	36	35	71	71
8:45 AM to 9:00 AM	0	0	0	0	0	0	0	43	44	87	87
TOTAL	0	0	0	0	0	0	0	255	323	578	578

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	0	0	0	0	0	0	0	56	43	99	99
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	52	36	88	88
11:30 AM to 11:45 AM	0	2	2	0	0	0	2	48	55	103	105
11:45 AM to 12:00 PM	0	2	2	0	0	0	2	46	59	105	107
12:00 PM to 12:15 PM	0	0	0	0	0	0	0	59	51	110	110
12:15 PM to 12:30 PM	0	0	0	0	0	0	0	53	67	120	120
12:30 PM to 12:45 PM	0	1	1	0	0	0	1	46	54	100	101
12:45 PM to 1:00 PM	0	0	0	0	0	0	0	57	73	130	130
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	63	59	122	122
1:15 PM to 1:30 PM	1	0	1	0	0	0	1	45	56	101	102
1:30 PM to 1:45 PM	0	1	1	0	0	0	1	44	65	109	110
1:45 PM to 2:00 PM	1	0	1	0	0	0	1	56	42	98	99
TOTAL	2	6	8	0	0	0	8	625	660	1285	1293

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	2	2	4	0	0	0	4	63	60	123	127
4:15 PM to 4:30 PM	1	1	2	0	0	0	2	64	54	118	120
4:30 PM to 4:45 PM	0	0	0	0	0	0	0	54	57	111	111
4:45 PM to 5:00 PM	0	0	0	0	0	0	0	65	59	124	124
5:00 PM to 5:15 PM	1	1	2	0	0	0	2	85	63	148	150
5:15 PM to 5:30 PM	0	1	1	0	0	0	1	71	50	121	122
5:30 PM to 5:45 PM	0	1	1	0	0	0	1	56	74	130	131
5:45 PM to 6:00 PM	0	1	1	0	0	0	1	59	62	121	122
TOTAL	4	7	11	0	0	0	11	517	479	996	1007

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:45 AM to 8:45 AM	0	0	0	0	0	0	0	130	192	322	322
12:15 PM to 1:15 PM	0	1	1	0	0	0	1	219	253	472	473
4:45 PM to 5:45 PM	1	3	4	0	0	0	4	277	246	523	527





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 8th St btw Phillips/Redington LATITUDE 36.3270599

CITY Hanford LONGITUDE -119.6499919

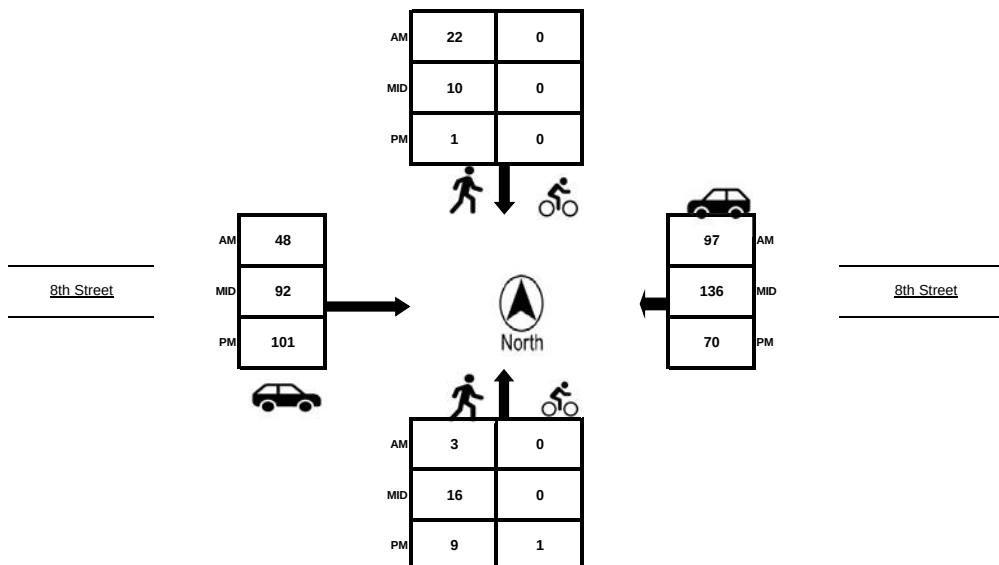
COLLECTION DATE Thursday, October 25, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	5	11	16	16
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	5	8	13	13
7:30 AM to 7:45 AM	0	2	2	0	0	0	2	1	15	16	18
7:45 AM to 8:00 AM	0	4	4	0	0	0	4	13	26	39	43
8:00 AM to 8:15 AM	0	5	5	0	0	0	5	6	18	24	29
8:15 AM to 8:30 AM	0	6	6	0	0	0	6	11	23	34	40
8:30 AM to 8:45 AM	1	6	7	0	0	0	7	13	22	35	42
8:45 AM to 9:00 AM	2	5	7	0	0	0	7	18	34	52	59
TOTAL	3	28	31	0	0	0	31	72	157	229	260

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	0	0	0	0	0	0	0	17	24	41	41
11:15 AM to 11:30 AM	3	2	5	0	0	0	5	20	27	47	52
11:30 AM to 11:45 AM	7	1	8	0	0	0	8	21	28	49	57
11:45 AM to 12:00 PM	5	0	5	0	0	0	5	12	28	40	45
12:00 PM to 12:15 PM	5	0	5	0	0	0	5	27	36	63	68
12:15 PM to 12:30 PM	5	4	9	0	0	0	9	16	35	51	60
12:30 PM to 12:45 PM	4	5	9	0	0	0	9	21	37	58	67
12:45 PM to 1:00 PM	2	1	3	0	0	0	3	28	28	56	59
1:00 PM to 1:15 PM	2	1	3	0	0	0	3	13	25	38	41
1:15 PM to 1:30 PM	2	0	2	0	0	0	2	20	33	53	55
1:30 PM to 1:45 PM	0	2	2	0	0	0	2	24	23	47	49
1:45 PM to 2:00 PM	1	1	2	0	0	0	2	18	32	50	52
TOTAL	36	17	53	0	0	0	53	237	356	593	646

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	0	0	0	0	0	0	0	22	23	45	45
4:15 PM to 4:30 PM	1	0	1	0	0	0	1	14	21	35	36
4:30 PM to 4:45 PM	4	0	4	0	0	0	4	17	18	35	39
4:45 PM to 5:00 PM	1	0	1	0	0	0	1	17	18	35	36
5:00 PM to 5:15 PM	7	0	7	1	0	1	8	28	19	47	55
5:15 PM to 5:30 PM	1	0	1	0	0	0	1	27	16	43	44
5:30 PM to 5:45 PM	1	0	1	0	0	0	1	23	17	40	41
5:45 PM to 6:00 PM	0	1	1	0	0	0	1	23	18	41	42
TOTAL	15	1	16	1	0	1	17	171	150	321	338

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
8:00 AM to 9:00 AM	3	22	25	0	0	0	25	48	97	145	170
12:00 PM to 1:00 PM	16	10	26	0	0	0	26	92	136	228	254
5:00 PM to 6:00 PM	9	1	10	1	0	1	11	101	70	171	182





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 7th St btw Phillips/Redington LATITUDE 36.3259961

CITY Hanford LONGITUDE -119.6495727

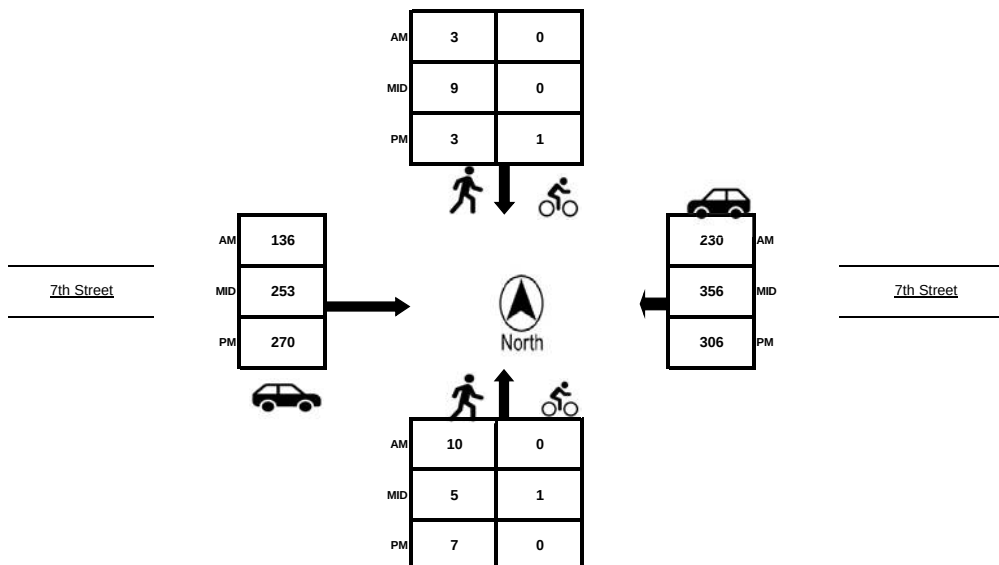
COLLECTION DATE Thursday, October 25, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	22	21	43	43
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	20	31	51	51
7:30 AM to 7:45 AM	1	0	1	0	0	0	1	19	49	68	69
7:45 AM to 8:00 AM	3	1	4	0	0	0	4	29	67	96	100
8:00 AM to 8:15 AM	3	0	3	0	0	0	3	37	51	88	91
8:15 AM to 8:30 AM	4	2	6	0	0	0	6	37	58	95	101
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	33	54	87	87
8:45 AM to 9:00 AM	2	0	2	0	0	0	2	29	58	87	89
TOTAL	13	3	16	0	0	0	16	226	389	615	631

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
11:00 AM to 11:15 AM	1	2	3	0	0	0	3	64	85	149	152
11:15 AM to 11:30 AM	0	2	2	0	0	0	2	64	72	136	138
11:30 AM to 11:45 AM	2	0	2	0	0	0	2	59	93	152	154
11:45 AM to 12:00 PM	4	2	6	0	0	0	6	74	92	166	172
12:00 PM to 12:15 PM	1	1	2	0	0	0	2	66	88	154	156
12:15 PM to 12:30 PM	4	1	5	0	0	0	5	55	73	128	133
12:30 PM to 12:45 PM	1	5	6	0	0	0	6	59	85	144	150
12:45 PM to 1:00 PM	0	2	2	0	0	0	2	60	95	155	157
1:00 PM to 1:15 PM	2	0	2	0	0	0	2	65	83	148	150
1:15 PM to 1:30 PM	2	2	4	1	0	1	5	69	93	162	167
1:30 PM to 1:45 PM	2	1	3	0	0	0	3	70	70	140	143
1:45 PM to 2:00 PM	0	1	1	0	0	0	1	52	88	140	141
TOTAL	19	19	38	1	0	1	39	757	1017	1774	1813

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
4:00 PM to 4:15 PM	0	1	1	0	0	0	1	67	83	150	151
4:15 PM to 4:30 PM	5	0	5	0	0	0	5	72	69	141	146
4:30 PM to 4:45 PM	1	0	1	0	0	0	1	63	87	150	151
4:45 PM to 5:00 PM	1	2	3	0	1	1	4	68	67	135	139
5:00 PM to 5:15 PM	3	2	5	0	0	0	5	58	84	142	147
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	82	62	144	144
5:30 PM to 5:45 PM	0	0	0	0	0	0	0	57	54	111	111
5:45 PM to 6:00 PM	1	2	3	0	0	0	3	51	60	111	114
TOTAL	11	7	18	0	1	1	19	518	566	1084	1103

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	NB	SB	Total	NB	SB	Total		EB	WB	Total	
7:45 AM to 8:45 AM	10	3	13	0	0	0	13	136	230	366	379
12:30 PM to 1:30 PM	5	9	14	1	0	1	15	253	356	609	624
4:00 PM to 5:00 PM	7	3	10	0	1	1	11	270	306	576	587





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION Irwin St btw 6th/7th LATITUDE 36.3257908

CITY Hanford LONGITUDE -119.6471748

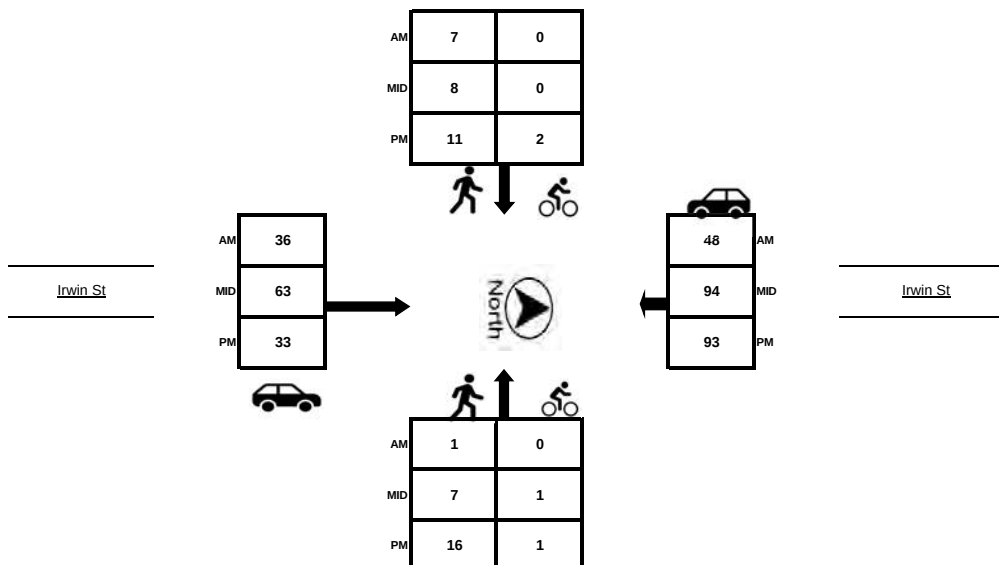
COLLECTION DATE Thursday, October 25, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:00 AM to 7:15 AM	0	0	0	0	1	1	1	3	6	9	10
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	5	10	15	15
7:30 AM to 7:45 AM	1	1	2	0	0	0	2	3	8	11	13
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	8	10	18	18
8:00 AM to 8:15 AM	3	0	3	0	0	0	3	7	12	19	22
8:15 AM to 8:30 AM	2	0	2	0	0	0	2	10	11	21	23
8:30 AM to 8:45 AM	0	1	1	0	0	0	1	8	7	15	16
8:45 AM to 9:00 AM	2	0	2	0	0	0	2	11	18	29	31
TOTAL	8	2	10	0	1	1	11	55	82	137	148

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
11:00 AM to 11:15 AM	1	0	1	0	0	0	1	17	19	36	37
11:15 AM to 11:30 AM	3	0	3	0	0	0	3	10	21	31	34
11:30 AM to 11:45 AM	3	1	4	0	0	0	4	16	25	41	45
11:45 AM to 12:00 PM	0	1	1	0	0	0	1	15	15	30	31
12:00 PM to 12:15 PM	4	1	5	1	0	1	6	17	14	31	37
12:15 PM to 12:30 PM	2	1	3	0	0	0	3	13	22	35	38
12:30 PM to 12:45 PM	1	2	3	0	1	1	4	16	22	38	42
12:45 PM to 1:00 PM	1	2	3	0	0	0	3	12	23	35	38
1:00 PM to 1:15 PM	4	2	6	0	0	0	6	22	27	49	55
1:15 PM to 1:30 PM	3	2	5	1	0	1	6	4	26	30	36
1:30 PM to 1:45 PM	0	2	2	0	0	0	2	12	23	35	37
1:45 PM to 2:00 PM	1	5	6	0	0	0	6	13	26	39	45
TOTAL	23	19	42	2	1	3	45	167	263	430	475

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
4:00 PM to 4:15 PM	2	4	6	0	0	0	6	10	16	26	32
4:15 PM to 4:30 PM	3	5	8	0	0	0	8	8	17	25	33
4:30 PM to 4:45 PM	4	4	8	0	0	0	8	7	15	22	30
4:45 PM to 5:00 PM	1	0	1	0	0	0	1	7	14	21	22
5:00 PM to 5:15 PM	2	5	7	0	1	1	8	11	21	32	40
5:15 PM to 5:30 PM	4	1	5	1	0	1	6	9	20	29	35
5:30 PM to 5:45 PM	2	4	6	1	0	1	7	9	21	30	37
5:45 PM to 6:00 PM	3	6	9	0	0	0	9	4	31	35	44
TOTAL	21	29	50	2	1	3	53	65	155	220	273

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
8:00 AM to 9:00 AM	7	1	8	0	0	0	8	36	48	84	92
12:15 PM to 1:15 PM	8	7	15	0	1	1	16	63	94	157	173
5:00 PM to 6:00 PM	11	16	27	2	1	3	30	33	93	126	156





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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

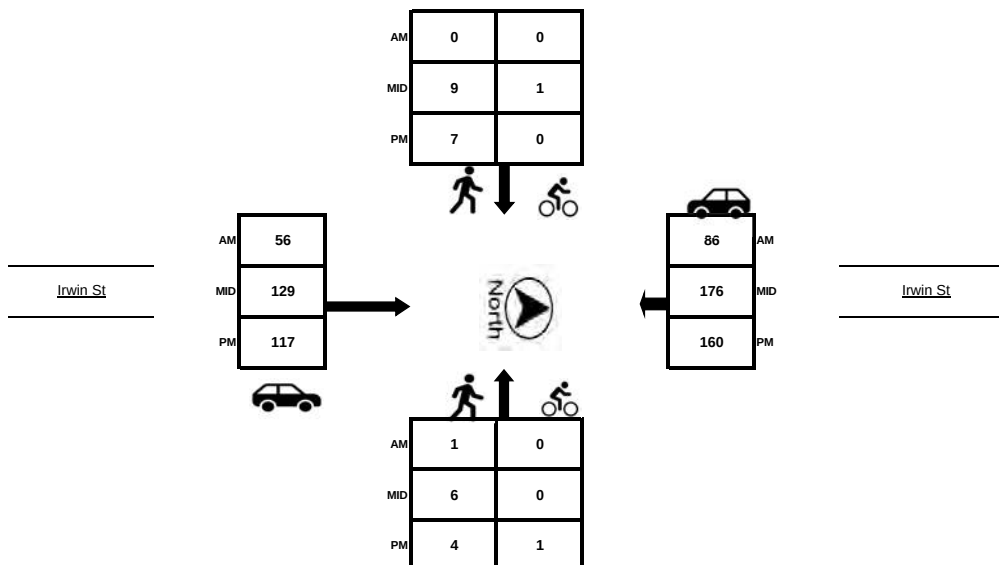
LOCATION Irwin St btw 7th/8th LATITUDE 36.3268669
CITY Hanford LONGITUDE -119.6474189
COLLECTION DATE Thursday, November 01, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	4	7	11	11
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	8	9	17	17
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	10	10	20	20
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	13	32	45	45
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	18	26	44	44
8:15 AM to 8:30 AM	0	1	1	0	0	0	1	10	9	19	20
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	15	19	34	34
8:45 AM to 9:00 AM	0	0	0	0	0	0	0	19	26	45	45
TOTAL	0	1	1	0	0	0	1	97	138	235	236

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
11:00 AM to 11:15 AM	1	1	2	0	0	0	2	42	38	80	82
11:15 AM to 11:30 AM	1	0	1	0	0	0	1	36	33	69	70
11:30 AM to 11:45 AM	3	0	3	0	0	0	3	36	48	84	87
11:45 AM to 12:00 PM	0	0	0	1	0	1	1	19	35	54	55
12:00 PM to 12:15 PM	1	1	2	0	0	0	2	41	48	89	91
12:15 PM to 12:30 PM	4	3	7	1	0	1	8	32	35	67	75
12:30 PM to 12:45 PM	4	1	5	0	0	0	5	25	48	73	78
12:45 PM to 1:00 PM	0	1	1	0	0	0	1	31	45	76	77
1:00 PM to 1:15 PM	0	2	2	0	0	0	2	36	49	85	87
1:15 PM to 1:30 PM	2	1	3	0	0	0	3	30	31	61	64
1:30 PM to 1:45 PM	0	1	1	0	0	0	1	25	38	63	64
1:45 PM to 2:00 PM	0	0	0	0	0	0	0	31	31	62	62
TOTAL	16	11	27	2	0	2	29	384	479	863	892

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
4:00 PM to 4:15 PM	1	2	3	0	0	0	3	25	39	64	67
4:15 PM to 4:30 PM	3	3	6	0	0	0	6	31	42	73	79
4:30 PM to 4:45 PM	2	0	2	0	0	0	2	37	36	73	75
4:45 PM to 5:00 PM	1	1	2	0	1	1	3	22	33	55	58
5:00 PM to 5:15 PM	1	0	1	0	0	0	1	27	49	76	77
5:15 PM to 5:30 PM	2	1	3	0	0	0	3	23	38	61	64
5:30 PM to 5:45 PM	0	1	1	0	0	0	1	22	45	67	68
5:45 PM to 6:00 PM	2	1	3	0	0	0	3	16	32	48	51
TOTAL	12	9	21	0	1	1	22	203	314	517	539

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:45 AM to 8:45 AM	0	1	1	0	0	0	1	56	86	142	143
12:00 PM to 1:00 PM	9	6	15	1	0	1	16	129	176	305	321
4:15 PM to 5:15 PM	7	4	11	0	1	1	12	117	160	277	289





Metro Traffic Data Inc.

310 N. Irwin Street - Suite 20
Hanford, CA 93230800-975-6938 Phone/Fax
www.metrotrafficdata.com

Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION Douty St btw 6th/7th LATITUDE 36.3261122

CITY Hanford LONGITUDE -119.6455938

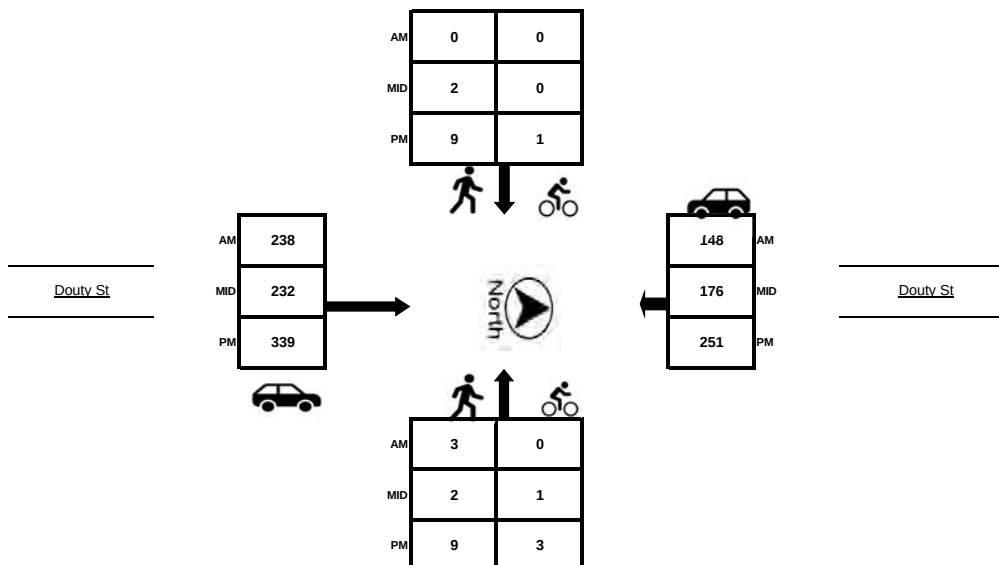
COLLECTION DATE Thursday, October 25, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	22	15	37	37
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	46	26	72	72
7:30 AM to 7:45 AM	0	1	1	0	0	0	1	62	53	115	116
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	79	40	119	119
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	55	26	81	81
8:15 AM to 8:30 AM	0	2	2	0	0	0	2	42	29	71	73
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	30	30	60	60
8:45 AM to 9:00 AM	0	0	0	0	0	0	0	46	28	74	74
TOTAL	0	3	3	0	0	0	3	382	247	629	632

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
11:00 AM to 11:15 AM	2	0	2	0	0	0	2	47	36	83	85
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	65	49	114	114
11:30 AM to 11:45 AM	1	0	1	0	0	0	1	48	34	82	83
11:45 AM to 12:00 PM	0	2	2	0	1	1	3	54	44	98	101
12:00 PM to 12:15 PM	1	0	1	0	0	0	1	65	49	114	115
12:15 PM to 12:30 PM	0	0	0	0	0	0	0	42	54	96	96
12:30 PM to 12:45 PM	0	0	0	0	1	1	1	53	42	95	96
12:45 PM to 1:00 PM	1	0	1	0	1	1	2	43	40	83	85
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	54	55	109	109
1:15 PM to 1:30 PM	1	0	1	0	0	0	1	62	37	99	100
1:30 PM to 1:45 PM	2	2	4	0	0	0	4	57	41	98	102
1:45 PM to 2:00 PM	0	0	0	0	1	1	1	52	36	88	89
TOTAL	8	4	12	0	4	4	16	642	517	1159	1175

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
4:00 PM to 4:15 PM	4	3	7	0	0	0	7	73	44	117	124
4:15 PM to 4:30 PM	1	0	1	0	0	0	1	76	60	136	137
4:30 PM to 4:45 PM	0	0	0	0	0	0	0	60	56	116	116
4:45 PM to 5:00 PM	1	2	3	1	1	2	5	80	59	139	144
5:00 PM to 5:15 PM	3	3	6	0	1	1	7	83	84	167	174
5:15 PM to 5:30 PM	2	2	4	0	1	1	5	86	47	133	138
5:30 PM to 5:45 PM	3	2	5	0	0	0	5	90	61	151	156
5:45 PM to 6:00 PM	3	2	5	0	0	0	5	84	44	128	133
TOTAL	17	14	31	1	3	4	35	632	455	1087	1122

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:30 AM to 8:30 AM	0	3	3	0	0	0	3	238	148	386	389
11:15 AM to 12:15 PM	2	2	4	0	1	1	5	232	176	408	413
4:45 PM to 5:45 PM	9	9	18	1	3	4	22	339	251	590	612





Metro Traffic Data Inc.

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Mid-Block Crosswalk Volume

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION Douty St btw 7th/8th LATITUDE 36.3271118

CITY Hanford LONGITUDE -119.6458355

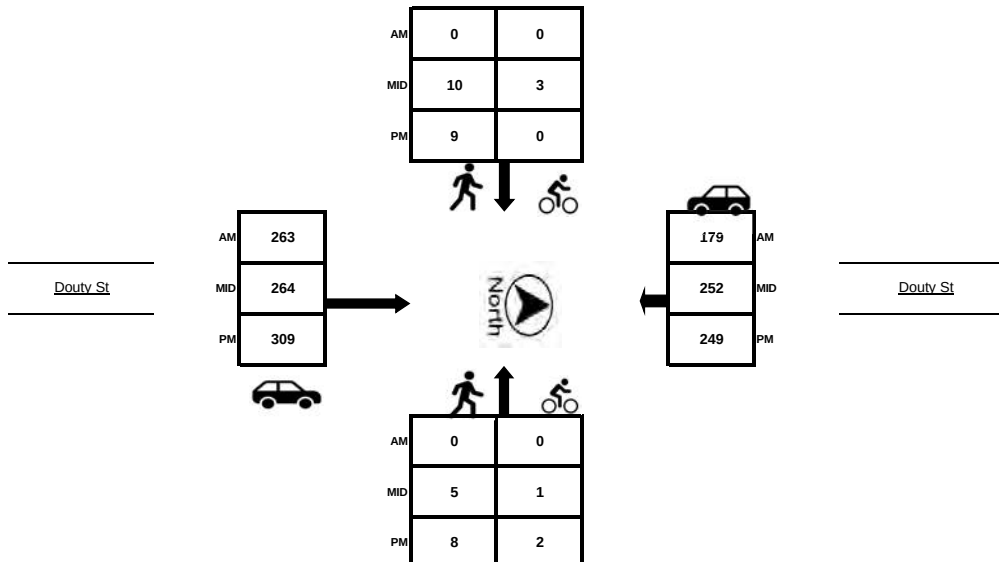
COLLECTION DATE Thursday, November 01, 2018 WEATHER Clear

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	22	15	37	37
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	42	21	63	63
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	88	52	140	140
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	78	70	148	148
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	55	36	91	91
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	36	24	60	60
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	40	28	68	68
8:45 AM to 9:00 AM	0	1	1	1	1	2	3	49	37	86	89
TOTAL	0	1	1	1	1	2	3	410	283	693	696

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
11:00 AM to 11:15 AM	0	3	3	0	0	0	3	59	61	120	123
11:15 AM to 11:30 AM	0	1	1	0	0	0	1	64	49	113	114
11:30 AM to 11:45 AM	6	2	8	0	1	1	9	56	59	115	124
11:45 AM to 12:00 PM	3	2	5	0	0	0	5	68	53	121	126
12:00 PM to 12:15 PM	0	0	0	1	0	1	1	52	84	136	137
12:15 PM to 12:30 PM	1	1	2	2	0	2	4	88	56	144	148
12:30 PM to 12:45 PM	2	3	5	0	0	0	5	62	56	118	123
12:45 PM to 1:00 PM	1	0	1	0	0	0	1	68	56	124	125
1:00 PM to 1:15 PM	2	3	5	0	0	0	5	70	58	128	133
1:15 PM to 1:30 PM	0	1	1	0	1	1	2	78	37	115	117
1:30 PM to 1:45 PM	1	2	3	0	0	0	3	68	53	121	124
1:45 PM to 2:00 PM	1	1	2	0	0	0	2	68	59	127	129
TOTAL	17	19	36	3	2	5	41	801	681	1482	1523

Time	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
4:00 PM to 4:15 PM	0	0	0	0	0	0	0	75	65	140	140
4:15 PM to 4:30 PM	0	2	2	0	0	0	2	62	59	121	123
4:30 PM to 4:45 PM	3	0	3	0	0	0	3	37	62	99	102
4:45 PM to 5:00 PM	2	3	5	0	1	1	6	88	54	142	148
5:00 PM to 5:15 PM	0	1	1	0	0	0	1	79	95	174	175
5:15 PM to 5:30 PM	2	3	5	0	0	0	5	74	46	120	125
5:30 PM to 5:45 PM	5	1	6	0	1	1	7	68	54	122	129
5:45 PM to 6:00 PM	0	1	1	0	0	0	1	55	42	97	98
TOTAL	12	11	23	0	2	2	25	538	477	1015	1040

PEAK HOUR	Pedestrians in Crosswalk			Bikes in Crosswalk			CROSSWALK TOTAL	Vehicle Cross-Traffic			ALL-MODES TOTAL
	EB	WB	Total	EB	WB	Total		NB	SB	Total	
7:15 AM to 8:15 AM	0	0	0	0	0	0	0	263	179	442	442
11:30 AM to 12:30 PM	10	5	15	3	1	4	19	264	252	516	535
4:45 PM to 5:45 PM	9	8	17	0	2	2	19	309	249	558	577





Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230
800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 7th St @ Redington St

COUNTY Kings

COLLECTION DATE Tuesday, October 23, 2018

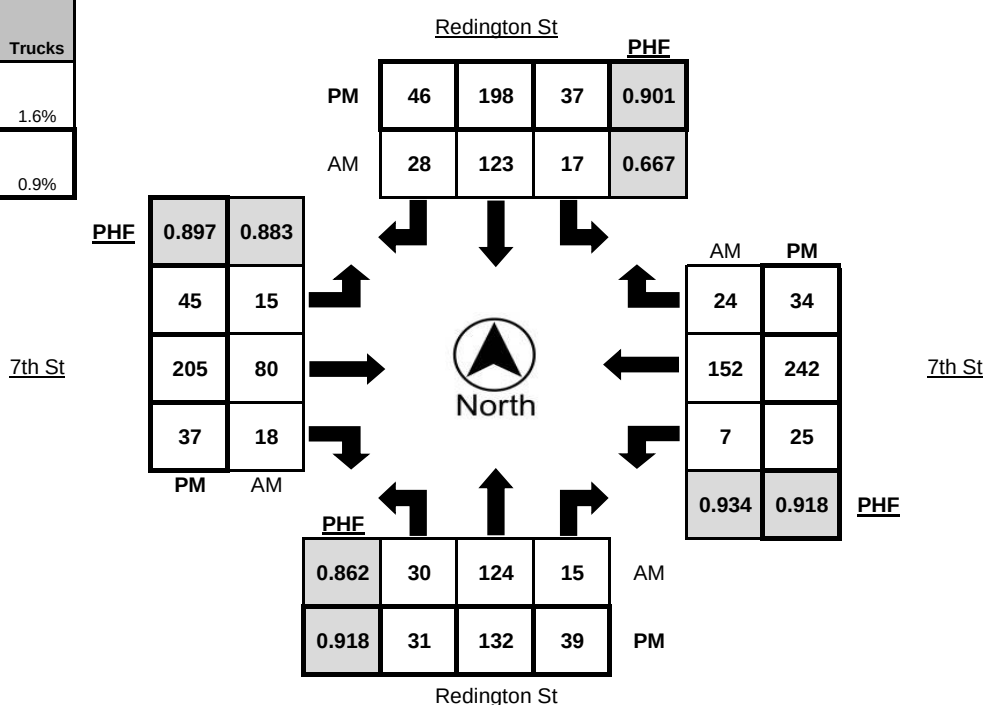
LATITUDE	36.3261
LONGITUDE	-119.6489
WEATHER	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	5	12	1	0	0	22	5	0	0	10	1	1	2	14	7	0
7:15 AM - 7:30 AM	3	16	3	0	0	31	6	1	0	7	1	0	2	23	5	2
7:30 AM - 7:45 AM	1	32	0	0	1	31	11	0	1	7	3	0	4	21	9	0
7:45 AM - 8:00 AM	9	38	2	1	5	46	12	1	4	18	3	0	0	39	5	0
8:00 AM - 8:15 AM	6	29	5	1	6	30	7	0	4	18	6	1	2	43	1	0
8:15 AM - 8:30 AM	7	31	5	1	2	20	5	2	4	21	7	1	3	37	9	1
8:30 AM - 8:45 AM	8	26	3	0	4	27	4	1	3	23	2	0	2	33	9	0
8:45 AM - 9:00 AM	9	36	9	2	5	18	12	3	4	25	4	0	0	40	5	0
TOTAL	48	220	28	5	23	225	62	8	20	129	27	3	15	250	50	3

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	9	32	11	0	3	36	11	1	8	51	10	1	5	70	13	0
4:15 PM - 4:30 PM	13	35	10	0	7	37	13	1	8	53	6	0	7	49	12	0
4:30 PM - 4:45 PM	9	29	13	0	10	50	12	0	13	46	7	0	9	62	6	1
4:45 PM - 5:00 PM	9	25	17	1	9	44	12	1	9	49	8	0	2	69	11	1
5:00 PM - 5:15 PM	6	35	4	1	12	59	7	1	17	50	8	2	5	49	10	0
5:15 PM - 5:30 PM	7	43	5	1	6	45	15	1	6	60	14	0	9	62	7	0
5:30 PM - 5:45 PM	8	54	6	2	6	41	9	0	6	49	8	0	11	56	10	1
5:45 PM - 6:00 PM	7	29	4	1	8	36	10	1	3	52	10	1	7	59	14	0
TOTAL	68	282	70	6	61	348	89	6	70	410	71	4	55	476	83	3

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	30	124	15	3	17	123	28	4	15	80	18	2	7	152	24	1
4:30 PM - 5:30 PM	31	132	39	3	37	198	46	3	45	205	37	2	25	242	34	2

	PHF	Trucks
AM	0.874	1.6%
PM	0.960	0.9%



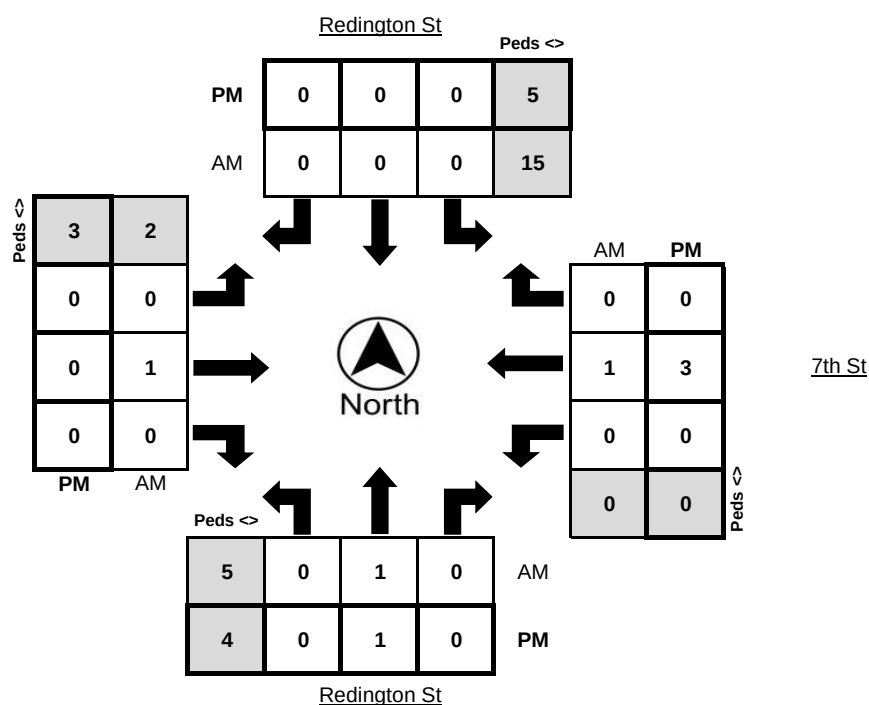
Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LATITUDE	36.3261
LONGITUDE	-119.6489
WEATHER	Clear

	Northbound Bikes			N.Leg Perfs	Southbound Bikes			S.Leg Perfs	Eastbound Bikes			E.Leg Perfs	Westbound Bikes			W.Leg Perfs
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	1	0	15	0	0	0	5	0	1	0	0	0	1	0	2
4:30 PM - 5:30 PM	0	1	0	5	0	0	0	4	0	0	0	0	0	3	0	3

	Bikes	Peds
AM Peak Total	3	22
PM Peak Total	4	12





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Turning Movement Report

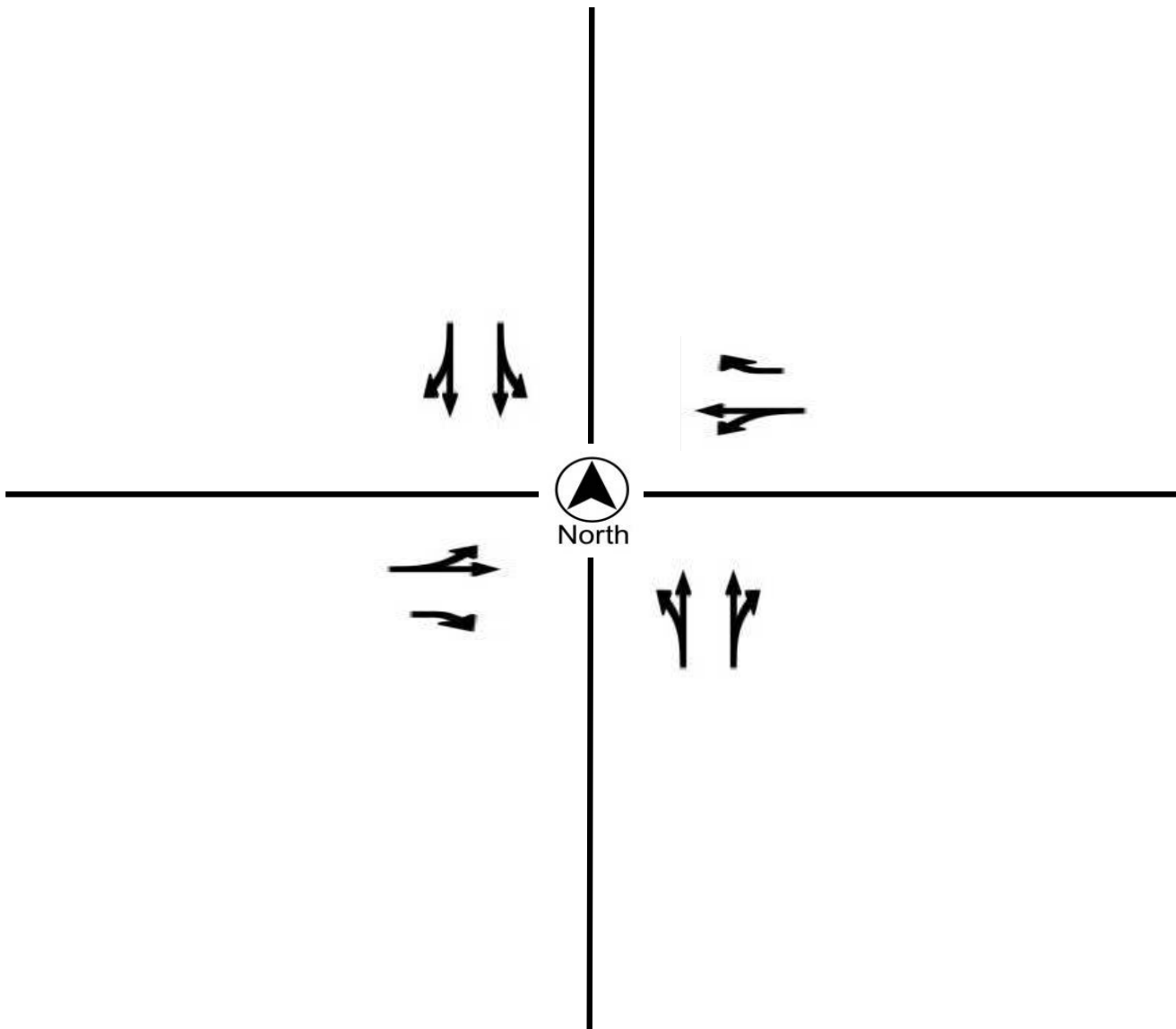
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Redington St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018
CYCLE TIME 57 Seconds

N/S STREET Redington St / Redington St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Signal

COMMENTS All approaches have permitted left turns.





Metro Traffic Data Inc.
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 Hanford, CA 93230
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Irwin St
 COUNTY Kings
 COLLECTION DATE Tuesday, October 23, 2018

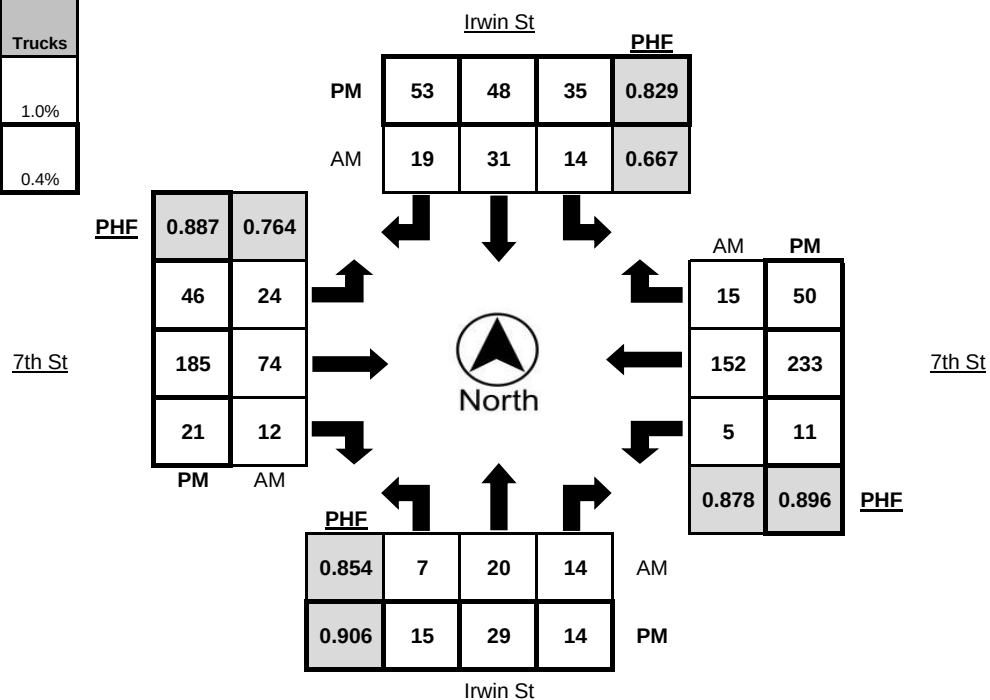
LATITUDE 36.3264
 LONGITUDE -119.6473
 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	3	2	0	1	6	2	0	3	6	1	1	2	16	1	0
7:15 AM - 7:30 AM	0	4	0	0	1	4	4	0	2	7	1	0	0	21	2	3
7:30 AM - 7:45 AM	1	5	0	0	5	6	3	1	0	9	1	0	3	27	4	0
7:45 AM - 8:00 AM	0	5	4	0	6	14	4	0	2	22	0	0	2	38	3	1
8:00 AM - 8:15 AM	0	8	2	0	3	6	5	0	8	16	2	1	1	42	6	0
8:15 AM - 8:30 AM	2	4	3	0	4	7	5	0	4	19	1	0	1	35	3	1
8:30 AM - 8:45 AM	3	3	6	0	2	5	3	0	6	16	2	1	1	35	3	1
8:45 AM - 9:00 AM	2	5	3	0	5	13	6	0	6	23	7	0	2	40	3	0
TOTAL	8	37	20	0	27	61	32	1	31	118	15	3	12	254	25	6

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	5	5	3	0	14	14	13	0	3	48	9	1	4	61	17	0
4:15 PM - 4:30 PM	7	7	2	0	9	9	19	0	11	51	3	0	4	49	8	0
4:30 PM - 4:45 PM	1	7	6	0	6	13	11	0	13	42	1	0	2	57	17	2
4:45 PM - 5:00 PM	2	10	3	0	6	12	10	0	19	44	8	0	1	66	8	0
5:00 PM - 5:15 PM	2	11	5	0	3	16	10	0	8	53	6	1	2	47	8	0
5:15 PM - 5:30 PM	2	7	7	0	7	17	6	0	10	54	3	0	4	61	17	0
5:30 PM - 5:45 PM	4	9	4	0	10	9	6	0	6	46	5	0	4	63	11	1
5:45 PM - 6:00 PM	0	6	4	0	12	9	16	0	8	51	5	0	3	52	9	0
TOTAL	23	62	34	0	67	99	91	0	78	389	40	2	24	456	95	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
8:00 AM - 9:00 AM	7	20	14	0	14	31	19	0	24	74	12	2	5	152	15	2
4:00 PM - 5:00 PM	15	29	14	0	35	48	53	0	46	185	21	1	11	233	50	2

	PHF	Trucks
AM	0.841	1.0%
PM	0.944	0.4%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

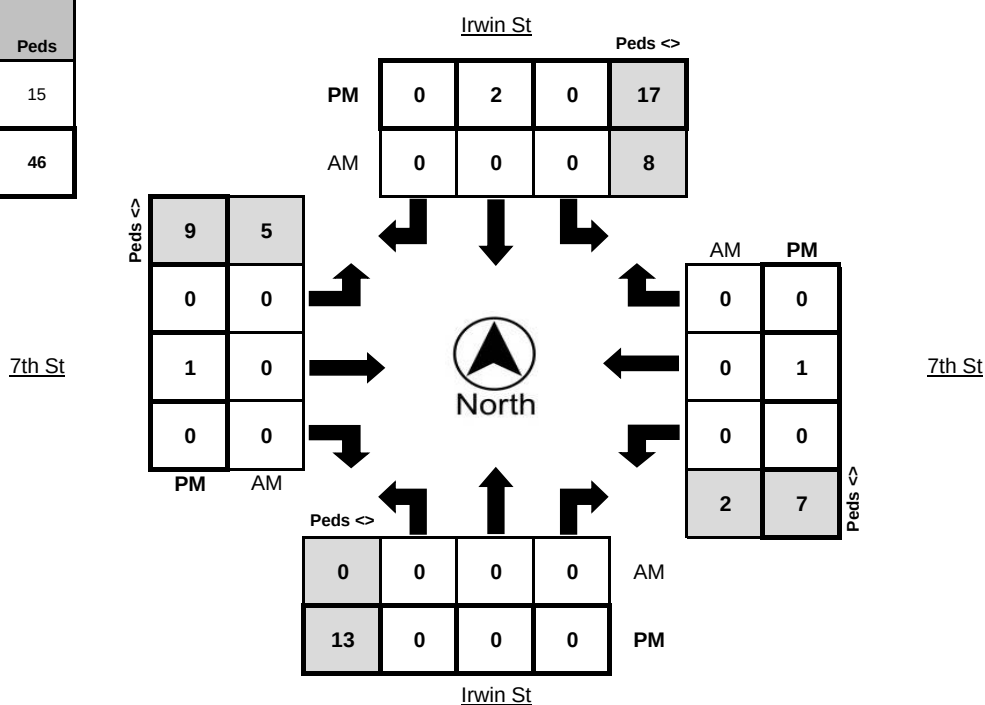
LATITUDE	36.3264
LONGITUDE	-119.6473
WEATHER	Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0
8:00 AM - 8:15 AM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4
TOTAL	0	0	0	11	0	0	0	0	0	2	0	3	0	2	0	5

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	7	0	0	0	2	0	1	0	1	0	1	0	2
4:15 PM - 4:30 PM	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0	3
4:30 PM - 4:45 PM	0	0	0	1	0	1	0	4	0	0	0	0	0	0	0	3
4:45 PM - 5:00 PM	0	0	0	8	0	1	0	5	0	0	0	2	0	0	0	1
5:00 PM - 5:15 PM	0	0	0	6	0	0	0	1	0	0	0	1	0	0	0	1
5:15 PM - 5:30 PM	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0
5:45 PM - 6:00 PM	0	1	0	1	0	0	0	4	0	0	0	4	0	0	0	4
TOTAL	0	1	0	27	0	2	0	20	0	1	0	14	0	2	0	16

	Northbound Bikes			N.Leg Perds	Southbound Bikes			S.Leg Perds	Eastbound Bikes			E.Leg Perds	Westbound Bikes			W.Leg Perds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
8:00 AM - 9:00 AM	0	0	0	8	0	0	0	0	0	0	0	2	0	0	0	5
4:00 PM - 5:00 PM	0	0	0	17	0	2	0	13	0	1	0	7	0	1	0	9

	Bikes	Peds
AM Peak Total	0	15
PM Peak Total	4	46





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Turning Movement Report

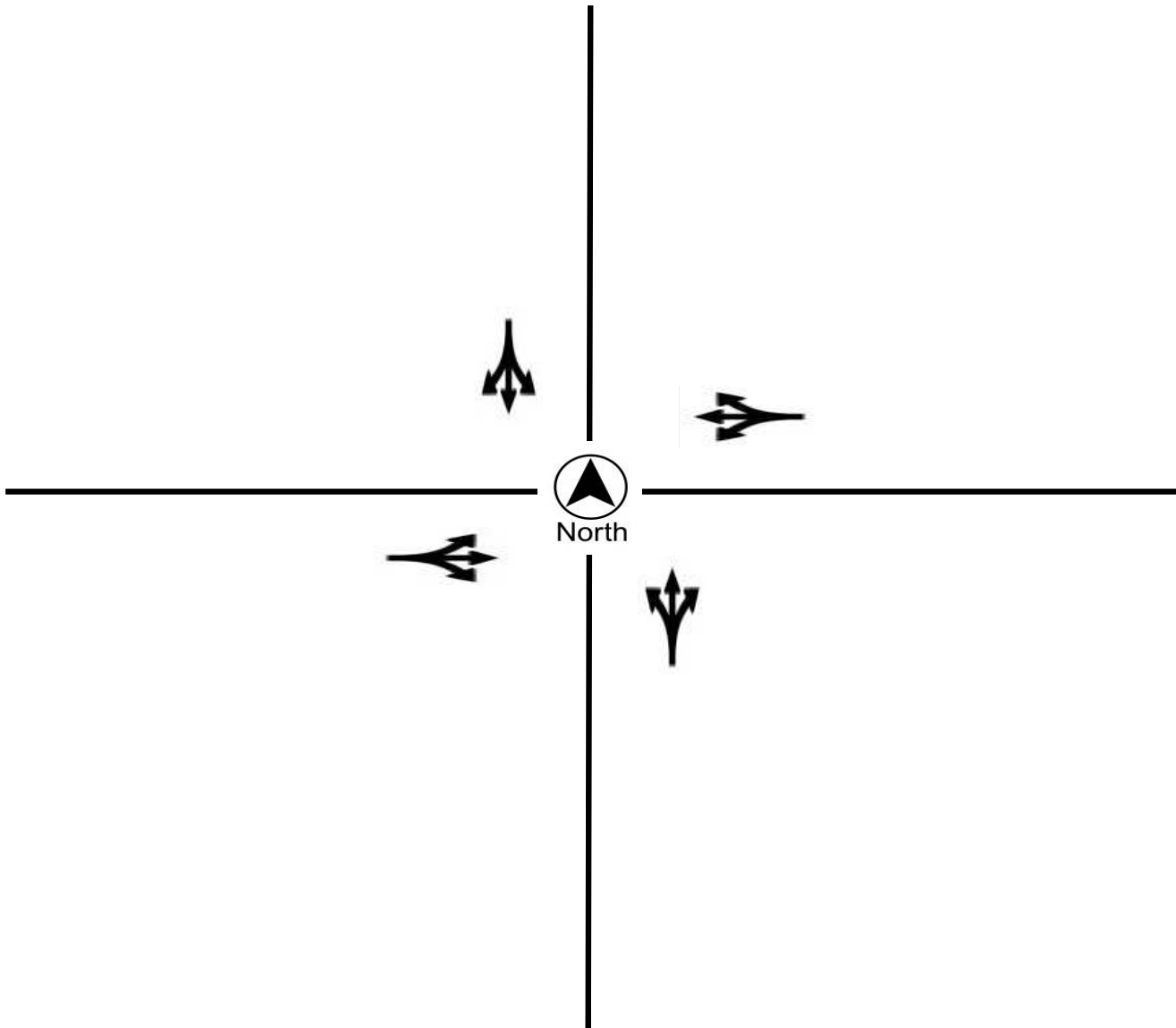
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Irwin St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018
CYCLE TIME 54 Seconds

N/S STREET Irwin St / Irwin St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Signal

COMMENTS All approaches have permitted left turns.





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Douty St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018

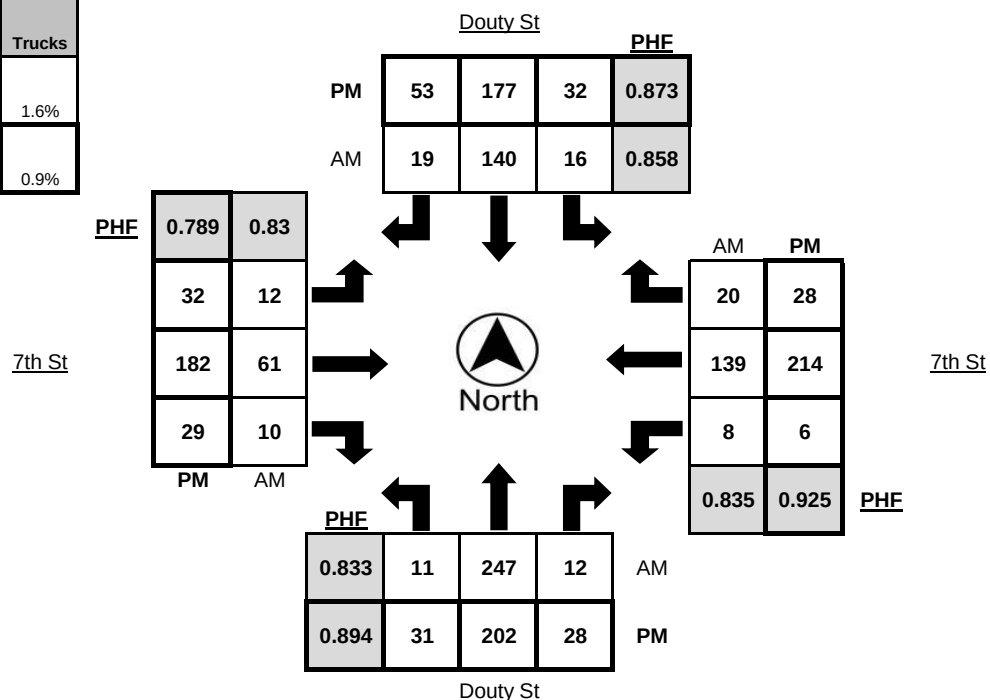
LATITUDE 36.3266
LONGITUDE -119.6457
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	1	23	0	1	0	18	0	0	0	9	0	1	0	17	4	0
7:15 AM - 7:30 AM	1	38	0	0	1	24	2	0	2	7	1	0	0	20	2	3
7:30 AM - 7:45 AM	2	71	1	0	2	39	5	1	0	14	0	0	1	27	3	0
7:45 AM - 8:00 AM	4	72	5	3	6	44	1	1	2	21	2	0	2	39	6	0
8:00 AM - 8:15 AM	2	56	3	1	7	32	7	1	6	11	2	1	3	40	7	0
8:15 AM - 8:30 AM	3	48	3	0	1	25	6	2	4	15	6	0	2	33	4	1
8:30 AM - 8:45 AM	4	43	3	2	5	22	5	0	2	17	3	0	1	30	5	1
8:45 AM - 9:00 AM	6	56	3	0	0	27	5	1	7	21	3	0	3	38	5	0
TOTAL	23	407	18	7	22	231	31	6	23	115	17	2	12	244	36	5

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	9	57	7	1	7	36	15	0	8	58	11	1	0	58	7	0
4:15 PM - 4:30 PM	9	35	9	0	5	39	14	5	11	46	6	0	2	43	5	0
4:30 PM - 4:45 PM	7	60	5	1	12	49	10	0	4	42	2	0	3	55	9	1
4:45 PM - 5:00 PM	6	50	7	0	8	53	14	0	9	36	10	0	1	58	7	0
5:00 PM - 5:15 PM	7	49	4	0	11	65	12	0	4	49	8	1	2	40	16	1
5:15 PM - 5:30 PM	9	27	7	0	14	23	13	0	9	50	4	0	2	56	12	0
5:30 PM - 5:45 PM	5	17	2	0	18	18	24	1	12	40	9	0	2	53	19	0
5:45 PM - 6:00 PM	9	58	6	1	9	23	10	0	5	55	6	0	5	41	7	0
TOTAL	61	353	47	3	84	306	112	6	62	376	56	2	17	404	82	2

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:30 AM - 8:30 AM	11	247	12	4	16	140	19	5	12	61	10	1	8	139	20	1
4:00 PM - 5:00 PM	31	202	28	2	32	177	53	5	32	182	29	1	6	214	28	1

	PHF	Trucks
AM	0.852	1.6%
PM	0.929	0.9%





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Douy St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018

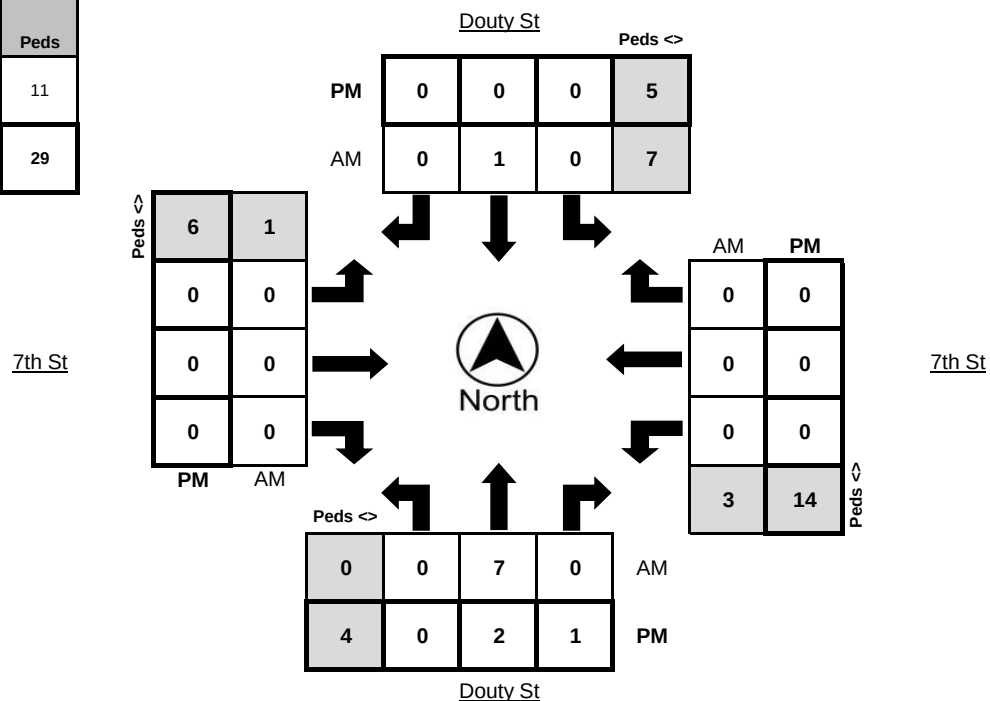
LATITUDE 36.3266
LONGITUDE -119.6457
WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM - 8:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	2	0	6	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM - 8:30 AM	0	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL	0	8	0	15	0	1	0	0	0	0	0	5	0	0	0	4

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	1	0	2	0	0	0	0	0	0	0	2	0	0	0	1
4:15 PM - 4:30 PM	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	1
4:30 PM - 4:45 PM	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	1
4:45 PM - 5:00 PM	0	0	1	2	0	0	0	2	0	0	0	5	0	0	0	3
5:00 PM - 5:15 PM	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0
5:15 PM - 5:30 PM	0	1	0	5	0	0	0	2	0	0	0	1	0	0	0	3
5:30 PM - 5:45 PM	0	0	0	6	0	0	0	1	0	0	0	5	0	0	0	3
5:45 PM - 6:00 PM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	0	4	1	19	0	0	1	7	0	0	0	23	0	0	0	14

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:30 AM - 8:30 AM	0	7	0	7	0	1	0	0	0	0	0	3	0	0	0	1
4:00 PM - 5:00 PM	0	2	1	5	0	0	0	4	0	0	0	14	0	0	0	6

	Bikes	Peds
AM Peak Total	8	11
PM Peak Total	3	29





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Turning Movement Report

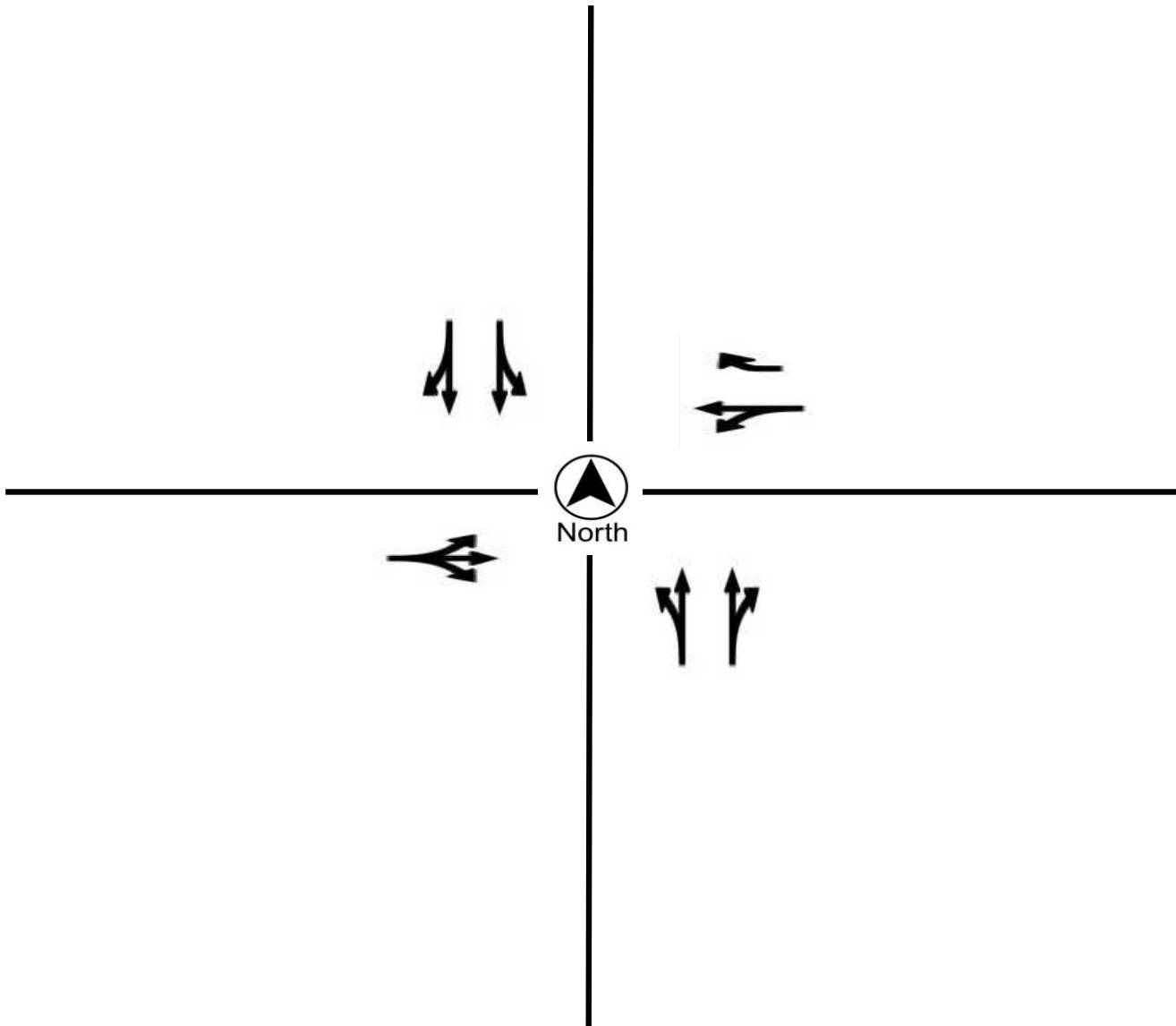
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Douty St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018
CYCLE TIME 58 Seconds

N/S STREET Douty St / Douty St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Signal

COMMENTS All approaches have permitted left turns.





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Harris St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018

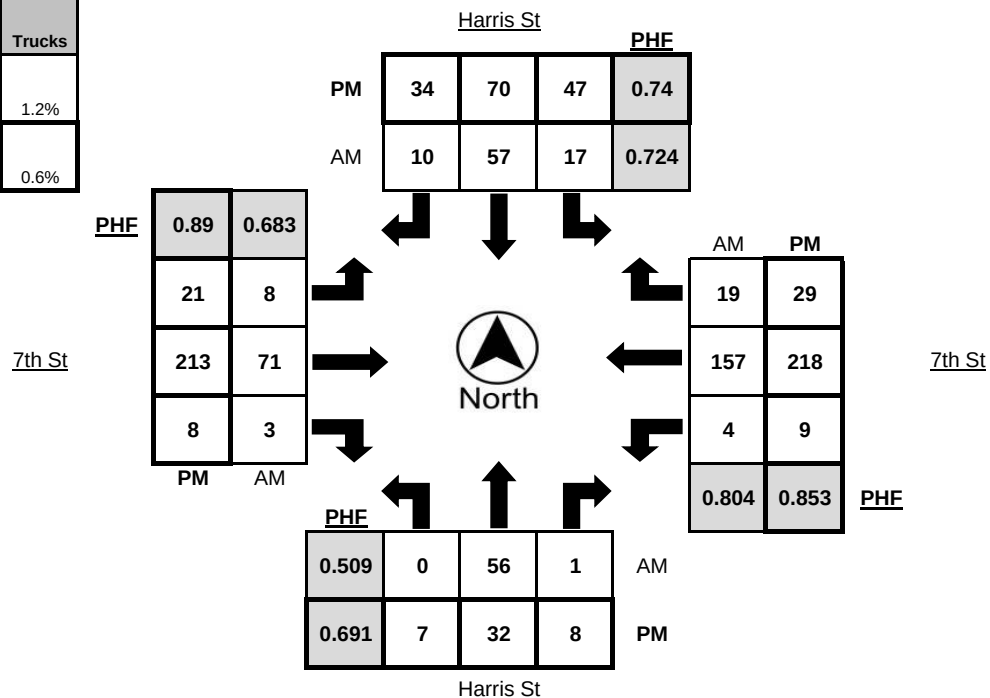
LATITUDE 36.3269
LONGITUDE -119.6441
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	1	0	0	5	1	1	0	9	0	1	0	19	1	0
7:15 AM - 7:30 AM	0	8	0	0	2	4	0	0	2	6	0	0	1	23	3	3
7:30 AM - 7:45 AM	0	10	0	0	5	19	3	0	2	14	0	0	0	26	3	0
7:45 AM - 8:00 AM	0	28	0	0	4	22	3	0	4	23	3	2	1	46	4	0
8:00 AM - 8:15 AM	0	5	0	0	4	10	1	0	1	17	0	1	2	48	6	0
8:15 AM - 8:30 AM	0	13	1	0	4	6	3	1	1	17	0	0	1	37	6	1
8:30 AM - 8:45 AM	0	4	2	0	6	4	1	0	2	20	0	0	0	35	2	1
8:45 AM - 9:00 AM	1	3	0	0	7	9	2	1	2	18	1	0	0	43	7	0
TOTAL	1	71	4	0	32	79	14	3	14	124	4	4	5	277	32	5

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	1	17	2	0	15	17	6	0	7	50	5	1	0	55	7	0
4:15 PM - 4:30 PM	0	13	2	0	13	14	6	0	5	54	3	1	2	50	8	1
4:30 PM - 4:45 PM	0	10	1	0	5	18	4	0	3	53	0	0	1	61	15	1
4:45 PM - 5:00 PM	1	11	5	0	11	18	5	0	3	46	1	0	3	55	4	1
5:00 PM - 5:15 PM	1	10	2	0	17	26	8	0	3	60	5	1	3	49	6	0
5:15 PM - 5:30 PM	3	4	0	1	8	13	15	0	5	58	0	0	0	54	7	0
5:30 PM - 5:45 PM	2	7	1	0	11	13	6	0	10	49	2	1	3	60	12	0
5:45 PM - 6:00 PM	0	9	1	0	3	10	6	0	6	57	2	0	0	52	6	0
TOTAL	8	81	14	1	83	129	56	0	42	427	18	4	12	436	65	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:30 AM - 8:30 AM	0	56	1	0	17	57	10	1	8	71	3	3	4	157	19	1
4:45 PM - 5:45 PM	7	32	8	1	47	70	34	0	21	213	8	2	9	218	29	1

	PHF	Trucks
AM	0.730	1.2%
PM	0.916	0.6%





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Harris St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018

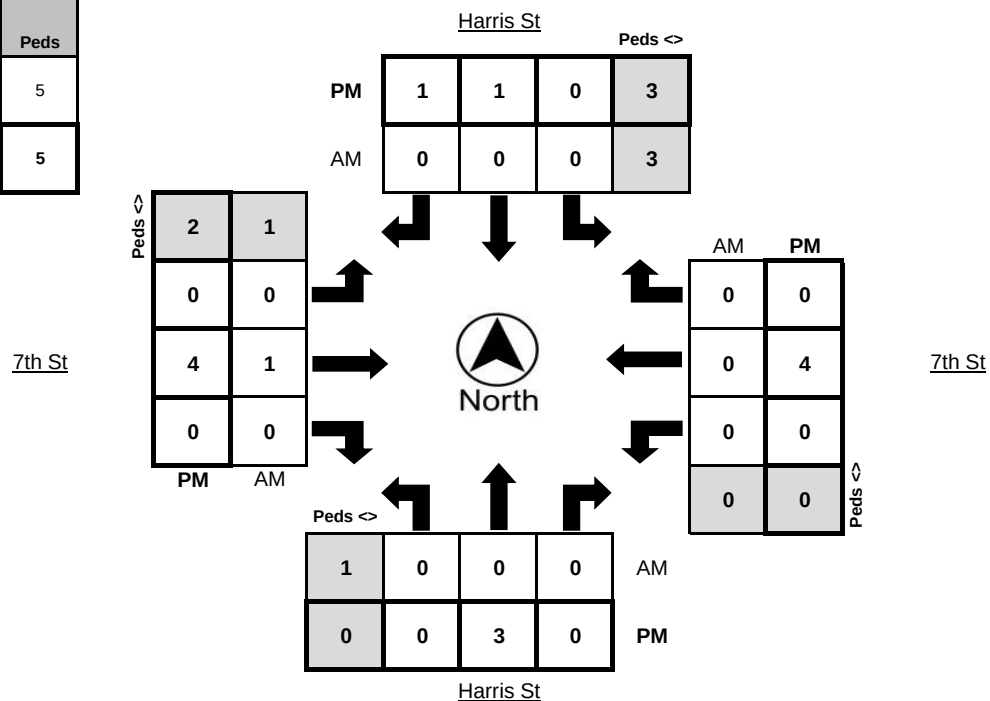
LATITUDE 36.3269
LONGITUDE -119.6441
WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	1
8:15 AM - 8:30 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL	0	2	0	6	0	0	0	3	0	2	0	0	1	0	0	2

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
4:15 PM - 4:30 PM	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM - 5:00 PM	0	1	0	2	0	0	1	0	0	2	0	0	0	2	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
5:15 PM - 5:30 PM	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0
5:45 PM - 6:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	4	0	6	0	2	1	1	0	4	0	1	0	5	0	5

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:30 AM - 8:30 AM	0	0	0	3	0	0	0	1	0	1	0	0	0	0	0	1
4:45 PM - 5:45 PM	0	3	0	3	0	1	1	0	0	4	0	0	0	4	0	2

	Bikes	Peds
AM Peak Total	1	5
PM Peak Total	13	5





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Turning Movement Report

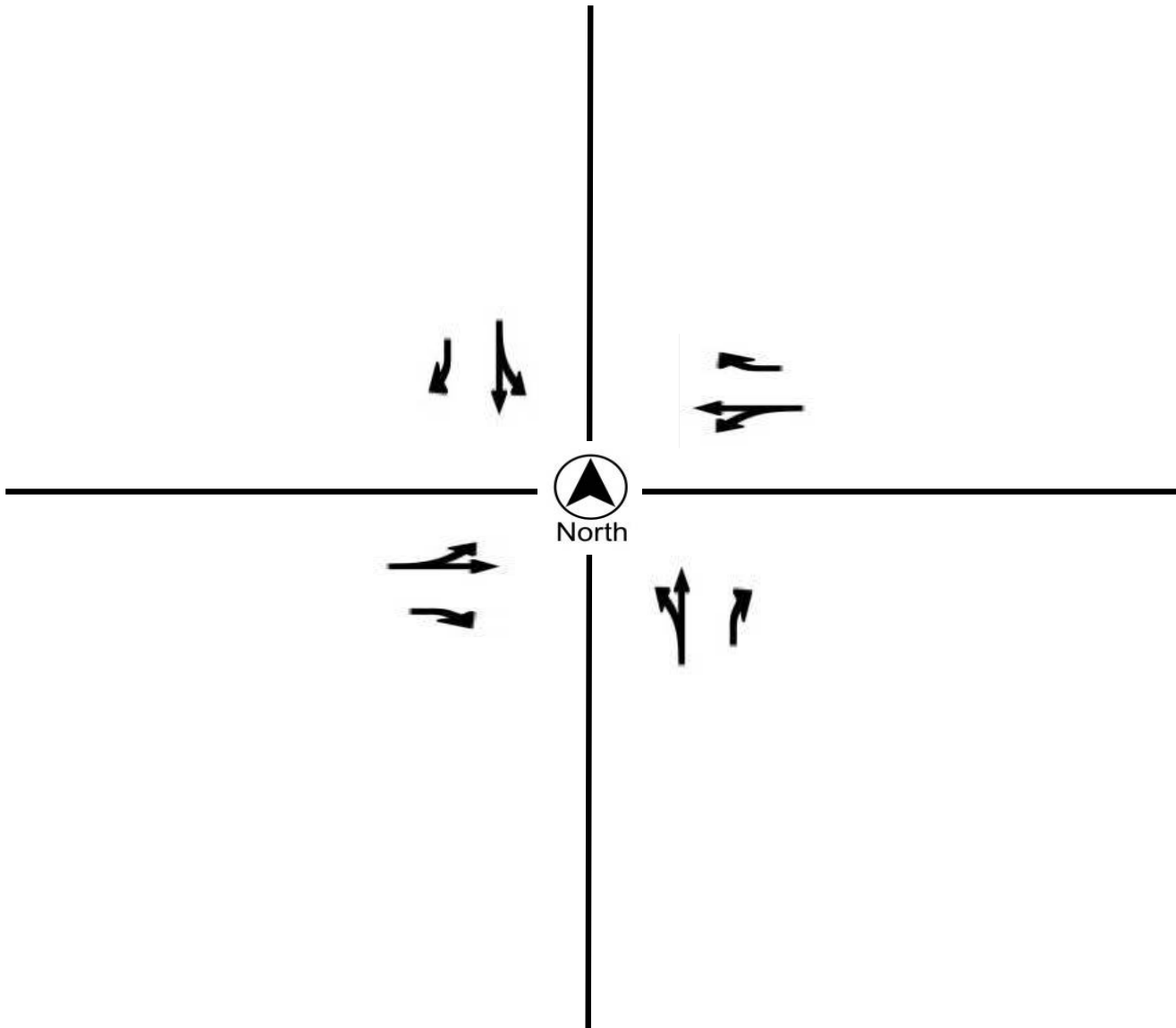
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Harris St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018
CYCLE TIME 56 Seconds

N/S STREET Harris St / Harris St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Signal

COMMENTS All approaches have permitted left turns.





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Brown St
 COUNTY Kings
 COLLECTION DATE Tuesday, October 23, 2018

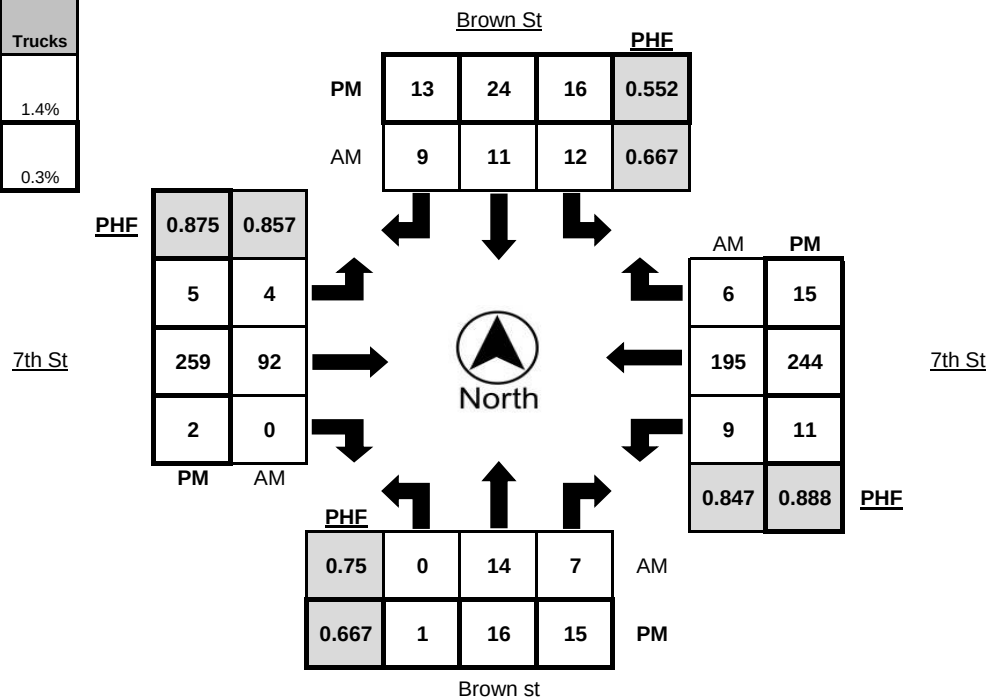
LATITUDE 36.3271
 LONGITUDE -119.6425
 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	2	0	0	0	0	0	0	1	8	1	0	0	20	2	1
7:15 AM - 7:30 AM	0	2	2	0	3	2	0	1	0	8	0	0	1	25	2	0
7:30 AM - 7:45 AM	0	3	1	0	0	3	0	0	0	15	0	0	0	30	0	0
7:45 AM - 8:00 AM	0	4	1	0	6	2	0	1	0	27	0	1	1	58	1	0
8:00 AM - 8:15 AM	0	6	1	0	2	3	4	0	1	19	0	1	2	58	2	0
8:15 AM - 8:30 AM	0	0	4	0	3	5	4	0	3	18	0	0	5	39	1	1
8:30 AM - 8:45 AM	0	4	1	0	1	1	1	0	0	28	0	0	1	40	2	1
8:45 AM - 9:00 AM	0	2	0	0	1	8	0	1	0	24	1	0	3	49	2	0
TOTAL	0	23	10	0	16	24	9	3	5	147	2	2	13	319	12	3

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	4	5	2	7	2	0	0	3	59	1	0	1	61	4	0
4:15 PM - 4:30 PM	0	3	4	0	5	6	1	0	3	62	1	0	2	61	3	0
4:30 PM - 4:45 PM	1	7	3	0	3	11	10	0	0	57	0	0	1	72	3	1
4:45 PM - 5:00 PM	0	1	1	0	3	5	2	0	1	66	0	0	1	55	7	1
5:00 PM - 5:15 PM	0	5	7	0	5	2	0	0	1	74	1	0	7	56	2	0
5:15 PM - 5:30 PM	2	2	2	0	10	2	2	0	2	66	0	1	0	57	4	0
5:30 PM - 5:45 PM	0	6	1	0	4	5	4	0	1	56	2	1	3	65	6	1
5:45 PM - 6:00 PM	1	4	4	0	10	4	4	0	0	58	0	0	3	49	4	0
TOTAL	4	32	27	2	47	37	23	0	11	498	5	2	18	476	33	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	0	14	7	0	12	11	9	1	4	92	0	2	9	195	6	2
4:15 PM - 5:15 PM	1	16	15	0	16	24	13	0	5	259	2	0	11	244	15	2

	PHF	Trucks
AM	0.898	1.4%
PM	0.924	0.3%





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Brown St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018

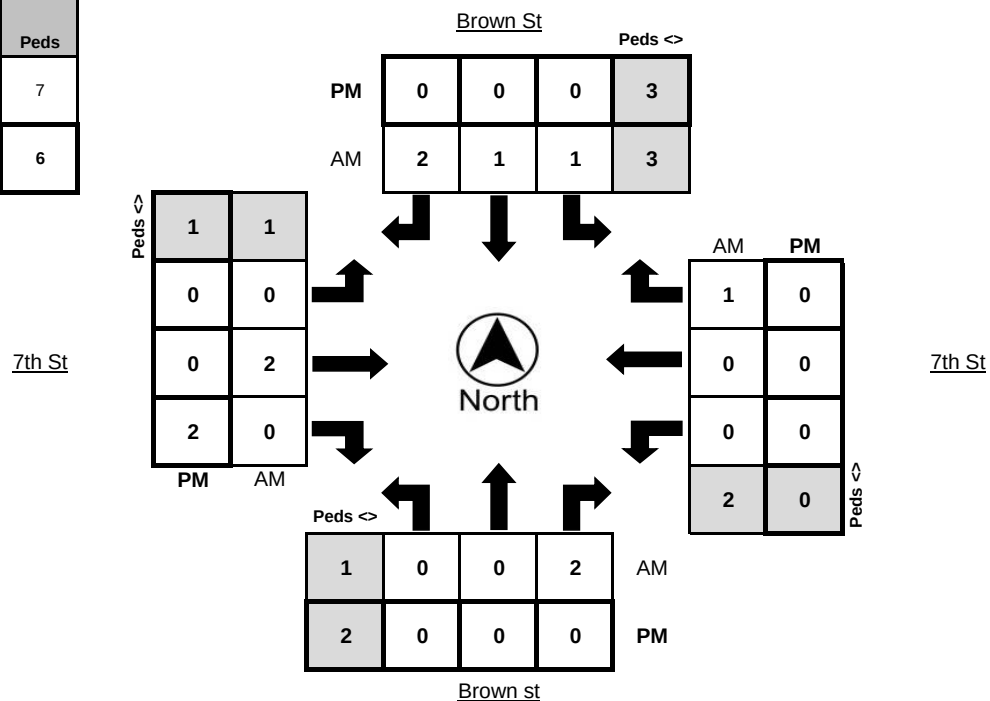
LATITUDE 36.3271
LONGITUDE -119.6425
WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM - 7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0
8:00 AM - 8:15 AM	0	0	1	1	1	1	0	0	0	0	0	2	0	0	0	0
8:15 AM - 8:30 AM	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	1
8:30 AM - 8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0
TOTAL	0	2	2	3	2	3	2	1	1	2	0	3	0	0	2	4

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
TOTAL	0	0	0	5	0	0	1	6	0	0	4	0	0	1	0	1

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	0	2	3	1	1	2	1	0	2	0	2	0	0	1	1
4:15 PM - 5:15 PM	0	0	0	3	0	0	0	2	0	0	2	0	0	0	0	1

	Bikes	Peds
AM Peak Total	9	7
PM Peak Total	2	6





Metro Traffic Data Inc.
 310 N. Irwin Street - Suite 20
 Hanford, CA 93230
 800-975-6938 Phone/Fax
 www.metrotrafficdata.com

Turning Movement Report

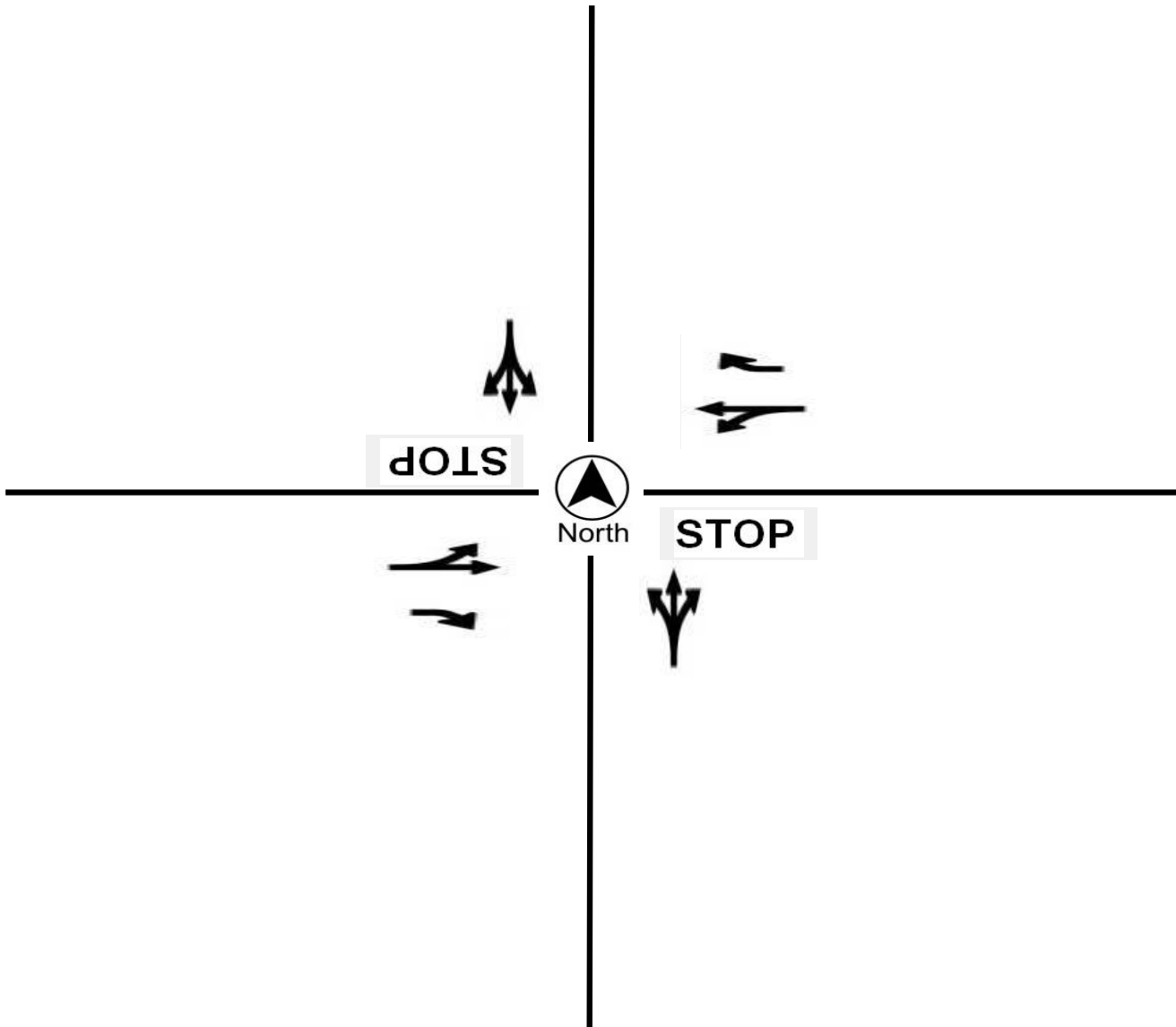
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Brown St
COUNTY Kings
COLLECTION DATE Tuesday, October 23, 2018
CYCLE TIME N/A

N/S STREET Brown St / Brown st
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Two-Way stop

COMMENTS





Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Green St
 COUNTY Kings
 COLLECTION DATE Wednesday, October 24, 2018

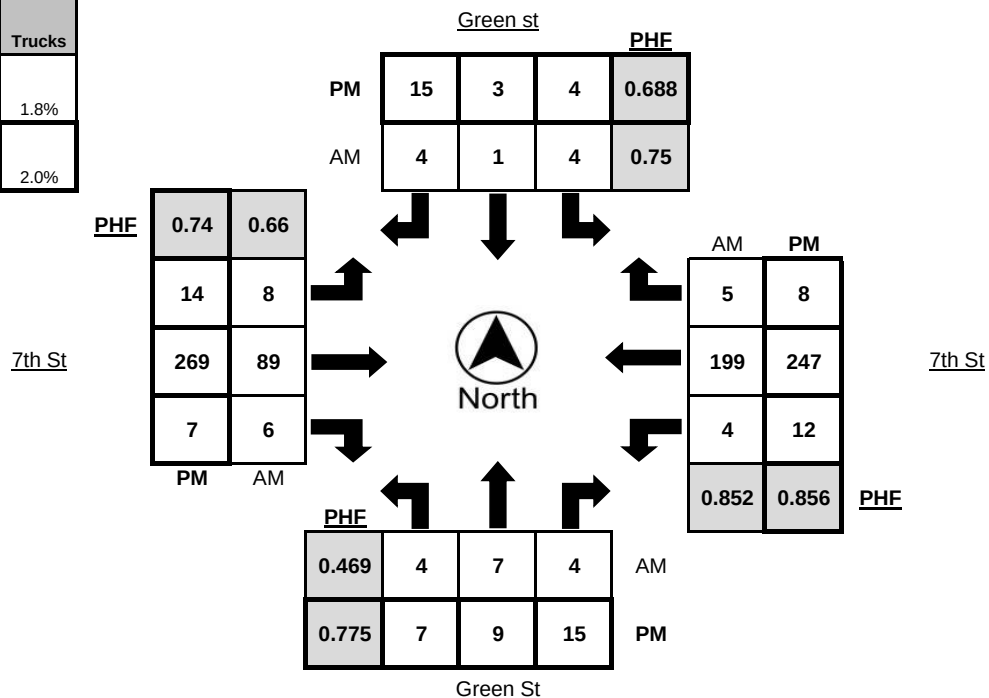
LATITUDE 36.3274
 LONGITUDE -119.6409
 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	1	0	0	0	0	12	1	1	0	20	0	1
7:15 AM - 7:30 AM	0	0	0	0	0	4	0	0	3	11	1	0	1	30	1	2
7:30 AM - 7:45 AM	1	2	0	1	2	0	0	1	1	25	0	2	1	28	0	1
7:45 AM - 8:00 AM	2	1	3	0	1	0	0	0	0	21	0	0	1	55	1	3
8:00 AM - 8:15 AM	1	2	1	0	2	0	1	0	0	23	1	2	1	43	3	0
8:15 AM - 8:30 AM	1	1	0	0	1	0	2	0	4	3	1	0	0	45	2	1
8:30 AM - 8:45 AM	2	3	3	1	0	1	1	0	2	28	2	1	3	50	0	1
8:45 AM - 9:00 AM	0	1	0	0	1	0	0	0	2	35	2	0	0	61	0	0
TOTAL	7	10	7	2	8	5	4	1	12	158	8	6	7	332	7	9

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	3	6	0	0	0	1	3	0	5	56	1	1	3	62	4	0
4:15 PM - 4:30 PM	1	4	0	0	2	1	1	0	3	49	2	1	2	56	2	0
4:30 PM - 4:45 PM	0	5	0	0	0	0	4	0	3	50	0	0	3	73	2	1
4:45 PM - 5:00 PM	3	2	2	1	2	2	4	0	7	58	2	0	2	54	2	0
5:00 PM - 5:15 PM	1	1	8	1	1	1	5	1	1	95	2	1	4	56	3	0
5:15 PM - 5:30 PM	3	1	5	2	1	0	2	0	3	66	3	1	3	64	1	4
5:30 PM - 5:45 PM	0	0	3	0	1	0	9	0	4	51	4	0	5	49	0	0
5:45 PM - 6:00 PM	1	0	2	0	1	0	2	0	5	51	2	2	2	62	3	0
TOTAL	12	19	20	4	8	5	30	1	31	476	16	6	24	476	17	5

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
8:00 AM - 9:00 AM	4	7	4	1	4	1	4	0	8	89	6	3	4	199	5	2
4:30 PM - 5:30 PM	7	9	15	4	4	3	15	1	14	269	7	2	12	247	8	5

	PHF	Trucks
AM	0.821	1.8%
PM	0.857	2.0%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

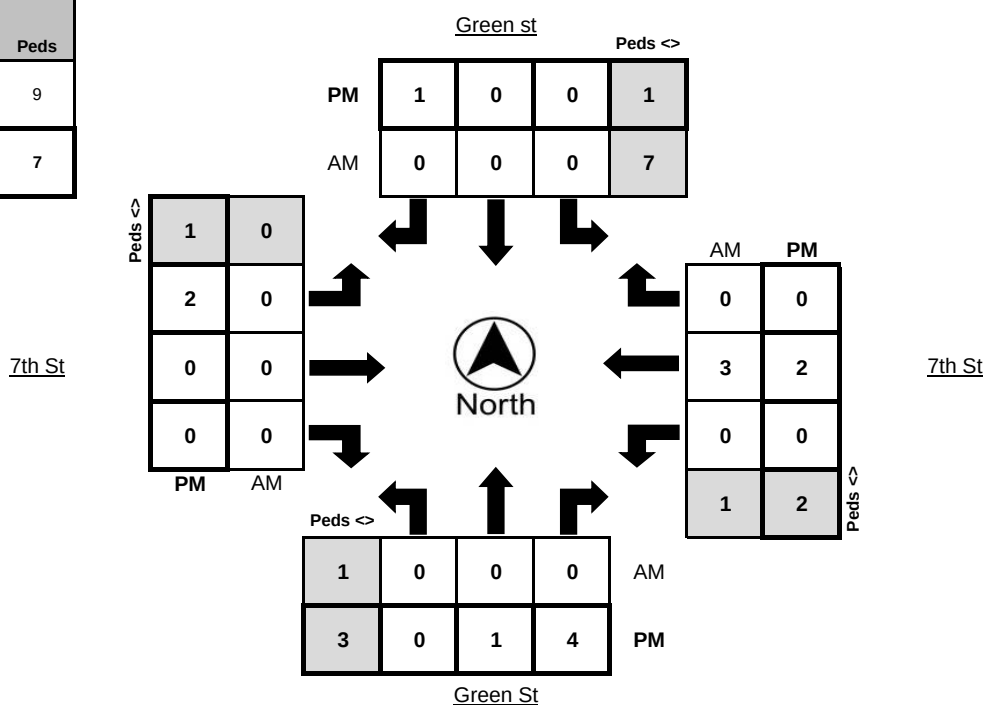
LATITUDE	36.3274
LONGITUDE	-119.6409
WEATHER	Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0
TOTAL	0	0	0	9	0	1	0	2	0	2	0	1	0	3	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg	
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
4:00 PM - 4:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	5	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
4:45 PM - 5:00 PM	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1	0	1
5:00 PM - 5:15 PM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	2	0	1	0	2	0	0	0	0	0	0	0	0	0
TOTAL	0	6	5	4	0	5	1	8	2	0	0	2	0	2	0	0	3

	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
8:00 AM - 9:00 AM	0	0	0	7	0	0	0	1	0	0	0	1	0	3	0	0
4:30 PM - 5:30 PM	0	1	4	1	0	0	1	3	2	0	0	2	0	2	0	1

	Bikes	Peds
AM Peak Total	3	9
PM Peak Total	10	7





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 310 N. Irwin Street - Suite 20
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Turning Movement Report

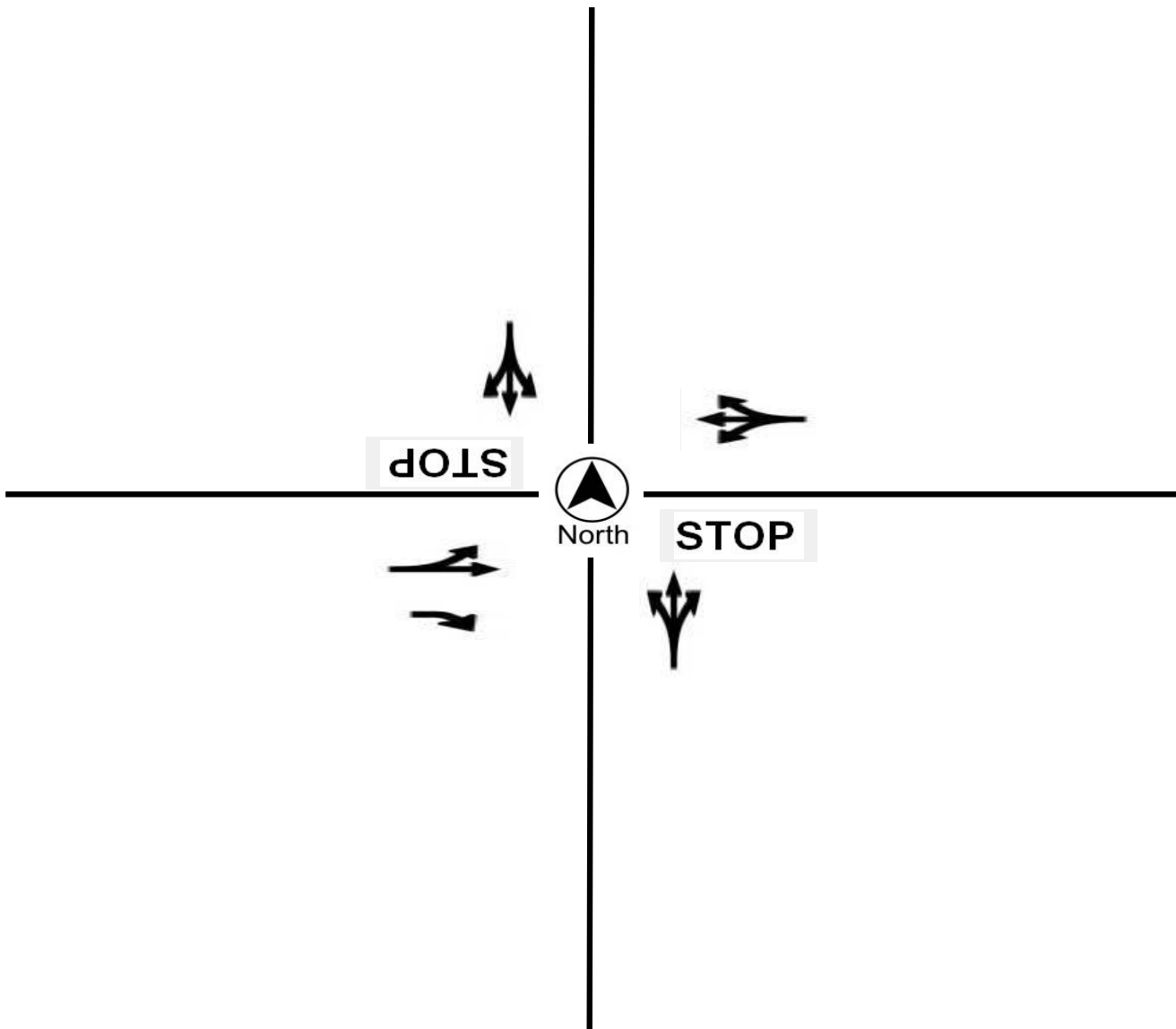
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ Green St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Green st / Green St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Two-Way stop

COMMENTS





Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ White St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018

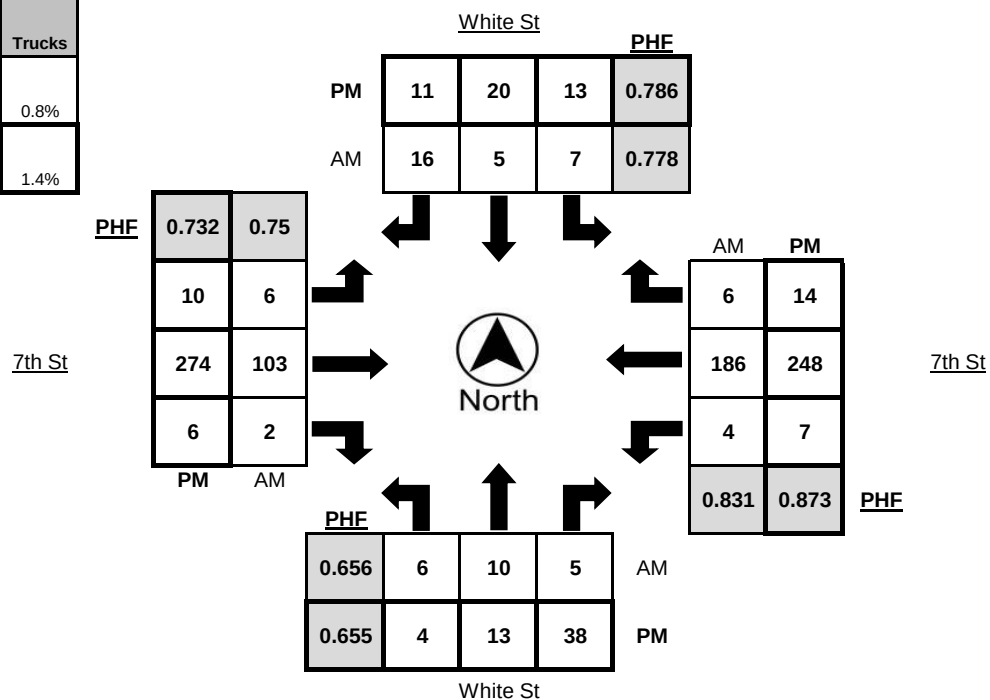
LATITUDE 36.3276
LONGITUDE -119.6393
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	1	0	1	1	0	1	0	14	1	1	2	21	1	1
7:15 AM - 7:30 AM	0	3	1	0	2	0	0	0	0	12	0	0	2	31	2	0
7:30 AM - 7:45 AM	0	5	1	0	0	3	1	0	0	27	0	0	2	25	2	1
7:45 AM - 8:00 AM	2	1	1	0	4	2	1	0	1	22	0	0	3	64	2	1
8:00 AM - 8:15 AM	2	1	1	0	2	2	1	0	0	25	2	0	2	44	3	0
8:15 AM - 8:30 AM	1	1	1	0	3	0	2	0	0	21	0	0	0	44	0	1
8:30 AM - 8:45 AM	1	5	0	0	0	3	6	0	2	24	0	0	1	43	0	2
8:45 AM - 9:00 AM	2	3	3	0	2	0	7	0	4	33	0	0	1	55	3	0
TOTAL	8	19	9	0	14	11	18	1	7	178	3	1	13	327	13	6

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	2	8	0	0	1	2	0	2	74	0	1	5	59	7	0
4:15 PM - 4:30 PM	2	7	10	2	3	3	6	0	2	49	0	1	2	53	5	0
4:30 PM - 4:45 PM	0	1	8	3	4	9	1	1	0	56	1	0	0	76	1	1
4:45 PM - 5:00 PM	1	3	6	1	1	3	4	0	2	57	1	0	5	53	2	0
5:00 PM - 5:15 PM	3	4	14	0	4	2	2	0	3	94	2	1	0	56	6	0
5:15 PM - 5:30 PM	0	5	10	0	4	6	4	0	5	67	2	1	2	63	5	1
5:30 PM - 5:45 PM	3	4	4	0	6	4	4	0	2	51	1	0	4	54	7	1
5:45 PM - 6:00 PM	1	5	2	0	1	2	1	0	1	56	0	0	1	61	5	0
TOTAL	10	31	62	6	23	30	24	1	17	504	7	4	19	475	38	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
8:00 AM - 9:00 AM	6	10	5	0	7	5	16	0	6	103	2	0	4	186	6	3
4:30 PM - 5:30 PM	4	13	38	4	13	20	11	1	10	274	6	2	7	248	14	2

	PHF	Trucks
AM	0.788	0.8%
PM	0.866	1.4%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

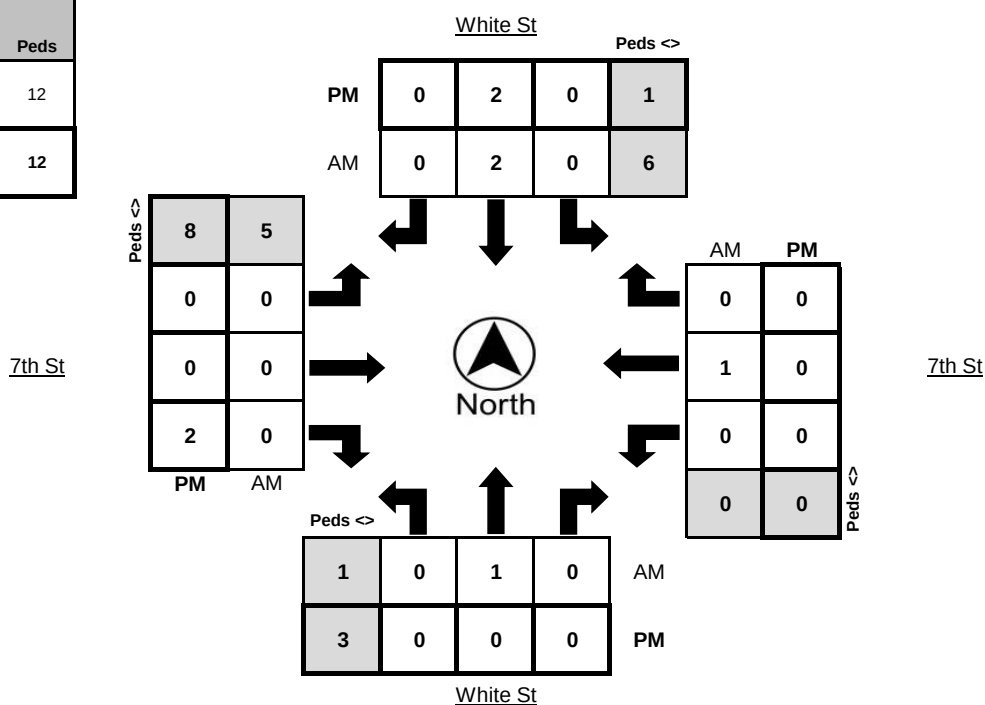
LATITUDE	36.3276
LONGITUDE	-119.6393
WEATHER	Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM - 8:30 AM	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM - 9:00 AM	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	2
TOTAL	0	1	0	8	0	2	0	2	0	1	0	0	0	1	0	5

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:15 PM - 4:30 PM	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6
4:45 PM - 5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM - 5:15 PM	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	11	0	3	0	3	0	0	2	3	0	0	1	9

	Northbound Bikes			N.Leg Perds	Southbound Bikes			S.Leg Perds	Eastbound Bikes			E.Leg Perds	Westbound Bikes			W.Leg Perds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
8:00 AM - 9:00 AM	0	1	0	6	0	2	0	1	0	0	0	0	0	1	0	5
4:30 PM - 5:30 PM	0	0	0	1	0	2	0	3	0	0	2	0	0	0	0	8

	Bikes	Peds
AM Peak Total	4	12
PM Peak Total	4	12





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Turning Movement Report

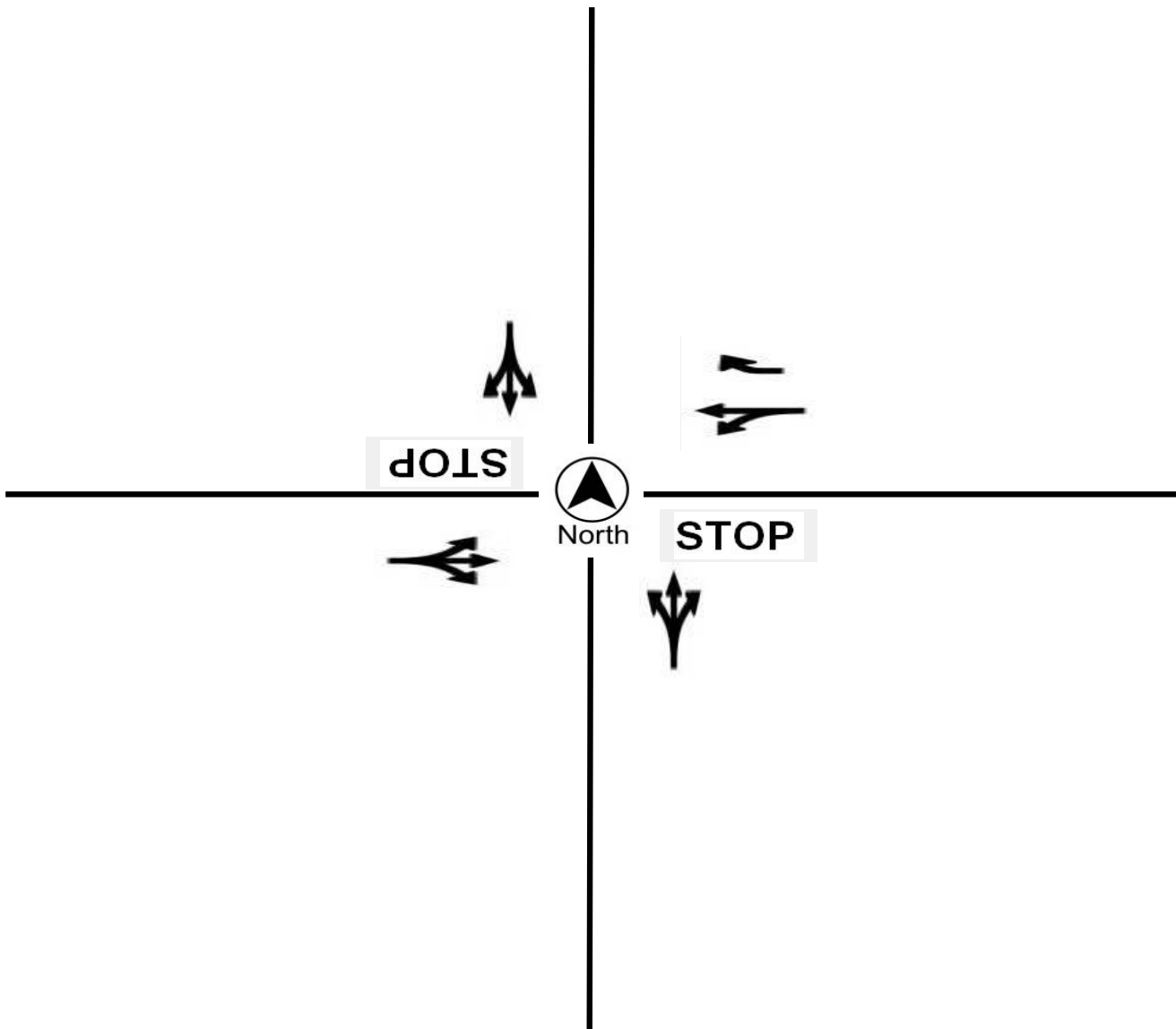
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Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 7th St @ White St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET White St / White St
E/W STREET 7th St / 7th St
WEATHER Clear
CONTROL TYPE Two-Way stop

COMMENTS





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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Redington St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018

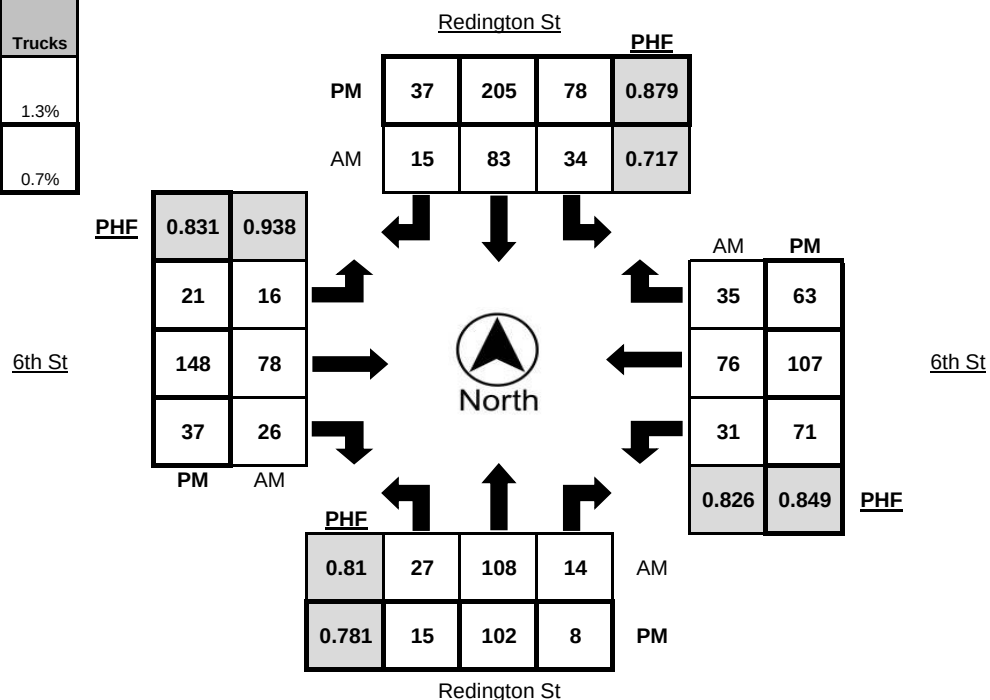
LATITUDE 36.3250
LONGITUDE -119.6486
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	3	14	0	0	6	20	1	0	0	12	3	0	6	10	4	0
7:15 AM - 7:30 AM	1	16	0	0	8	22	1	0	1	15	1	0	8	13	7	1
7:30 AM - 7:45 AM	5	21	3	0	6	30	4	0	2	14	4	0	3	15	8	0
7:45 AM - 8:00 AM	8	32	6	2	13	27	6	0	4	16	9	1	11	23	9	0
8:00 AM - 8:15 AM	7	20	5	0	9	19	3	0	7	18	7	0	7	17	6	0
8:15 AM - 8:30 AM	7	27	2	0	4	20	0	0	2	18	7	0	4	14	12	2
8:30 AM - 8:45 AM	5	29	1	0	8	17	6	1	3	26	3	0	9	22	8	1
8:45 AM - 9:00 AM	9	29	4	0	6	19	5	0	3	20	3	0	8	20	10	0
TOTAL	45	188	21	2	60	174	26	1	22	139	37	1	56	134	64	4

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	6	22	1	0	13	44	6	1	3	28	10	0	13	26	11	0
4:15 PM - 4:30 PM	5	29	1	0	13	40	6	0	5	31	10	6	6	26	10	0
4:30 PM - 4:45 PM	6	16	1	0	15	61	15	0	6	37	6	0	16	25	11	0
4:45 PM - 5:00 PM	2	28	1	0	22	37	5	0	6	37	7	0	18	28	19	2
5:00 PM - 5:15 PM	2	27	2	0	20	55	6	1	6	40	16	1	25	29	17	0
5:15 PM - 5:30 PM	5	31	4	0	21	52	11	0	3	34	8	1	12	25	16	1
5:30 PM - 5:45 PM	3	20	3	0	9	42	4	0	3	30	13	0	12	23	9	0
5:45 PM - 6:00 PM	4	19	2	0	14	34	2	0	1	26	3	0	9	29	4	0
TOTAL	33	192	15	0	127	365	55	2	33	263	73	8	111	211	97	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	27	108	14	2	34	83	15	1	16	78	26	1	31	76	35	3
4:30 PM - 5:30 PM	15	102	8	0	78	205	37	1	21	148	37	2	71	107	63	3

	PHF	Trucks
AM	0.828	1.3%
PM	0.910	0.7%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

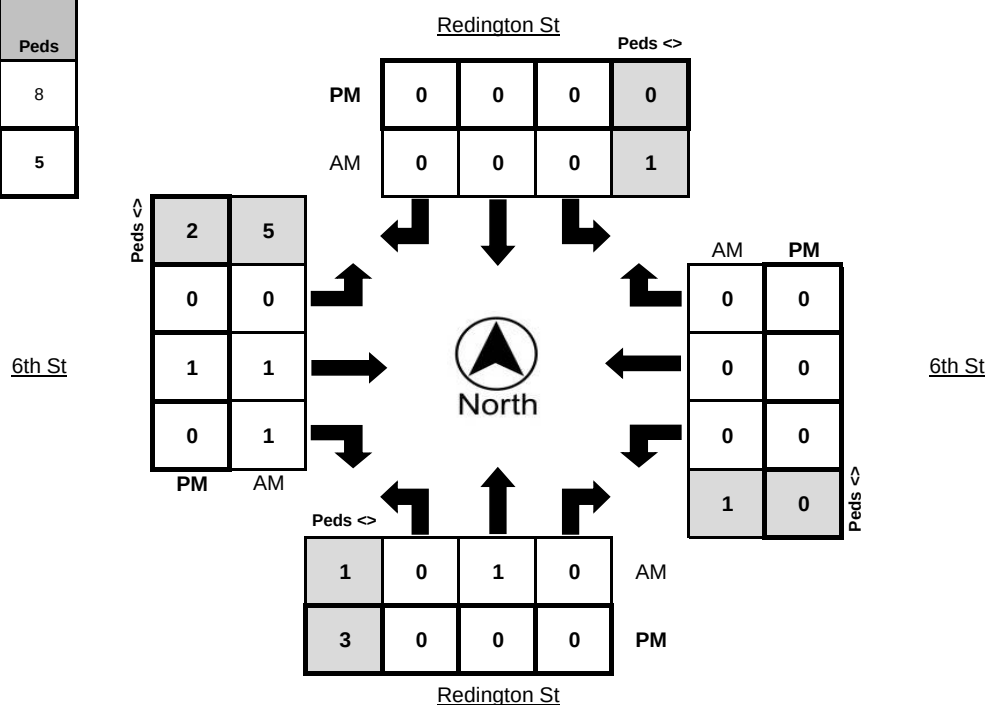
LATITUDE	36.3250
LONGITUDE	-119.6486
WEATHER	Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3
8:15 AM - 8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
8:45 AM - 9:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
TOTAL	0	1	1	1	1	1	0	1	0	3	1	1	0	0	0	5

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
TOTAL	0	1	0	0	0	0	0	5	0	1	0	0	1	0	0	5

	Northbound Bikes			N.Leg Perds	Southbound Bikes			S.Leg Perds	Eastbound Bikes			E.Leg Perds	Westbound Bikes			W.Leg Perds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	1	0	1	0	0	0	1	0	1	1	1	0	0	0	5
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	2

	Bikes	Peds
AM Peak Total	3	8
PM Peak Total	1	5





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Turning Movement Report

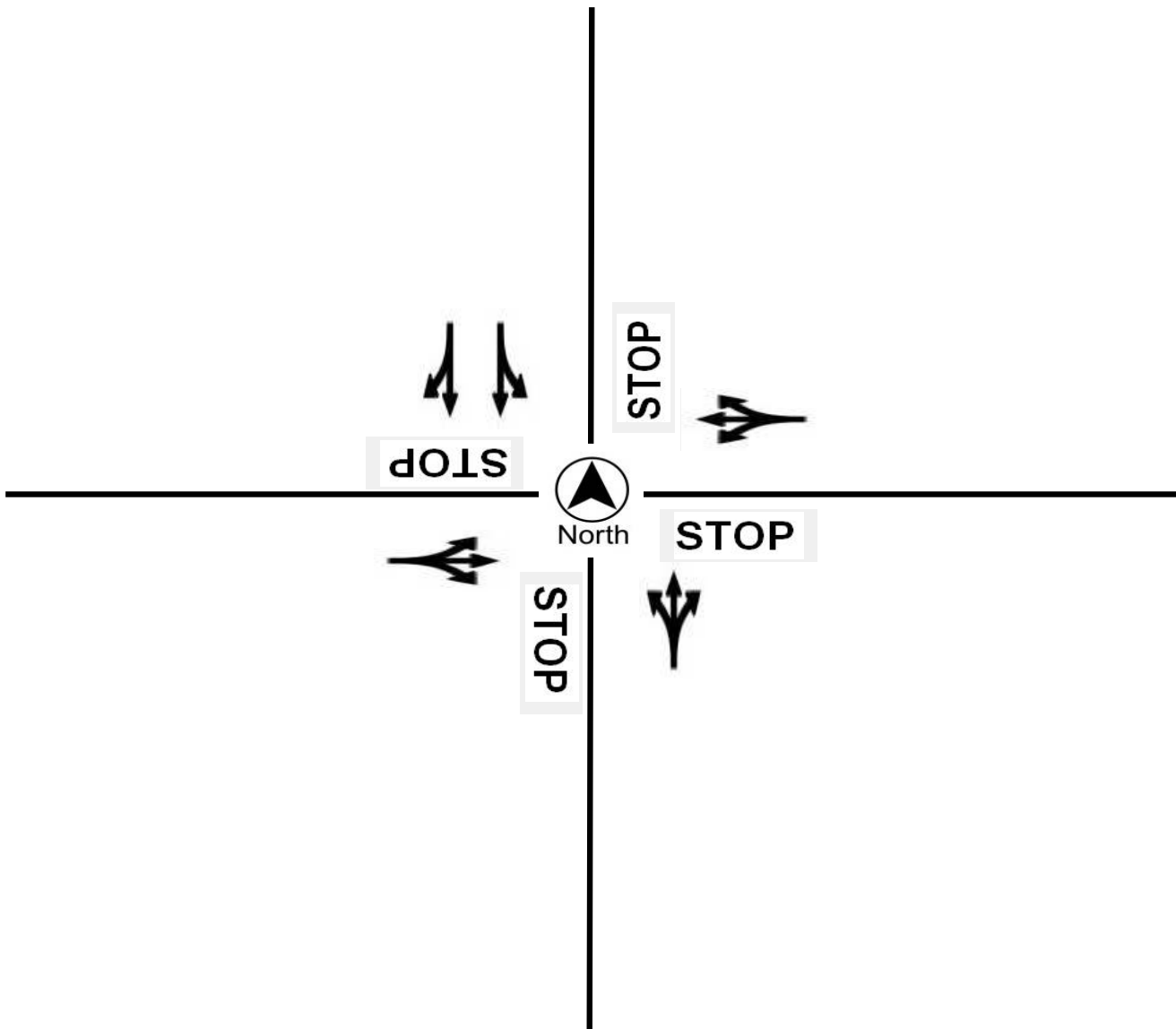
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Redington St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Redington St / Redington St
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE All-Way Stop

COMMENTS



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

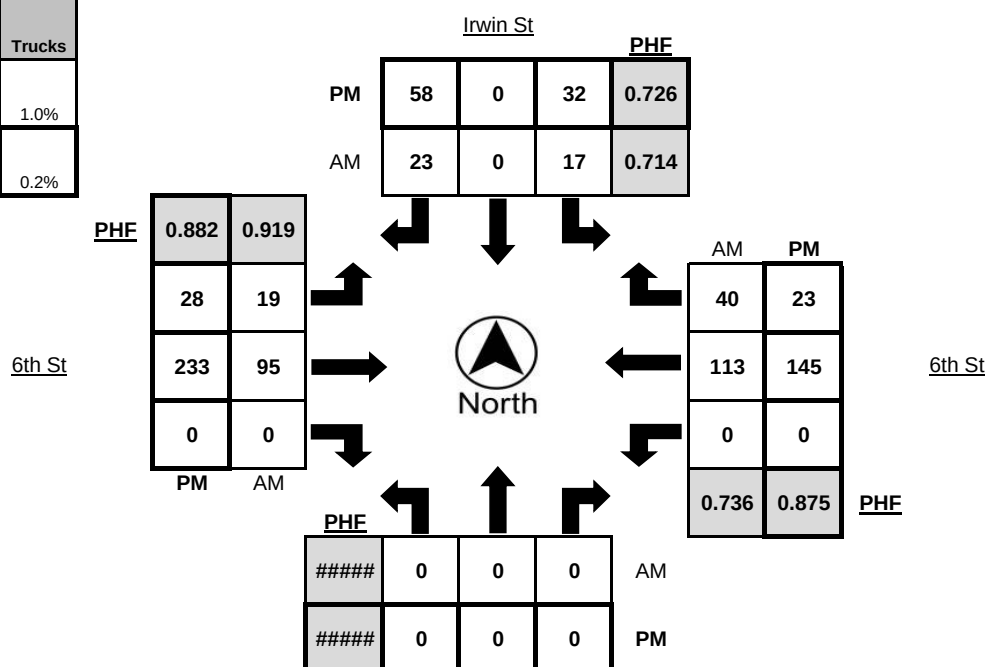
LATITUDE	36.3253
LONGITUDE	-119.6470
WEATHER	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	1	0	6	1	0	14	0	0	0	11	3	1
7:15 AM - 7:30 AM	0	0	0	0	1	0	4	0	1	15	0	0	0	25	5	1
7:30 AM - 7:45 AM	0	0	0	0	5	0	2	0	4	16	0	0	0	9	2	2
7:45 AM - 8:00 AM	0	0	0	0	10	0	2	0	5	28	0	0	0	17	1	1
8:00 AM - 8:15 AM	0	0	0	0	2	0	5	0	9	19	0	0	0	34	18	0
8:15 AM - 8:30 AM	0	0	0	0	2	0	4	0	3	22	0	0	0	25	10	0
8:30 AM - 8:45 AM	0	0	0	0	8	0	5	0	4	27	0	0	0	29	2	3
8:45 AM - 9:00 AM	0	0	0	0	5	0	9	0	3	27	0	0	0	25	10	0
TOTAL	0	0	0	0	34	0	37	1	29	168	0	0	0	175	51	8

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	0	0	0	14	0	8	1	7	38	0	1	0	37	14	0
4:15 PM - 4:30 PM	0	0	0	0	5	0	11	0	5	45	0	0	0	29	5	0
4:30 PM - 4:45 PM	0	0	0	0	7	0	11	0	7	53	0	1	0	37	3	0
4:45 PM - 5:00 PM	0	0	0	0	7	0	18	0	8	52	0	0	0	38	10	0
5:00 PM - 5:15 PM	0	0	0	0	14	0	17	0	5	69	0	0	0	35	4	0
5:15 PM - 5:30 PM	0	0	0	0	4	0	12	0	8	59	0	0	0	35	6	0
5:30 PM - 5:45 PM	0	0	0	0	7	0	8	0	6	37	0	1	0	41	4	0
5:45 PM - 6:00 PM	0	0	0	0	7	0	6	0	2	42	0	0	0	35	6	0
TOTAL	0	0	0	0	65	0	91	1	48	395	0	3	0	287	52	0

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
8:00 AM - 9:00 AM	0	0	0	0	17	0	23	0	19	95	0	0	0	113	40	3
4:30 PM - 5:30 PM	0	0	0	0	32	0	58	0	28	233	0	1	0	145	23	0

	PHF	Trucks
AM	0.882	1.0%
PM	0.901	0.2%





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 Hanford, CA 93230
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Irwin St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018

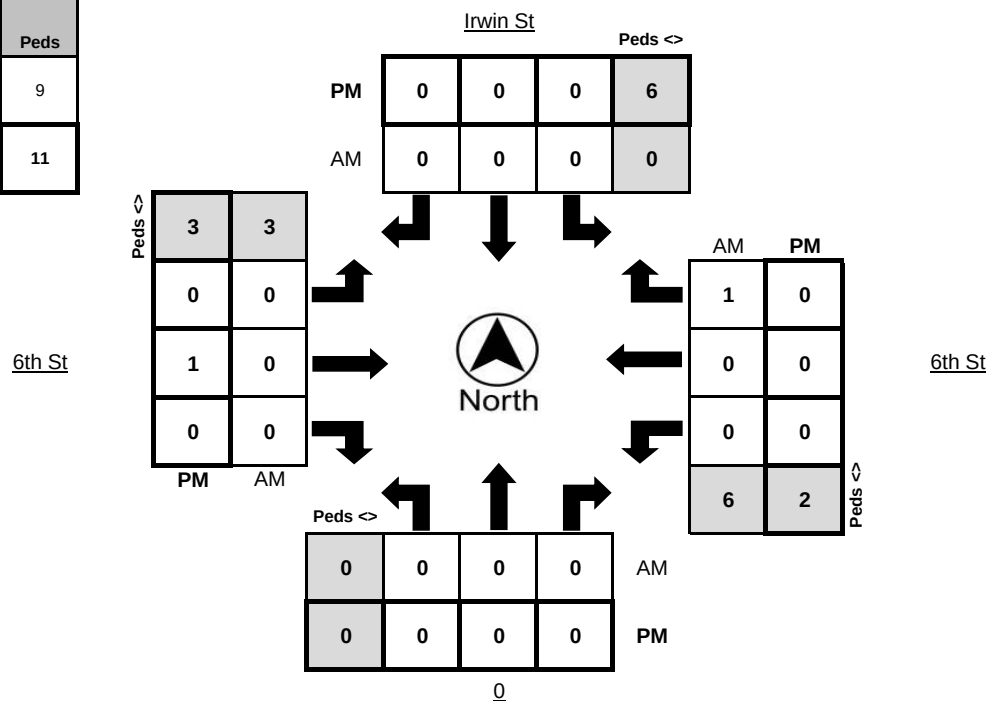
LATITUDE 36.3253
LONGITUDE -119.6470
WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	1	0	6	0	0	1	6

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	1
5:00 PM - 5:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM - 5:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
TOTAL	0	0	0	8	0	0	0	0	0	1	0	3	0	0	0	8

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	1	3
4:30 PM - 5:30 PM	0	0	0	6	0	0	0	0	0	1	0	2	0	0	0	3

	Bikes	Peds
AM Peak Total	1	9
PM Peak Total	1	11





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Turning Movement Report

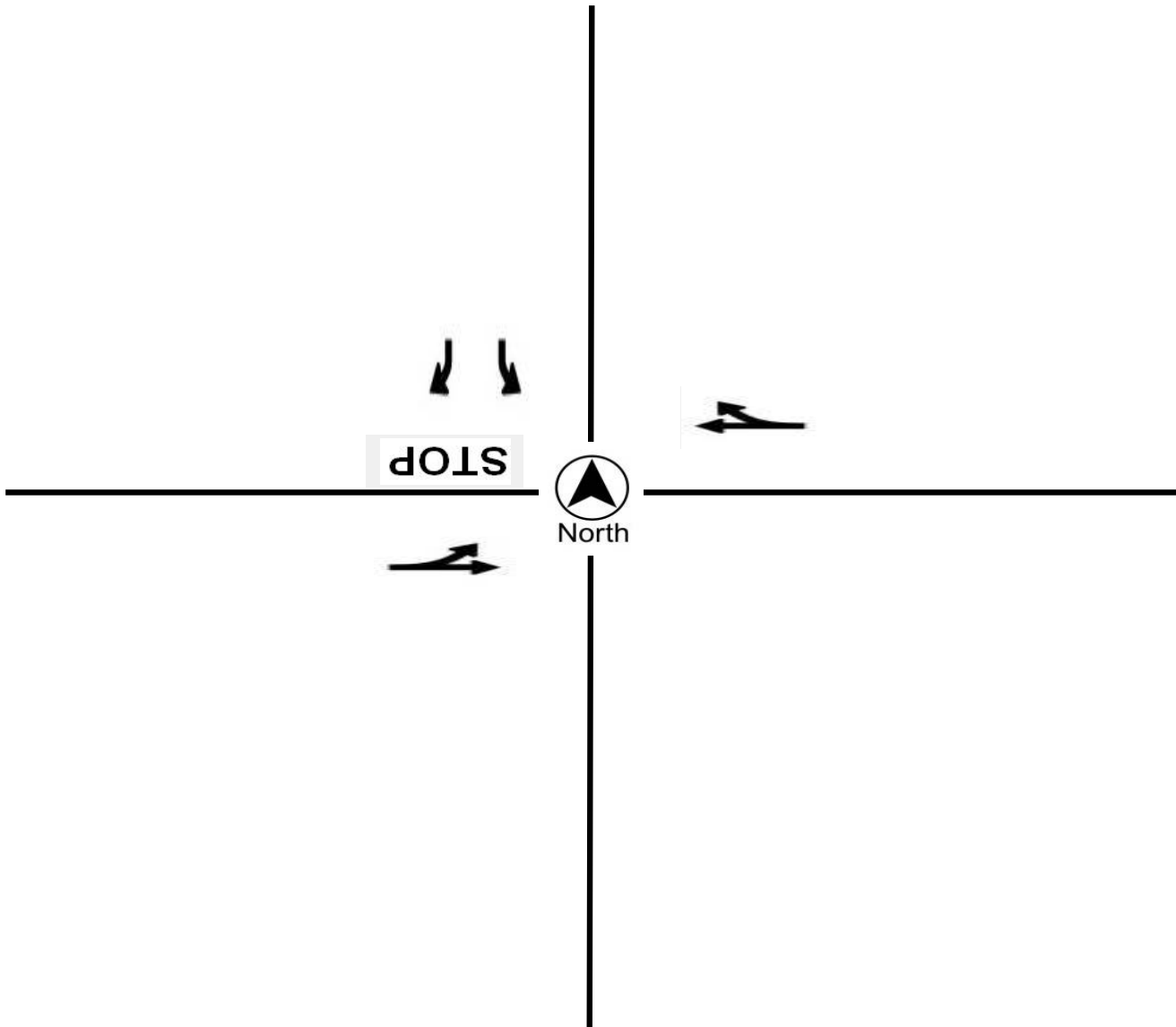
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Irwin St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Irwin St /
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE One-Way stop

COMMENTS





Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Douy St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018

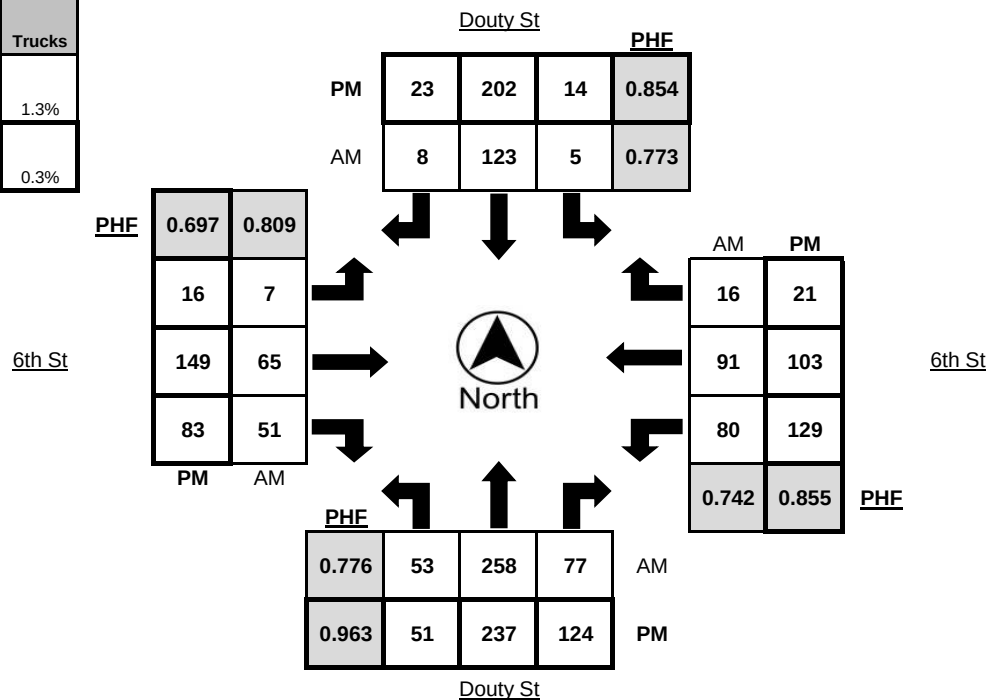
LATITUDE 36.3255
LONGITUDE -119.6454
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	4	18	10	1	0	16	2	1	1	12	4	0	7	8	3	2
7:15 AM - 7:30 AM	11	33	22	1	0	18	2	0	0	9	10	0	13	18	3	0
7:30 AM - 7:45 AM	9	50	21	1	1	33	4	2	4	7	9	1	19	14	0	1
7:45 AM - 8:00 AM	20	80	25	1	0	44	0	0	1	19	17	0	27	29	7	1
8:00 AM - 8:15 AM	12	60	14	0	2	25	2	0	3	11	11	0	20	21	2	1
8:15 AM - 8:30 AM	9	57	19	1	1	28	2	1	3	15	5	0	19	22	3	2
8:30 AM - 8:45 AM	12	61	19	1	2	26	4	0	0	20	18	2	14	19	4	1
8:45 AM - 9:00 AM	13	75	19	2	2	33	6	0	4	14	13	0	21	18	4	0
TOTAL	90	434	149	8	8	223	22	4	16	107	87	3	140	149	26	8

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	16	60	36	0	2	28	5	1	5	23	18	2	30	28	4	0
4:15 PM - 4:30 PM	7	68	32	1	5	43	3	1	4	27	20	1	21	27	6	0
4:30 PM - 4:45 PM	16	56	17	0	2	39	6	0	2	38	23	1	36	21	2	0
4:45 PM - 5:00 PM	13	61	33	0	3	44	9	0	3	33	17	0	29	24	7	1
5:00 PM - 5:15 PM	10	61	30	0	4	63	3	0	5	53	31	0	30	26	6	1
5:15 PM - 5:30 PM	14	57	31	0	3	49	5	0	1	40	19	0	28	27	2	0
5:30 PM - 5:45 PM	14	58	30	0	4	46	6	1	7	23	16	1	42	26	6	0
5:45 PM - 6:00 PM	6	45	23	0	3	34	5	0	3	33	11	0	28	29	5	0
TOTAL	96	466	232	1	26	346	42	3	30	270	155	5	244	208	38	2

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	53	258	77	3	5	123	8	1	7	65	51	2	80	91	16	5
4:45 PM - 5:45 PM	51	237	124	0	14	202	23	1	16	149	83	1	129	103	21	2

	PHF	Trucks
AM	0.775	1.3%
PM	0.894	0.3%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

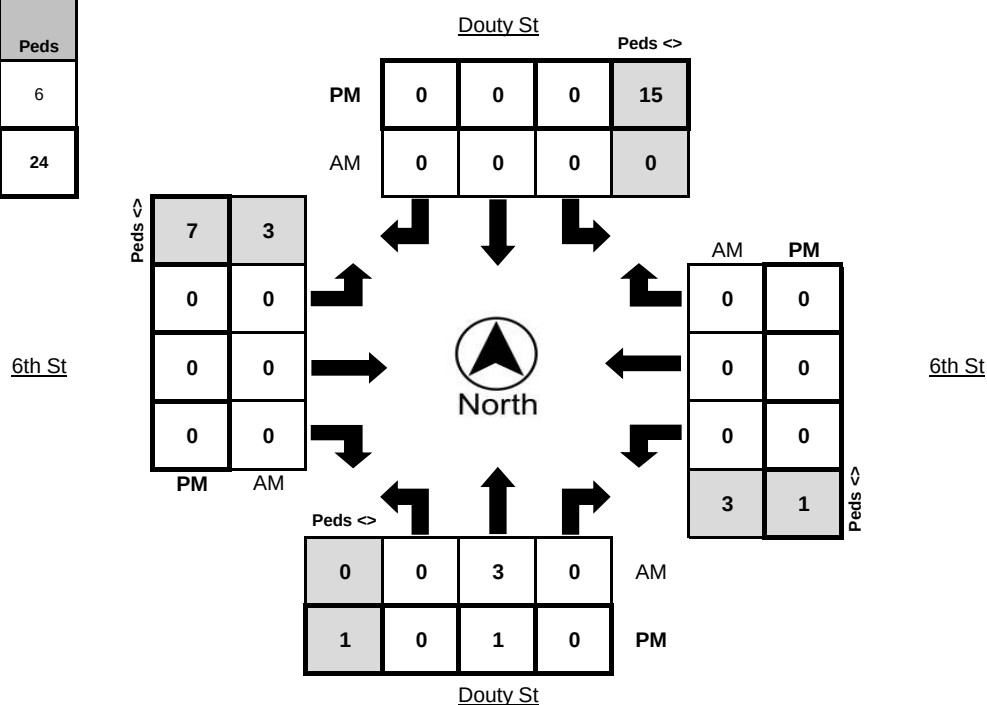
LATITUDE	36.3255
LONGITUDE	-119.6454
WEATHER	Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
7:30 AM - 7:45 AM	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM - 8:15 AM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM - 8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM - 9:00 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL	0	4	1	1	0	0	0	0	0	1	0	6	0	1	0	4

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	2	0	0	0	0	0	1	0	0	0	2	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	3
4:30 PM - 4:45 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM - 5:00 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM - 5:45 PM	0	1	0	8	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM - 6:00 PM	0	0	0	1	0	0	0	0	0	1	0	4	1	0	0	0
TOTAL	0	3	0	21	0	0	0	2	0	1	0	8	1	0	0	11

	Northbound Bikes			N.Leg Perds	Southbound Bikes			S.Leg Perds	Eastbound Bikes			E.Leg Perds	Westbound Bikes			W.Leg Perds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	3
4:45 PM - 5:45 PM	0	1	0	15	0	0	0	1	0	0	0	1	0	0	0	7

	Bikes	Peds
AM Peak Total	3	6
PM Peak Total	1	24





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Turning Movement Report

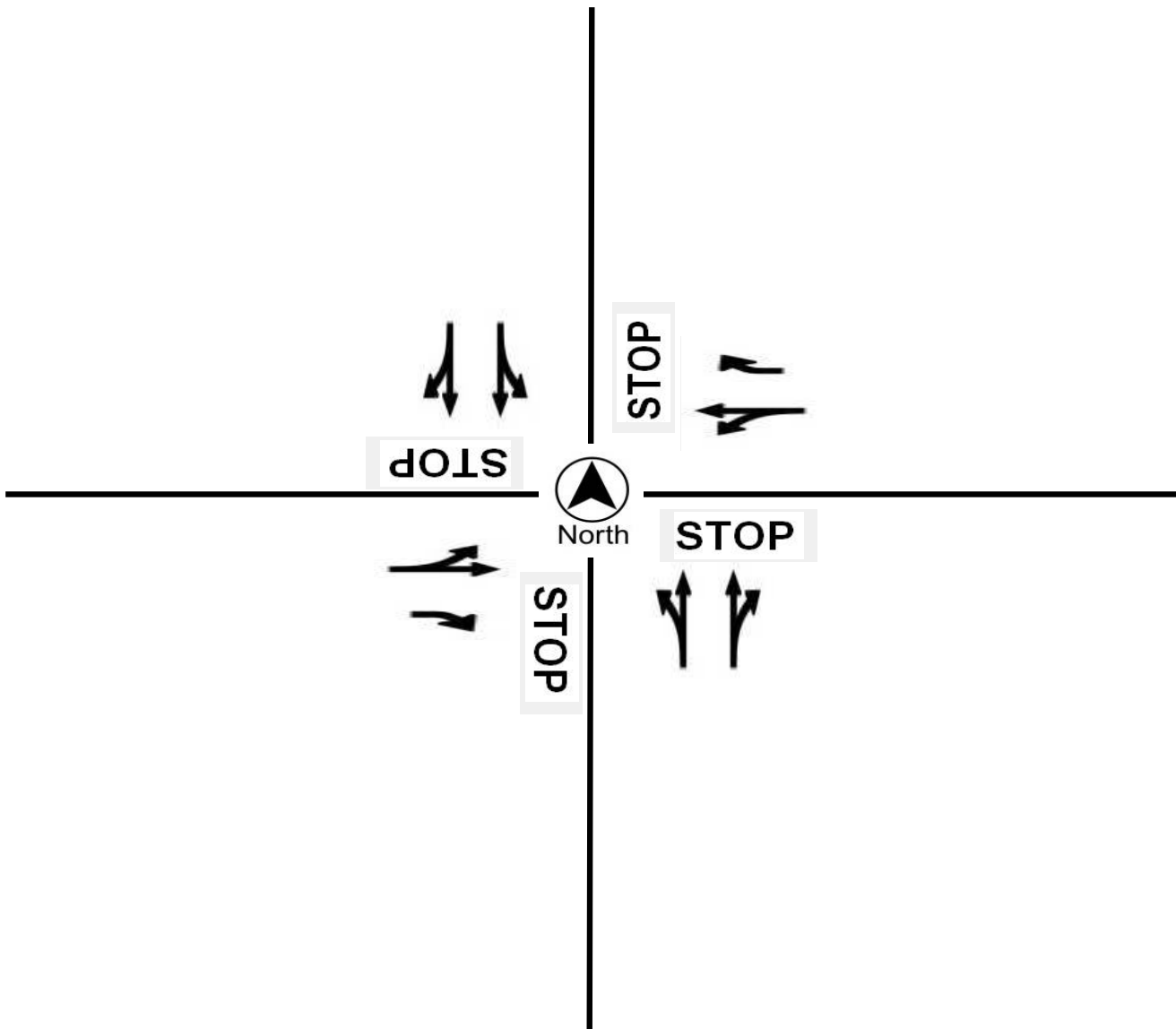
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Douty St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Douty St / Douty St
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE All-Way Stop

COMMENTS





Metro Traffic Data Inc.
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 800-975-6938 Phone/Fax
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Harris St
 COUNTY Kings
 COLLECTION DATE Wednesday, October 24, 2018

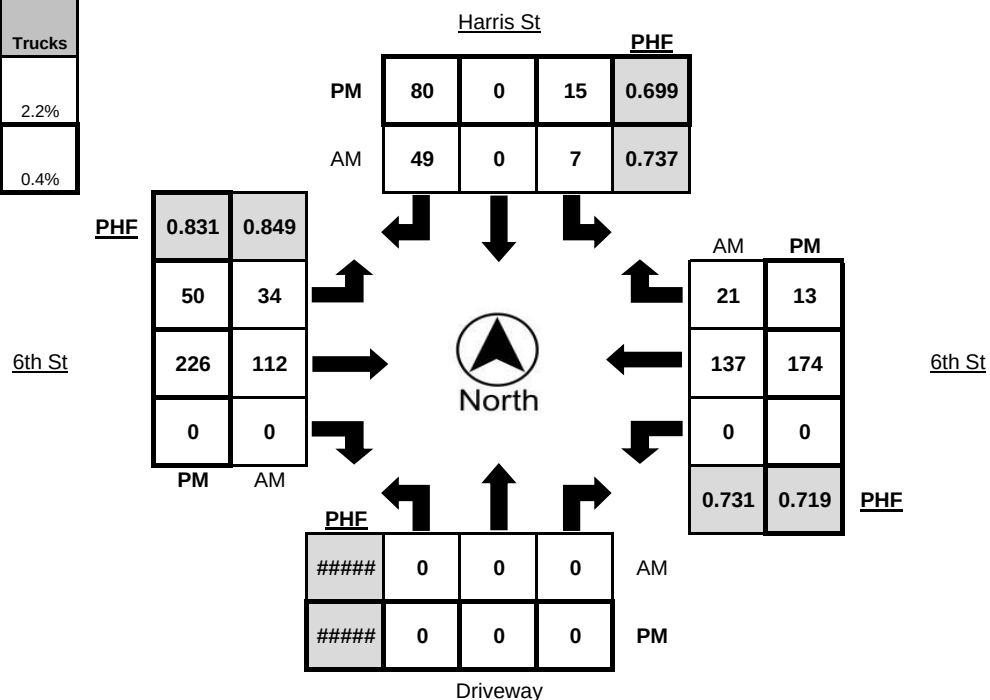
LATITUDE 36.3258
 LONGITUDE -119.6438
 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	1	0	4	1	4	18	0	0	0	15	0	1
7:15 AM - 7:30 AM	0	0	0	0	0	0	4	0	5	26	0	1	0	31	4	0
7:30 AM - 7:45 AM	0	0	0	0	2	0	9	0	9	21	0	0	0	26	0	1
7:45 AM - 8:00 AM	0	0	0	0	1	0	18	1	10	33	0	0	0	44	10	2
8:00 AM - 8:15 AM	0	0	0	0	2	0	12	1	6	21	0	0	0	31	5	0
8:15 AM - 8:30 AM	0	0	0	0	1	0	10	0	9	26	0	0	0	35	3	1
8:30 AM - 8:45 AM	0	0	0	0	3	0	9	1	9	32	0	1	0	27	3	1
8:45 AM - 9:00 AM	0	0	0	0	3	0	14	0	12	22	0	1	0	29	3	0
TOTAL	0	0	0	0	13	0	80	4	64	199	0	3	0	238	28	6

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	0	0	0	3	0	17	0	15	45	0	0	0	48	6	0
4:15 PM - 4:30 PM	0	0	0	0	4	0	16	0	12	49	0	1	0	38	0	0
4:30 PM - 4:45 PM	0	0	0	0	1	0	20	0	4	51	0	2	0	34	1	0
4:45 PM - 5:00 PM	0	0	0	0	2	0	18	0	14	53	0	1	0	42	2	0
5:00 PM - 5:15 PM	0	0	0	0	9	0	25	0	10	73	0	1	0	33	3	0
5:15 PM - 5:30 PM	0	0	0	0	2	0	20	0	14	57	0	0	0	38	4	0
5:30 PM - 5:45 PM	0	0	0	0	2	0	17	0	12	43	0	0	0	61	4	0
5:45 PM - 6:00 PM	0	0	0	0	1	0	15	0	12	45	0	0	0	40	3	0
TOTAL	0	0	0	0	24	0	148	0	93	416	0	5	0	334	23	0

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	0	0	0	0	7	0	49	3	34	112	0	1	0	137	21	4
4:45 PM - 5:45 PM	0	0	0	0	15	0	80	0	50	226	0	2	0	174	13	0

	PHF	Trucks
AM	0.776	2.2%
PM	0.912	0.4%





Metro Traffic Data Inc.
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 Hanford, CA 93230
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Harris St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018

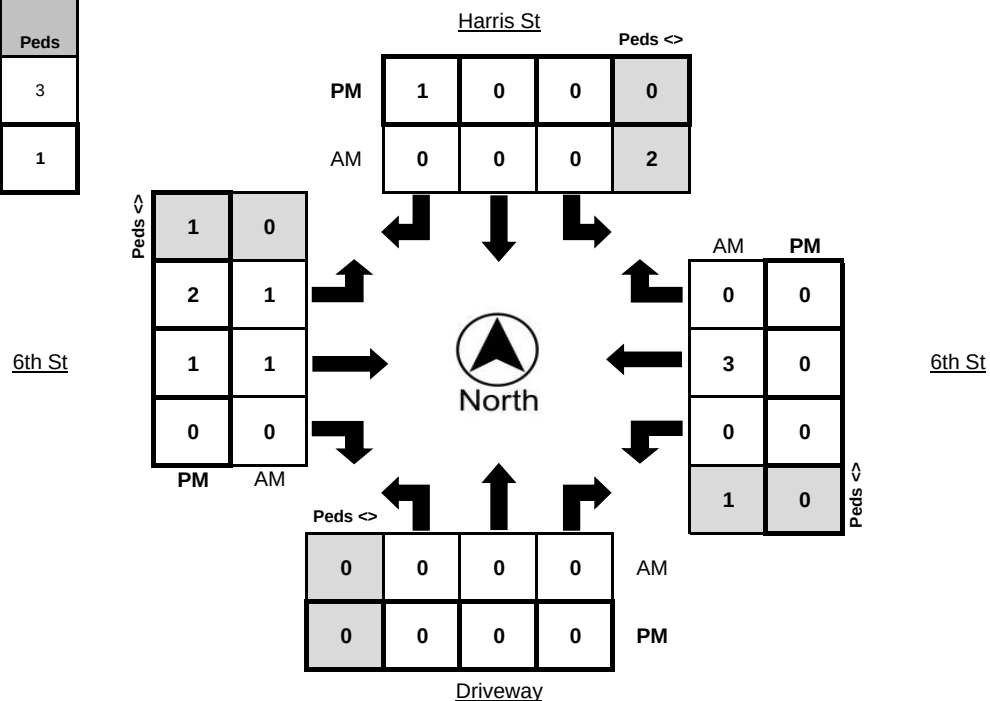
LATITUDE 36.3258
LONGITUDE -119.6438
WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
TOTAL	0	0	0	2	0	0	0	0	3	2	0	1	0	3	0	2

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	1	0	6	1	0	0	0	0	0	1

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	0	0	2	0	0	0	0	1	1	0	1	0	3	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	1

	Bikes	Peds
AM Peak Total	5	3
PM Peak Total	4	1





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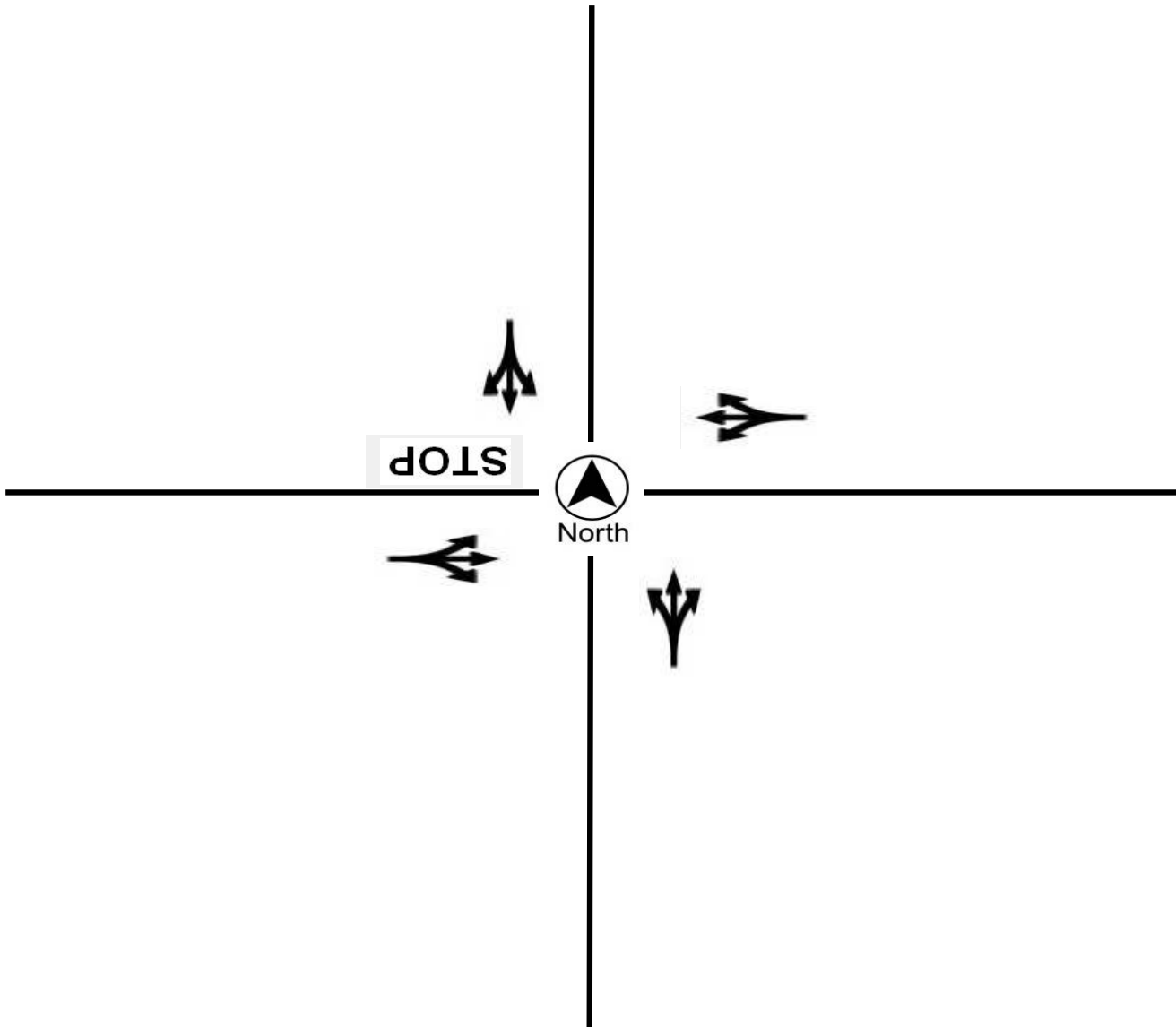
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Harris St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Harris St / Driveway
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE One-Way stop

COMMENTS





Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Brown St
 COUNTY Kings
 COLLECTION DATE Wednesday, October 24, 2018

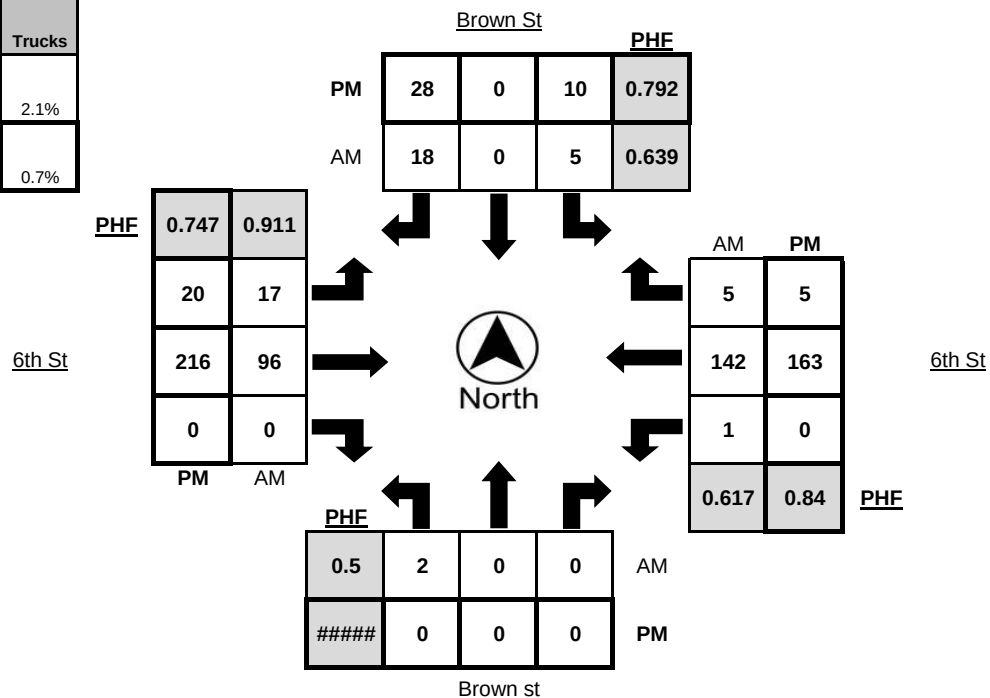
LATITUDE 36.3260
 LONGITUDE -119.6422
 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	3	14	0	0	0	15	0	0
7:15 AM - 7:30 AM	0	0	0	0	2	0	1	1	5	18	0	0	0	20	1	0
7:30 AM - 7:45 AM	0	0	0	0	2	0	0	0	4	19	0	0	0	17	0	0
7:45 AM - 8:00 AM	1	0	0	1	1	0	4	0	3	28	0	1	0	58	2	0
8:00 AM - 8:15 AM	0	0	0	0	2	0	3	0	7	18	0	0	0	36	1	1
8:15 AM - 8:30 AM	0	0	0	0	2	0	7	0	3	23	0	0	0	20	1	0
8:30 AM - 8:45 AM	1	0	0	1	0	0	4	0	4	27	0	1	1	28	1	1
8:45 AM - 9:00 AM	0	0	0	0	1	0	9	1	2	28	0	1	0	24	0	1
TOTAL	2	0	0	2	10	0	28	2	31	175	0	3	1	218	6	3

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	0	0	0	0	0	4	0	7	54	0	1	0	36	1	0
4:15 PM - 4:30 PM	0	0	0	0	2	0	8	1	4	33	0	0	0	45	1	0
4:30 PM - 4:45 PM	0	0	0	0	3	0	12	1	8	46	0	0	0	26	1	0
4:45 PM - 5:00 PM	0	0	0	0	2	0	10	0	2	46	0	0	0	39	1	0
5:00 PM - 5:15 PM	0	0	0	0	4	0	8	0	12	67	0	0	0	38	0	0
5:15 PM - 5:30 PM	0	0	0	0	1	0	4	0	2	56	0	2	0	46	4	0
5:30 PM - 5:45 PM	0	0	0	0	3	0	6	0	4	47	0	1	0	40	0	0
5:45 PM - 6:00 PM	0	0	0	0	1	0	4	0	7	45	0	0	0	30	2	0
TOTAL	0	0	0	0	16	0	56	2	46	394	0	4	0	300	10	0

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	2	0	0	2	5	0	18	0	17	96	0	2	1	142	5	2
4:45 PM - 5:45 PM	0	0	0	0	10	0	28	0	20	216	0	3	0	163	5	0

	PHF	Trucks
AM	0.737	2.1%
PM	0.857	0.7%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

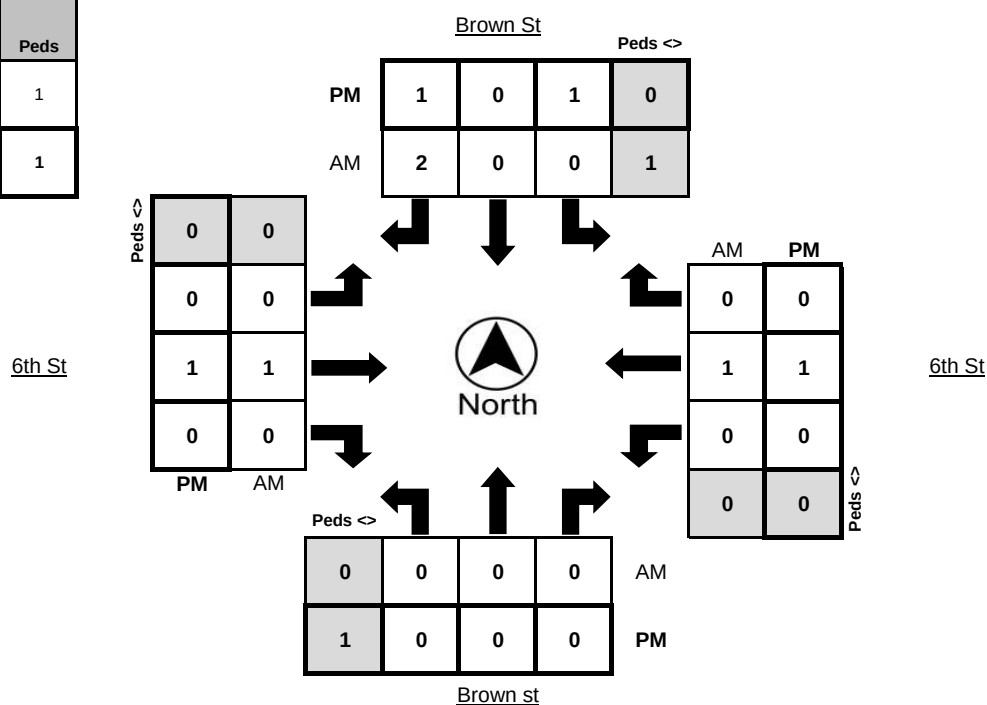
LATITUDE	36.3260
LONGITUDE	-119.6422
WEATHER	Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	1	0	0	2	0	1	1	0	0	0	2	0	0

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	17	1	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
5:00 PM - 5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL	0	0	0	5	1	0	2	19	1	1	0	0	0	2	0	1

	Northbound Bikes			N.Leg Perds	Southbound Bikes			S.Leg Perds	Eastbound Bikes			E.Leg Perds	Westbound Bikes			W.Leg Perds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:45 AM - 8:45 AM	0	0	0	1	0	0	2	0	0	1	0	0	0	1	0	0
4:45 PM - 5:45 PM	0	0	0	0	1	0	1	1	0	1	0	0	0	1	0	0

	Bikes	Peds
AM Peak Total	4	1
PM Peak Total	4	1





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Turning Movement Report

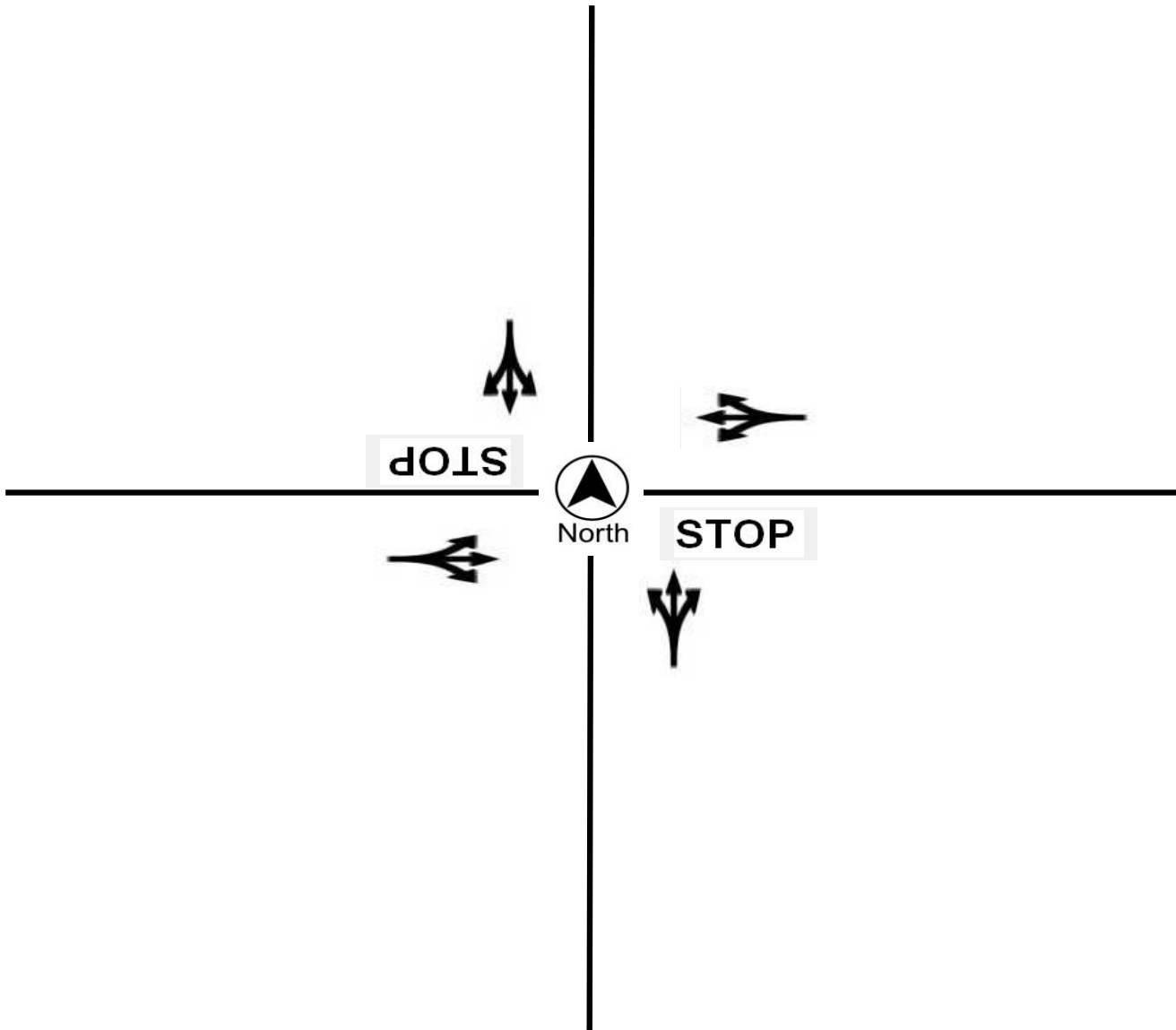
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Brown St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET Brown St / Brown st
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE Two-Way stop

COMMENTS





Metro Traffic Data Inc.
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Hanford, CA 93230
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Turning Movement Report

Prepared For:

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

LOCATION 6th St @ Green St
COUNTY Kings
COLLECTION DATE Thursday, October 25, 2018

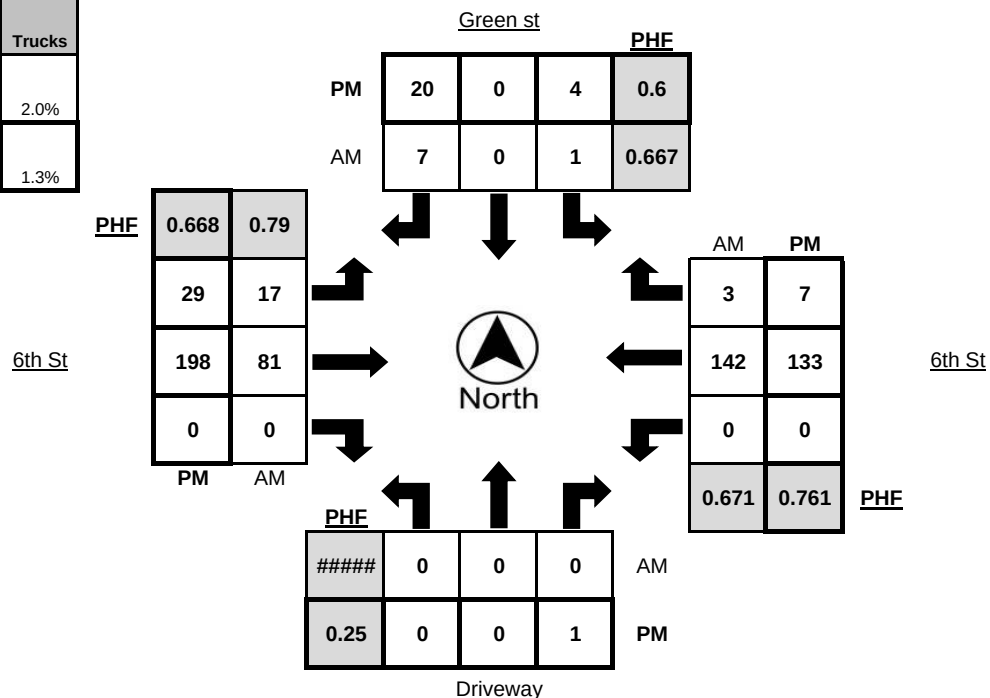
LATITUDE 36.3263
LONGITUDE -119.6407
WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	17	0	0	0	16	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	6	0	0	19	0	1	0	28	0	2
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	2	18	0	0	0	22	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	1	0	5	22	0	0	0	53	1	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	2	0	4	16	0	0	0	35	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	2	0	1	19	0	0	0	30	1	3
8:30 AM - 8:45 AM	0	0	0	0	1	0	2	0	7	24	0	0	0	24	1	2
8:45 AM - 9:00 AM	0	0	0	0	0	0	2	0	2	24	0	0	0	27	0	0
TOTAL	0	0	0	0	1	0	15	0	21	159	0	1	0	235	3	7

Time	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	0	0	0	0	0	4	0	5	41	0	1	0	39	3	0
4:15 PM - 4:30 PM	0	0	0	0	2	0	4	0	8	47	0	1	0	32	1	0
4:30 PM - 4:45 PM	0	0	0	0	1	0	3	0	5	37	0	0	0	24	1	1
4:45 PM - 5:00 PM	0	0	1	0	2	0	3	0	6	37	0	0	0	31	2	0
5:00 PM - 5:15 PM	0	0	0	0	1	0	4	1	11	74	0	1	0	28	2	0
5:15 PM - 5:30 PM	0	0	0	0	1	0	3	0	7	53	0	1	0	31	0	2
5:30 PM - 5:45 PM	0	0	0	0	0	0	10	0	5	34	0	0	0	43	3	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	4	0	2	42	0	0	0	30	0	0
TOTAL	0	0	1	0	7	0	35	1	49	365	0	4	0	258	12	3

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound			
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:45 AM - 8:45 AM	0	0	0	0	1	0	7	0	17	81	0	0	0	142	3	5
4:45 PM - 5:45 PM	0	0	1	0	4	0	20	1	29	198	0	2	0	133	7	2

	PHF	Trucks
AM	0.765	2.0%
PM	0.817	1.3%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

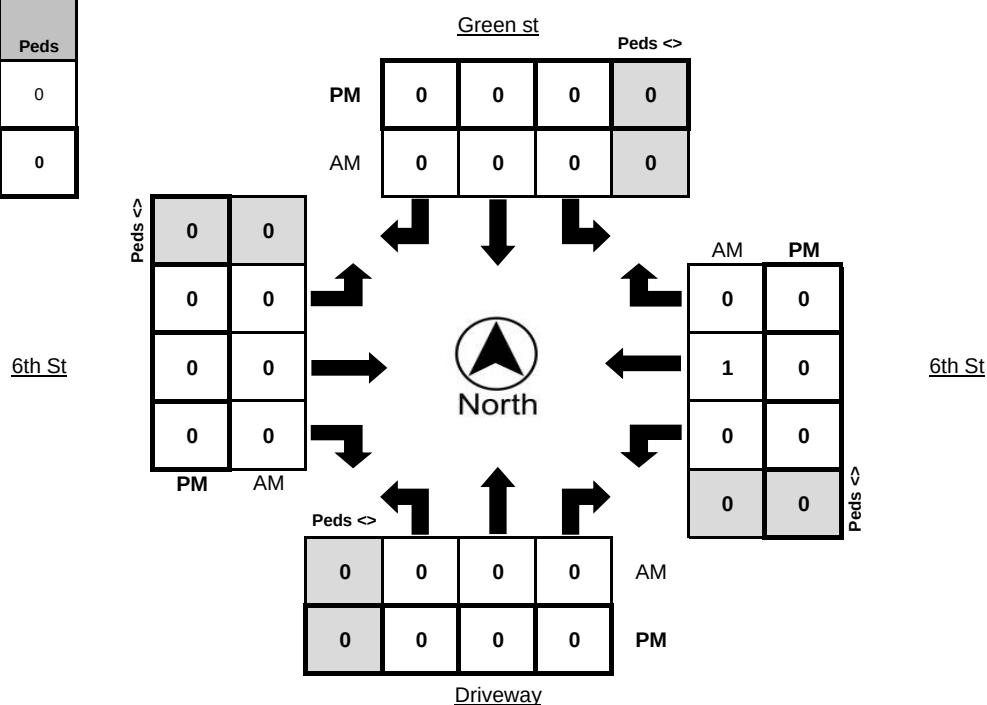
LATITUDE	36.3263
LONGITUDE	-119.6407
WEATHER	Clear

[illegible]

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
TOTAL	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	0

[illegible]

	Bikes	Peds
AM Peak Total	1	0
PM Peak Total	0	0





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Turning Movement Report

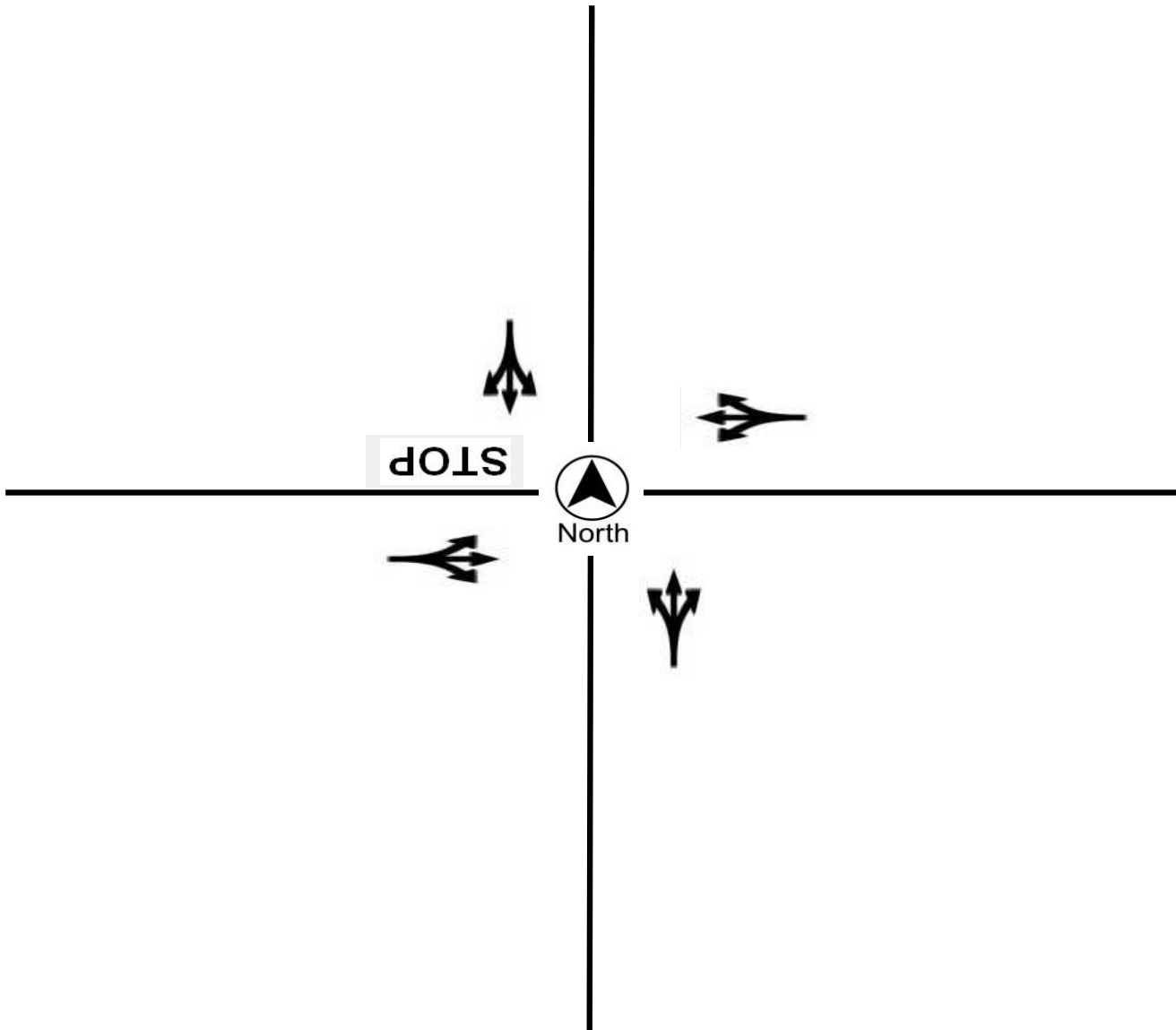
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ Green St
COUNTY Kings
COLLECTION DATE Thursday, October 25, 2018
CYCLE TIME N/A

N/S STREET Green st / Driveway
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE One-Way stop

COMMENTS



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

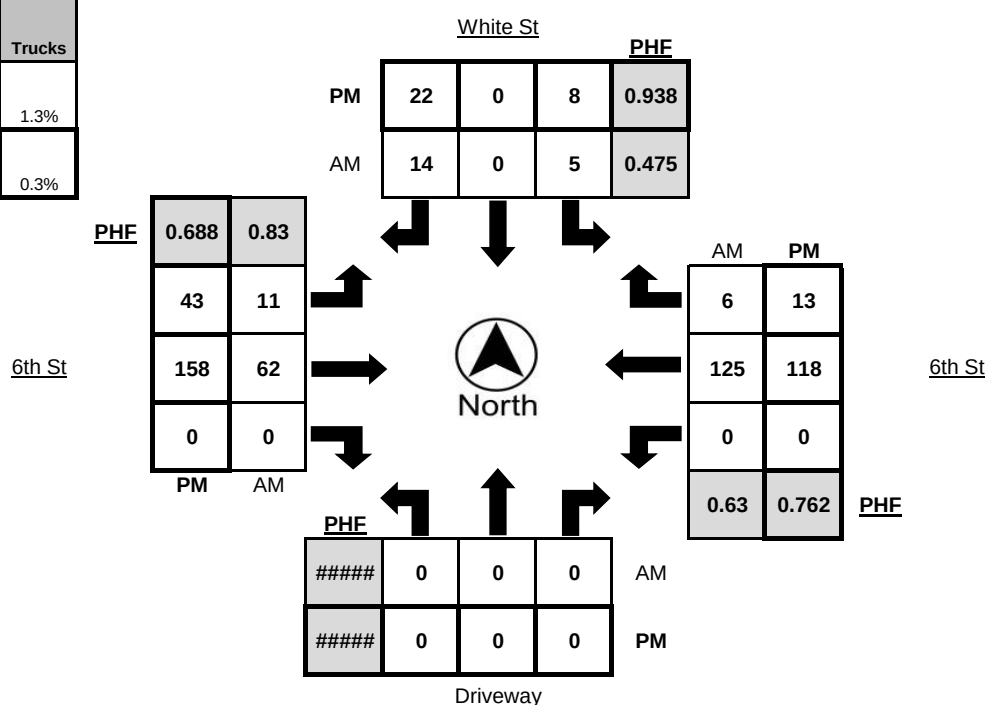
LATITUDE	36.3265
LONGITUDE	-119.6391
WEATHER	Clear

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:00 AM - 7:15 AM	0	0	0	0	2	0	2	0	4	17	0	0	0	13	0	0
7:15 AM - 7:30 AM	0	0	0	0	1	0	2	0	4	14	0	1	0	26	0	1
7:30 AM - 7:45 AM	0	0	0	0	3	0	7	0	3	15	0	0	0	17	2	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	2	0	3	19	0	0	0	49	3	1
8:00 AM - 8:15 AM	0	0	0	0	1	0	3	0	1	14	0	0	0	33	1	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	2	15	0	0	0	28	2	2
8:30 AM - 8:45 AM	0	0	0	0	1	0	3	0	6	15	0	1	0	22	0	1
8:45 AM - 9:00 AM	0	0	0	0	0	0	1	0	7	18	0	0	0	26	0	0
TOTAL	0	0	0	0	8	0	20	0	26	127	0	2	0	214	8	5

	Northbound				Southbound				Eastbound				Westbound			
Time	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
4:00 PM - 4:15 PM	0	0	0	0	1	0	4	0	7	33	0	1	0	36	2	0
4:15 PM - 4:30 PM	0	0	0	0	2	0	2	0	15	35	0	1	0	31	1	0
4:30 PM - 4:45 PM	0	0	0	0	2	0	9	0	7	29	0	0	0	19	1	0
4:45 PM - 5:00 PM	0	0	0	0	3	0	5	0	7	33	0	0	0	26	5	1
5:00 PM - 5:15 PM	0	0	0	0	3	0	4	0	16	57	0	0	0	29	4	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	8	0	13	40	0	0	0	22	2	0
5:30 PM - 5:45 PM	0	0	0	0	2	0	5	0	7	28	0	0	0	41	2	0
5:45 PM - 6:00 PM	0	0	0	0	1	0	3	0	3	37	0	0	0	29	4	0
TOTAL	0	0	0	0	14	0	40	0	75	292	0	2	0	233	21	1

	Northbound				Southbound				Eastbound				Westbound			
PEAK HOUR	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks
7:15 AM - 8:15 AM	0	0	0	0	5	0	14	0	11	62	0	1	0	125	6	2
4:45 PM - 5:45 PM	0	0	0	0	8	0	22	0	43	158	0	0	0	118	13	1

	PHF	Trucks
AM	0.734	1.3%
PM	0.801	0.3%



Turning Movement Report

Peters Engineering Group
952 Pollasky Avenue
Clovis, CA 93612

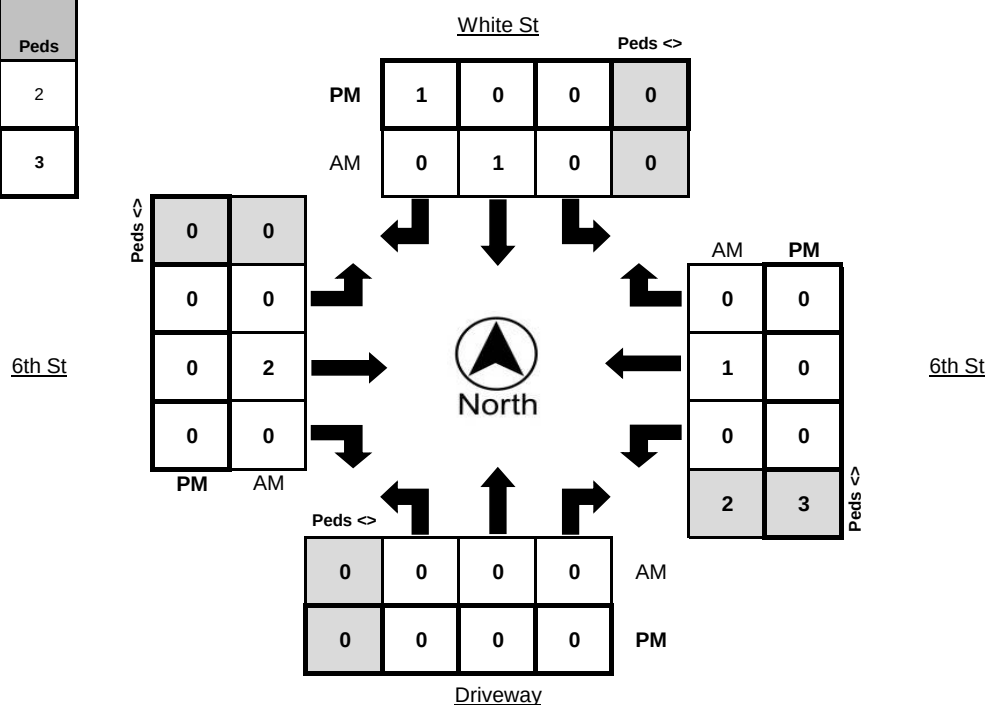
LATITUDE	36.3265
LONGITUDE	-119.6391
WEATHER	Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
TOTAL	0	0	0	0	1	1	0	0	0	2	0	2	0	1	1	0

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0

	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds
PEAK HOUR	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	
7:15 AM - 8:15 AM	0	0	0	0	0	1	0	0	0	2	0	2	0	1	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0

	Bikes	Peds
AM Peak Total	4	2
PM Peak Total	1	3





Metro Traffic Data Inc.
 310 N. Irwin Street - Suite 20
 Hanford, CA 93230
 800-975-6938 Phone/Fax
 www.metrotrafficdata.com

Turning Movement Report

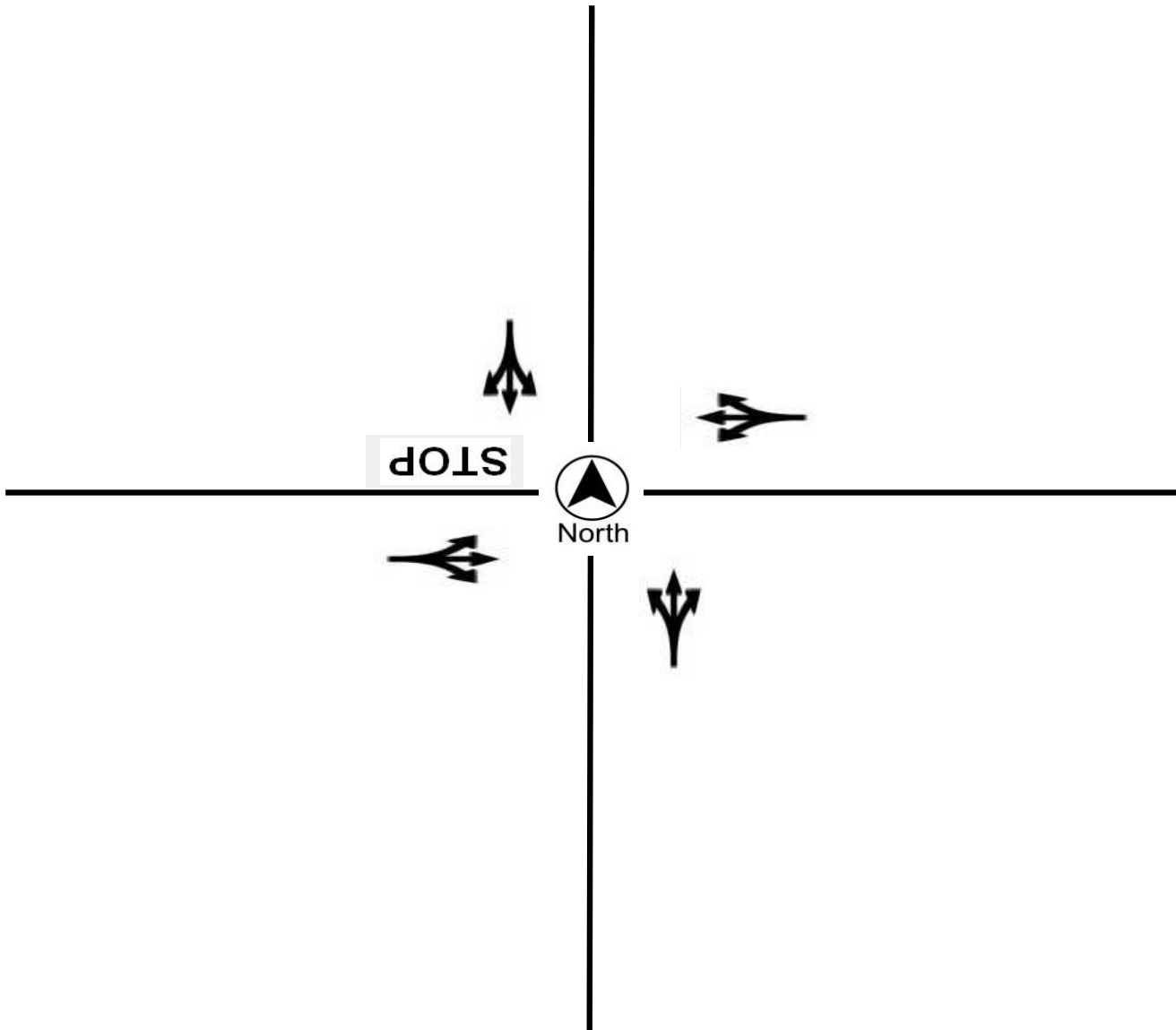
Prepared For:

Peters Engineering Group
 952 Pollasky Avenue
 Clovis, CA 93612

LOCATION 6th St @ White St
COUNTY Kings
COLLECTION DATE Wednesday, October 24, 2018
CYCLE TIME N/A

N/S STREET White St / Driveway
E/W STREET 6th St / 6th St
WEATHER Clear
CONTROL TYPE One-Way stop

COMMENTS



15: Redington St & Seventh St Lanes, Volumes, Timings

Existing-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	205	37	25	242	34	31	132	39	37	198	46
Future Volume (vph)	45	205	37	25	242	34	31	132	39	37	198	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99	0.93		1.00	0.93		0.97			0.97	
Frt			0.850			0.850		0.971			0.975	
Flt Protected		0.991			0.995			0.992			0.993	
Satd. Flow (prot)	0	1846	1583	0	1853	1583	0	3332	0	0	3360	0
Flt Permitted		0.876			0.941			0.877			0.895	
Satd. Flow (perm)	0	1621	1471	0	1746	1471	0	2916	0	0	2999	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			35			35		42			45	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			481			201			205	
Travel Time (s)		11.0			10.9			4.6			4.7	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	50	228	41	27	263	37	34	143	42	41	220	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	41	0	290	37	0	219	0	0	312	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9		22.9	22.9	
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%		48.3%	48.3%	
Maximum Green (s)	26.1	26.1	26.1	26.1	26.1	26.1	24.1	24.1		24.1	24.1	
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.9	4.9		4.9	4.9		4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

15: Redington St & Seventh St

Lanes, Volumes, Timings

Existing-PM

02/20/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None	None	Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	50	50	50	50	50	50	50	50		50	50	
Act Effect Green (s)		12.4	12.4		12.4	12.4		14.9			14.9	
Actuated g/C Ratio		0.39	0.39		0.39	0.39		0.47			0.47	
v/c Ratio		0.44	0.07		0.43	0.06		0.16			0.22	
Control Delay		11.5	4.7		11.1	4.4		7.3			7.7	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		11.5	4.7		11.1	4.4		7.3			7.7	
LOS		B	A		B	A		A			A	
Approach Delay		10.6			10.3			7.3			7.7	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		27	1		28	0		9			14	
Queue Length 95th (ft)		100	14		101	13		31			44	
Internal Link Dist (ft)		402			401			121			125	
Turn Bay Length (ft)			30			30						
Base Capacity (vph)		1325	1209		1427	1209		2273			2338	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.21	0.03		0.20	0.03		0.10			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 31.7

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 9.1

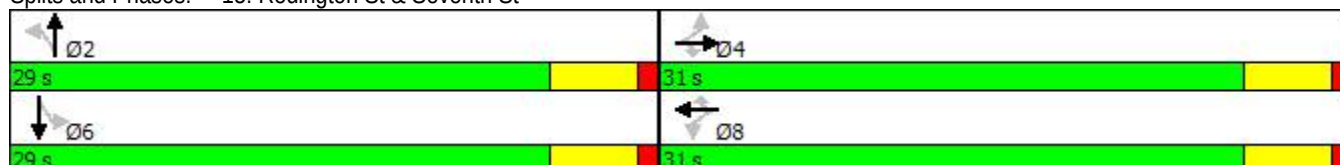
Intersection LOS: A

Intersection Capacity Utilization 74.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Redington St & Seventh St



Synchro 9 Report

16: Irwin St & Seventh St Lanes, Volumes, Timings

Existing-PM

02/20/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	46	185	21	11	233	50	15	29	14	35	48	53
Future Volume (vph)	46	185	21	11	233	50	15	29	14	35	48	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98			0.95			0.93	
Frt		0.989			0.977			0.968			0.947	
Flt Protected		0.991			0.998			0.987			0.987	
Satd. Flow (prot)	0	1807	0	0	1780	0	0	1730	0	0	1661	0
Flt Permitted		0.880			0.982			0.903			0.909	
Satd. Flow (perm)	0	1589	0	0	1747	0	0	1552	0	0	1494	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			23			15			62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		481			482			199			205	
Travel Time (s)		10.9			11.0			4.5			4.7	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Adj. Flow (vph)	52	208	24	12	259	56	16	32	15	42	58	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	284	0	0	327	0	0	63	0	0	164	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9		22.9	22.9		22.9	22.9		22.9	22.9	
Total Split (s)	32.0	32.0		32.0	32.0		28.0	28.0		28.0	28.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	27.1	27.1		27.1	27.1		23.1	23.1		23.1	23.1	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.9			4.9			4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

16: Irwin St & Seventh St Lanes, Volumes, Timings

Existing-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	50	50		50	50		50	50		50	50	
Act Effect Green (s)		11.9			11.9			10.3			10.3	
Actuated g/C Ratio		0.36			0.36			0.31			0.31	
v/c Ratio		0.49			0.51			0.13			0.32	
Control Delay		12.0			11.5			7.8			8.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		12.0			11.5			7.8			8.0	
LOS		B			B			A			A	
Approach Delay		12.0			11.5			7.8			8.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		26			29			5			10	
Queue Length 95th (ft)		99			109			25			41	
Internal Link Dist (ft)		401			402			119			125	
Turn Bay Length (ft)												
Base Capacity (vph)		1330			1464			1183			1151	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.21			0.22			0.05			0.14	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 33.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 10.7

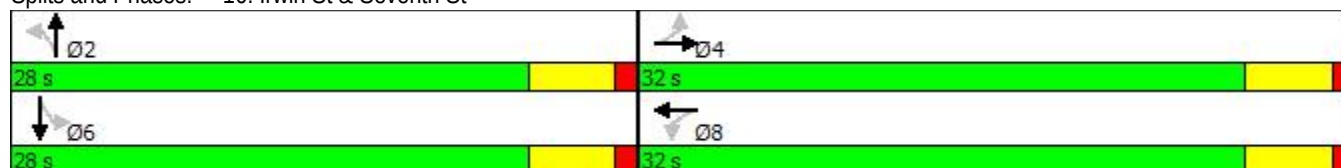
Intersection LOS: B

Intersection Capacity Utilization 54.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 16: Irwin St & Seventh St



Synchro 9 Report

17: Douty St & Seventh St

Lanes, Volumes, Timings

Existing-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	182	29	6	214	28	31	202	28	32	177	53
Future Volume (vph)	32	182	29	6	214	28	31	202	28	32	177	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		30	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99			1.00	0.93		0.98			0.97	
Frt		0.984				0.850		0.984			0.970	
Flt Protected		0.993			0.999			0.994			0.994	
Satd. Flow (prot)	0	1805	0	0	1861	1583	0	3418	0	0	3331	0
Flt Permitted		0.928			0.988			0.886			0.885	
Satd. Flow (perm)	0	1677	0	0	1839	1471	0	3023	0	0	2941	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				35		26			61	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			483			200			211	
Travel Time (s)		11.0			11.0			4.5			4.8	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Adj. Flow (vph)	41	230	37	6	230	30	35	227	31	37	203	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	308	0	0	236	30	0	293	0	0	301	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9		22.9	22.9	22.9	22.9	22.9		22.9	22.9	
Total Split (s)	30.0	30.0		30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.1	25.1		25.1	25.1	25.1	25.1	25.1		25.1	25.1	
Yellow Time (s)	3.9	3.9		3.9	3.9	3.9	3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.9			4.9	4.9		4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

17: Douty St & Seventh St Lanes, Volumes, Timings

Existing-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None		None	None	None	Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	50	50		50	50	50	50	50		50	50	
Act Effect Green (s)		12.0			12.0	12.0		10.9			10.9	
Actuated g/C Ratio		0.36			0.36	0.36		0.32			0.32	
v/c Ratio		0.51			0.36	0.05		0.29			0.30	
Control Delay		12.1			10.4	3.9		8.8			7.9	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		12.1			10.4	3.9		8.8			7.9	
LOS		B			B	A		A			A	
Approach Delay		12.1			9.7			8.8			7.9	
Approach LOS		B			A			A			A	
Queue Length 50th (ft)		29			22	0		14			13	
Queue Length 95th (ft)		88			81	10		43			39	
Internal Link Dist (ft)		402			403			120			131	
Turn Bay Length (ft)						30						
Base Capacity (vph)		1339			1465	1179		2414			2355	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.23			0.16	0.03		0.12			0.13	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 33.6

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 9.6

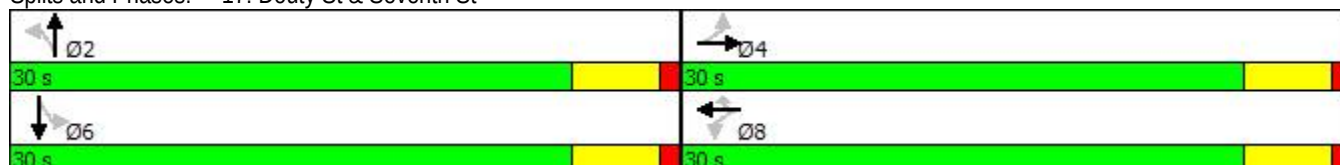
Intersection LOS: A

Intersection Capacity Utilization 73.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Douty St & Seventh St



18: Harris St & Seventh St Lanes, Volumes, Timings

Existing-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	213	8	9	218	29	7	32	8	47	70	34
Future Volume (vph)	21	213	8	9	218	29	7	32	8	47	70	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		1	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.88		1.00	0.88	0.92	0.98			0.96	0.88
Frt			0.850			0.850		0.969				0.850
Flt Protected		0.995			0.998		0.950				0.980	
Satd. Flow (prot)	0	1853	1583	0	1859	1583	1770	1761	0	0	1825	1583
Flt Permitted		0.944			0.977		0.656				0.870	
Satd. Flow (perm)	0	1748	1397	0	1815	1397	1124	1761	0	0	1560	1397
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			35			35		12				46
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			480			195			203	
Travel Time (s)		11.0			10.9			4.4			4.6	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Adj. Flow (vph)	24	239	9	11	256	34	10	46	12	64	95	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	263	9	0	267	34	10	58	0	0	159	46
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9		22.9	22.9	22.9
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	29.0	29.0		29.0	29.0	29.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%		48.3%	48.3%	48.3%
Maximum Green (s)	26.1	26.1	26.1	26.1	26.1	26.1	24.1	24.1		24.1	24.1	24.1
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9		3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.9	4.9			4.9	4.9
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

18: Harris St & Seventh St Lanes, Volumes, Timings

Existing-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None	None	Min	Min		Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	50	50	50	50	50	50	50	50		50	50	50
Act Effect Green (s)		12.0	12.0		12.0	12.0	15.1	15.1			15.1	15.1
Actuated g/C Ratio		0.38	0.38		0.38	0.38	0.47	0.47			0.47	0.47
v/c Ratio		0.40	0.02		0.39	0.06	0.02	0.07			0.21	0.07
Control Delay		10.9	1.0		10.7	4.2	8.6	7.4			9.8	3.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0			0.0	0.0
Total Delay		10.9	1.0		10.7	4.2	8.6	7.4			9.8	3.9
LOS		B	A		B	A	A	A			A	A
Approach Delay		10.6			10.0			7.6			8.5	
Approach LOS		B			A			A			A	
Queue Length 50th (ft)		26	0		26	0	1	4			16	0
Queue Length 95th (ft)		90	2		85	11	6	17			46	10
Internal Link Dist (ft)		403			400			115			123	
Turn Bay Length (ft)			30			30						
Base Capacity (vph)		1432	1151		1487	1151	877	1377			1217	1100
Starvation Cap Reductn		0	0		0	0	0	0			0	0
Spillback Cap Reductn		0	0		0	0	0	0			0	0
Storage Cap Reductn		0	0		0	0	0	0			0	0
Reduced v/c Ratio		0.18	0.01		0.18	0.03	0.01	0.04			0.13	0.04

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 31.9

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 9.6

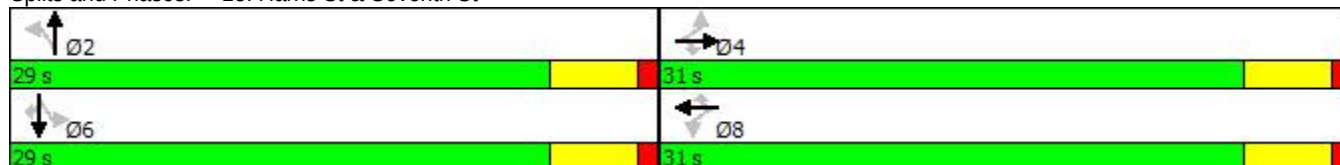
Intersection LOS: A

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 18: Harris St & Seventh St



Synchro 9 Report

22: Redington St & Sixth St
HCM 2010 AWSC

Existing-PM
02/20/2019

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	148	37	71	107	63	15	102	8	78	205	37
Future Vol, veh/h	21	148	37	71	107	63	15	102	8	78	205	37
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	178	45	84	126	74	19	131	10	89	233	42
Number of Lanes	0	1	1	0	1	0	0	1	1	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	12.8	16.3	12.4	12.8
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	13%	0%	12%	0%	29%	43%	0%
Vol Thru, %	87%	0%	88%	0%	44%	57%	73%
Vol Right, %	0%	100%	0%	100%	26%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	117	8	169	37	241	181	140
LT Vol	15	0	21	0	71	78	0
Through Vol	102	0	148	0	107	103	103
RT Vol	0	8	0	37	63	0	37
Lane Flow Rate	150	10	204	45	284	205	159
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.29	0.018	0.38	0.074	0.511	0.385	0.28
Departure Headway (Hd)	6.959	6.177	6.72	5.944	6.491	6.759	6.35
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	574	531	597	550	529	561
Service Time	4.759	3.976	4.511	3.735	4.579	4.545	4.135
HCM Lane V/C Ratio	0.293	0.017	0.384	0.075	0.516	0.388	0.283
HCM Control Delay	12.6	9.1	13.6	9.2	16.3	13.8	11.6
HCM Lane LOS	B	A	B	A	C	B	B
HCM 95th-tile Q	1.2	0.1	1.8	0.2	2.9	1.8	1.1

Synchro 9 Report

23: Sixth St & Irwin St
HCM 2010 TWSC

Existing-PM
02/20/2019

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	233	145	23	32	58
Future Vol, veh/h	28	233	145	23	32	58
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	265	165	26	36	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	251	0	-	0	627	298
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1314	-	-	-	447	741
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	685	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1239	-	-	-	386	659
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	646	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		13.4		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1239	-	-	-	527	
HCM Lane V/C Ratio	0.026	-	-	-	0.19	
HCM Control Delay (s)	8	0	-	-	13.4	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

24: Douty St & Sixth St
HCM 2010 AWSC

Existing-PM
02/20/2019

Intersection	
Intersection Delay, s/veh	20.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	149	83	129	103	21	51	237	124	14	202	23
Future Vol, veh/h	16	149	83	129	103	21	51	237	124	14	202	23
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	213	119	150	120	24	53	247	129	16	238	27
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	28.8	21.4	16.8	14.3
HCM LOS	D	C	C	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	6%	56%	0%	12%	0%
Vol Thru, %	70%	49%	60%	44%	0%	88%	81%
Vol Right, %	0%	51%	33%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	243	248	232	21	115	124
LT Vol	51	0	16	129	0	14	0
Through Vol	119	119	149	103	0	101	101
RT Vol	0	124	83	0	21	0	23
Lane Flow Rate	177	253	354	270	24	135	146
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.385	0.514	0.736	0.603	0.048	0.303	0.318
Departure Headway (Hd)	7.844	7.319	7.476	8.049	7.042	8.053	7.856
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	490	482	445	505	444	455
Service Time	5.633	5.108	5.561	5.839	4.832	5.851	5.654
HCM Lane V/C Ratio	0.387	0.516	0.734	0.607	0.048	0.304	0.321
HCM Control Delay	15.5	17.7	28.8	22.4	10.2	14.4	14.3
HCM Lane LOS	C	C	D	C	B	B	B
HCM 95th-tile Q	1.8	2.9	6	3.9	0.2	1.3	1.4

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

Existing-PM
02/20/2019

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	226	174	13	15	80
Future Vol, veh/h	50	226	174	13	15	80
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	314	238	18	21	114
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	316	0	-	0	819	367
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	512	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	345	678
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1173	-	-	-	285	603
Mov Cap-2 Maneuver	-	-	-	-	285	-
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	568	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		14.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1173	-	-	-	513	
HCM Lane V/C Ratio	0.059	-	-	-	0.265	
HCM Control Delay (s)	8.3	0	-	-	14.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.2	-	-	-	1.1	

Synchro 9 Report

15: Redington St & Seventh St Lanes, Volumes, Timings

2040-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	255	46	31	301	42	39	164	55	46	246	57
Future Volume (vph)	56	255	46	31	301	42	39	164	55	46	246	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		1	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99	0.93		1.00	0.93		0.97			0.97	
Frt			0.850			0.850		0.968			0.976	
Flt Protected		0.991			0.995			0.993			0.993	
Satd. Flow (prot)	0	1846	1583	0	1853	1583	0	3316	0	0	3364	0
Flt Permitted		0.874			0.940			0.855			0.876	
Satd. Flow (perm)	0	1618	1471	0	1745	1471	0	2830	0	0	2941	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			35			35		60			45	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			481			201			205	
Travel Time (s)		11.0			10.9			4.6			4.7	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	62	283	51	34	327	46	42	178	60	51	273	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	345	51	0	361	46	0	280	0	0	387	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9		22.9	22.9	
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	29.0	29.0		29.0	29.0	
Total Split (%)	51.7%	51.7%	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%		48.3%	48.3%	
Maximum Green (s)	26.1	26.1	26.1	26.1	26.1	26.1	24.1	24.1		24.1	24.1	
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.9	4.9		4.9	4.9		4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

15: Redington St & Seventh St

Lanes, Volumes, Timings

2040-PM
02/20/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None	None	Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	50	50	50	50	50	50	50	50		50	50	
Act Effect Green (s)		13.4	13.4		13.4	13.4		11.5			11.5	
Actuated g/C Ratio		0.38	0.38		0.38	0.38		0.32			0.32	
v/c Ratio		0.57	0.09		0.55	0.08		0.29			0.39	
Control Delay		13.4	5.0		12.8	4.7		8.4			10.0	
Queue Delay		0.0	0.0		0.0	0.0		0.0			0.0	
Total Delay		13.4	5.0		12.8	4.7		8.4			10.0	
LOS		B	A		B	A		A			A	
Approach Delay		12.3			11.9			8.4			10.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		39	1		41	1		13			21	
Queue Length 95th (ft)		125	16		126	15		44			64	
Internal Link Dist (ft)		402			401			121			125	
Turn Bay Length (ft)			30			30						
Base Capacity (vph)		1262	1155		1362	1155		2098			2176	
Starvation Cap Reductn		0	0		0	0		0			0	
Spillback Cap Reductn		0	0		0	0		0			0	
Storage Cap Reductn		0	0		0	0		0			0	
Reduced v/c Ratio		0.27	0.04		0.27	0.04		0.13			0.18	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 35.5

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 10.8

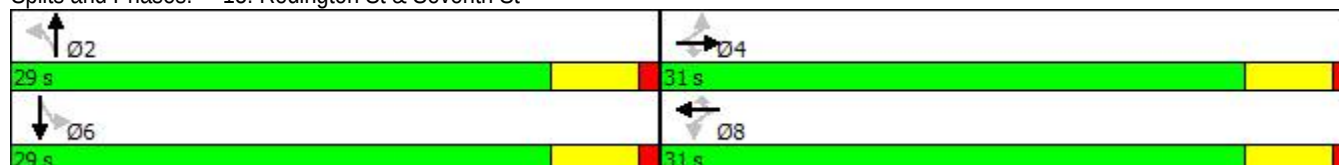
Intersection LOS: B

Intersection Capacity Utilization 78.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Redington St & Seventh St



16: Irwin St & Seventh St Lanes, Volumes, Timings

2040-PM

02/20/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (vph)	57	230	26	14	290	62	19	36	20	44	60	66
Future Volume (vph)	57	230	26	14	290	62	19	36	20	44	60	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98			0.95			0.93	
Frt		0.989			0.977			0.964			0.947	
Flt Protected		0.991			0.998			0.988			0.987	
Satd. Flow (prot)	0	1808	0	0	1780	0	0	1719	0	0	1661	0
Flt Permitted		0.880			0.978			0.891			0.899	
Satd. Flow (perm)	0	1592	0	0	1741	0	0	1523	0	0	1478	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			22			22			62	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		481			482			199			205	
Travel Time (s)		10.9			11.0			4.5			4.7	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Adj. Flow (vph)	64	258	29	16	322	69	21	40	22	53	72	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	351	0	0	407	0	0	83	0	0	205	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9		22.9	22.9		22.9	22.9		22.9	22.9	
Total Split (s)	32.0	32.0		32.0	32.0		28.0	28.0		28.0	28.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	27.1	27.1		27.1	27.1		23.1	23.1		23.1	23.1	
Yellow Time (s)	3.9	3.9		3.9	3.9		3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.9			4.9			4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

16: Irwin St & Seventh St Lanes, Volumes, Timings

2040-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Pedestrian Calls (#/hr)	50	50		50	50		50	50		50	50	
Act Effect Green (s)		13.5			13.5			10.8			10.8	
Actuated g/C Ratio		0.39			0.39			0.31			0.31	
v/c Ratio		0.57			0.60			0.17			0.41	
Control Delay		13.0			12.8			8.6			10.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		13.0			12.8			8.6			10.2	
LOS		B			B			A			B	
Approach Delay		13.0			12.8			8.6			10.2	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)		37			42			7			17	
Queue Length 95th (ft)		123			139			34			60	
Internal Link Dist (ft)		401			402			119			125	
Turn Bay Length (ft)												
Base Capacity (vph)		1287			1409			1104			1082	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.27			0.29			0.08			0.19	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 35

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 12.0

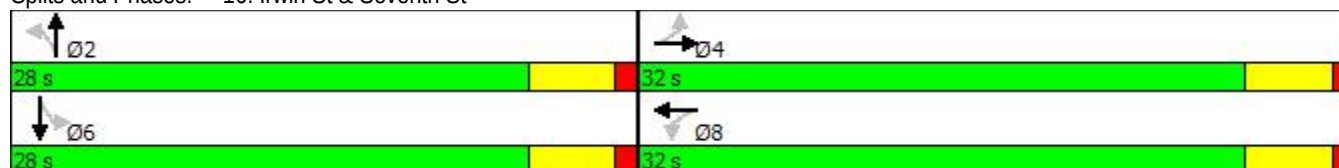
Intersection LOS: B

Intersection Capacity Utilization 62.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 16: Irwin St & Seventh St



Synchro 9 Report

17: Douty St & Seventh St

Lanes, Volumes, Timings

2040-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	227	36	7	266	35	39	251	40	40	220	66
Future Volume (vph)	40	227	36	7	266	35	39	251	40	40	220	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		30	0		0	0		0
Storage Lanes	0		0	0		1	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99			1.00	0.93		0.98			0.97	
Frt		0.984				0.850		0.982			0.970	
Flt Protected		0.993			0.999			0.994			0.994	
Satd. Flow (prot)	0	1805	0	0	1861	1583	0	3405	0	0	3331	0
Flt Permitted		0.919			0.986			0.872			0.869	
Satd. Flow (perm)	0	1662	0	0	1835	1471	0	2966	0	0	2891	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14				35		31			65	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		482			483			200			211	
Travel Time (s)		11.0			11.0			4.5			4.8	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Adj. Flow (vph)	51	287	46	8	286	38	44	282	45	46	253	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	384	0	0	294	38	0	371	0	0	375	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Detector Phase	4	4		8	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	22.9	22.9		22.9	22.9	22.9	22.9	22.9		22.9	22.9	
Total Split (s)	30.0	30.0		30.0	30.0	30.0	30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.1	25.1		25.1	25.1	25.1	25.1	25.1		25.1	25.1	
Yellow Time (s)	3.9	3.9		3.9	3.9	3.9	3.9	3.9		3.9	3.9	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0	0.0		0.0			0.0	
Total Lost Time (s)		4.9			4.9	4.9		4.9			4.9	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

17: Douty St & Seventh St Lanes, Volumes, Timings

2040-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None		None	None	None	Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	50	50		50	50	50	50	50		50	50	
Act Effect Green (s)		13.6			13.6	13.6		11.5			11.5	
Actuated g/C Ratio		0.38			0.38	0.38		0.32			0.32	
v/c Ratio		0.60			0.42	0.07		0.38			0.38	
Control Delay		13.5			10.8	4.2		10.2			9.4	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		13.5			10.8	4.2		10.2			9.4	
LOS		B			B	A		B			A	
Approach Delay		13.5			10.0			10.2			9.4	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)		43			32	0		22			20	
Queue Length 95th (ft)		111			99	12		62			56	
Internal Link Dist (ft)		402			403			120			131	
Turn Bay Length (ft)						30						
Base Capacity (vph)		1255			1382	1116		2241			2193	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.31			0.21	0.03		0.17			0.17	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 35.7

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 10.8

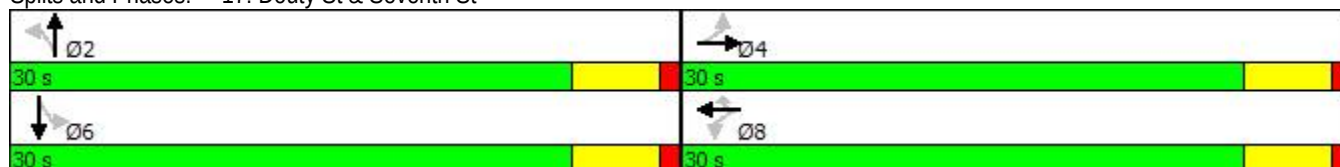
Intersection LOS: B

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Douty St & Seventh St



18: Harris St & Seventh St Lanes, Volumes, Timings

2040-PM

02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	265	10	11	271	36	9	40	11	59	87	42
Future Volume (vph)	26	265	10	11	271	36	9	40	11	59	87	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		30	0		0	0		0
Storage Lanes	0		1	0		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99	0.88		1.00	0.88	0.92	0.97			0.96	0.88
Frt			0.850			0.850		0.968				0.850
Flt Protected		0.996			0.998		0.950				0.980	
Satd. Flow (prot)	0	1855	1583	0	1859	1583	1770	1757	0	0	1825	1583
Flt Permitted		0.945			0.979		0.633				0.845	
Satd. Flow (perm)	0	1751	1397	0	1819	1397	1090	1757	0	0	1517	1397
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			35			35		16				57
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		483			480			195			203	
Travel Time (s)		11.0			10.9			4.4			4.6	
Confl. Peds. (#/hr)	60		60	60		60	60		60	60		60
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Adj. Flow (vph)	29	298	11	13	319	42	13	58	16	80	118	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	327	11	0	332	42	13	74	0	0	198	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Detector Phase	4	4	4	8	8	8	2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9		22.9	22.9	22.9
Total Split (s)	31.0	31.0	31.0	31.0	31.0	31.0	29.0	29.0		29.0	29.0	29.0
Total Split (%)	51.7%	51.7%	51.7%	51.7%	51.7%	51.7%	48.3%	48.3%		48.3%	48.3%	48.3%
Maximum Green (s)	26.1	26.1	26.1	26.1	26.1	26.1	24.1	24.1		24.1	24.1	24.1
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9		3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.9	4.9			4.9	4.9
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

18: Harris St & Seventh St Lanes, Volumes, Timings

2040-PM
02/20/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Recall Mode	None	None	None	None	None	None	Min	Min		Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	50	50	50	50	50	50	50	50		50	50	50
Act Effect Green (s)		12.4	12.4		12.4	12.4	11.4	11.4			11.4	11.4
Actuated g/C Ratio		0.36	0.36		0.36	0.36	0.33	0.33			0.33	0.33
v/c Ratio		0.52	0.02		0.51	0.08	0.04	0.13			0.40	0.11
Control Delay		12.6	1.4		12.3	4.8	8.9	7.8			12.0	4.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0			0.0	0.0
Total Delay		12.6	1.4		12.3	4.8	8.9	7.8			12.0	4.0
LOS		B	A		B	A	A	A			B	A
Approach Delay		12.3			11.5			8.0			10.2	
Approach LOS		B			B			A			B	
Queue Length 50th (ft)		37	0		37	1	1	6			23	0
Queue Length 95th (ft)		113	3		107	13	7	20			58	11
Internal Link Dist (ft)		403			400			115			123	
Turn Bay Length (ft)			30			30						
Base Capacity (vph)		1394	1119		1448	1119	818	1323			1138	1063
Starvation Cap Reductn		0	0		0	0	0	0			0	0
Spillback Cap Reductn		0	0		0	0	0	0			0	0
Storage Cap Reductn		0	0		0	0	0	0			0	0
Reduced v/c Ratio		0.23	0.01		0.23	0.04	0.02	0.06			0.17	0.05

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 34.4

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 11.1

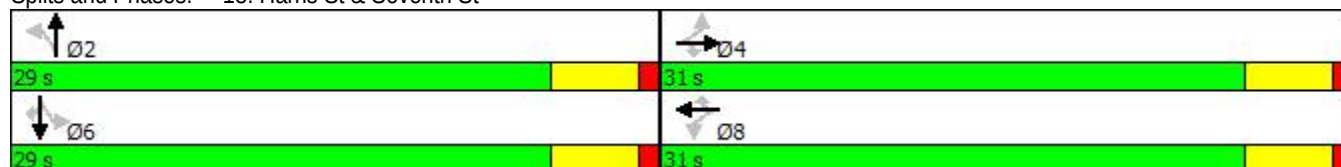
Intersection LOS: B

Intersection Capacity Utilization 57.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 18: Harris St & Seventh St



22: Redington St & Sixth St
HCM 2010 AWSC

2040-PM
02/20/2019

Intersection	
Intersection Delay, s/veh	19.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↔			↗	↘		↔	
Traffic Vol, veh/h	26	184	46	88	133	78	19	127	11	97	255	46
Future Vol, veh/h	26	184	46	88	133	78	19	127	11	97	255	46
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	222	55	104	156	92	24	163	14	110	290	52
Number of Lanes	0	1	1	0	1	0	0	1	1	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	17.6	27.4	16.1	17.3
HCM LOS	C	D	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	13%	0%	12%	0%	29%	43%	0%
Vol Thru, %	87%	0%	88%	0%	44%	57%	73%
Vol Right, %	0%	100%	0%	100%	26%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	11	210	46	299	225	174
LT Vol	19	0	26	0	88	97	0
Through Vol	127	0	184	0	133	128	128
RT Vol	0	11	0	46	78	0	46
Lane Flow Rate	187	14	253	55	352	255	197
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.417	0.028	0.539	0.106	0.721	0.544	0.398
Departure Headway (Hd)	8.022	7.23	7.67	6.887	7.379	7.673	7.259
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	492	468	518	489	469	495
Service Time	5.806	5.014	5.446	4.662	5.451	5.447	5.033
HCM Lane V/C Ratio	0.418	0.028	0.541	0.106	0.72	0.544	0.398
HCM Control Delay	16.5	10.2	19.1	10.5	27.4	19.3	14.8
HCM Lane LOS	C	B	C	B	D	C	B
HCM 95th-tile Q	2	0.1	3.1	0.4	5.8	3.2	1.9

23: Sixth St & Irwin St
HCM 2010 TWSC

2040-PM
02/20/2019

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	290	180	29	40	72
Future Vol, veh/h	35	290	180	29	40	72
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	330	205	33	44	80
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	298	0	-	0	752	342
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	378	701
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	629	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1191	-	-	-	322	623
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	593	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		15.5		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1191	-	-	-	467	
HCM Lane V/C Ratio	0.033	-	-	-	0.266	
HCM Control Delay (s)	8.1	0	-	-	15.5	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	

24: Douty St & Sixth St
HCM 2010 AWSC

2040-PM
02/20/2019

Intersection	
Intersection Delay, s/veh	49.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	185	103	161	128	26	63	295	176	17	251	29
Future Vol, veh/h	20	185	103	161	128	26	63	295	176	17	251	29
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	264	147	187	149	30	66	307	183	20	295	34
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	97.8	45.4	31.6	19.9
HCM LOS	F	E	D	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	6%	56%	0%	12%	0%
Vol Thru, %	70%	46%	60%	44%	0%	88%	81%
Vol Right, %	0%	54%	33%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	211	324	308	289	26	143	155
LT Vol	63	0	20	161	0	17	0
Through Vol	148	148	185	128	0	126	126
RT Vol	0	176	103	0	26	0	29
Lane Flow Rate	219	337	440	336	30	168	182
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.545	0.788	1.079	0.855	0.069	0.432	0.459
Departure Headway (Hd)	9.384	8.828	8.826	9.543	8.521	9.748	9.547
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	386	414	409	383	423	372	380
Service Time	7.084	6.528	6.898	7.243	6.221	7.448	7.247
HCM Lane V/C Ratio	0.567	0.814	1.076	0.877	0.071	0.452	0.479
HCM Control Delay	22.8	37.4	97.8	48.4	11.9	19.7	20.1
HCM Lane LOS	C	E	F	E	B	C	C
HCM 95th-tile Q	3.1	6.8	14.9	8.1	0.2	2.1	2.3

25: Sixth St & Harris St
HCM 2010 TWSC

2040-PM
02/20/2019

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	62	281	217	16	19	100
Future Vol, veh/h	62	281	217	16	19	100
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	390	297	22	27	143
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	379	0	-	0	990	428
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1179	-	-	-	273	627
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1112	-	-	-	219	557
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	505	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		17.9		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1112	-	-	-	447	
HCM Lane V/C Ratio	0.077	-	-	-	0.38	
HCM Control Delay (s)	8.5	0	-	-	17.9	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.3	-	-	-	1.8	

Synchro 9 Report

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection												
Intersection Delay, s/veh	15											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↗	↘		↗↘			↗↘	
Traffic Vol, veh/h	45	205	37	25	242	34	31	132	39	37	198	46
Future Vol, veh/h	45	205	37	25	242	34	31	132	39	37	198	46
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	228	41	27	263	37	34	143	42	41	220	51
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	16.7	17.3	12.1	12.9
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	18%	0%	9%	0%	27%	0%
Vol Thru, %	68%	63%	82%	0%	91%	0%	73%	68%
Vol Right, %	0%	37%	0%	100%	0%	100%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	105	250	37	267	34	136	145
LT Vol	31	0	45	0	25	0	37	0
Through Vol	66	66	205	0	242	0	99	99
RT Vol	0	39	0	37	0	34	0	46
Lane Flow Rate	105	114	278	41	290	37	151	161
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.22	0.224	0.542	0.071	0.562	0.064	0.306	0.309
Departure Headway (Hd)	7.5	7.069	7.025	6.218	6.966	6.203	7.281	6.915
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	479	508	514	576	519	577	494	520
Service Time	5.25	4.819	4.769	3.961	4.708	3.944	5.028	4.661
HCM Lane V/C Ratio	0.219	0.224	0.541	0.071	0.559	0.064	0.306	0.31
HCM Control Delay	12.4	11.9	17.8	9.4	18.3	9.4	13.2	12.7
HCM Lane LOS	B	B	C	A	C	A	B	B
HCM 95th-tile Q	0.8	0.9	3.2	0.2	3.4	0.2	1.3	1.3

Synchro 9 Report

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 11.1

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	185	21	11	233	50	15	29	14	35	48	53
Future Vol, veh/h	46	185	21	11	233	50	15	29	14	35	48	53
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	208	24	12	259	56	16	32	15	42	58	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.3	11.7	9.3	10.2
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	18%	4%	26%
Vol Thru, %	50%	73%	79%	35%
Vol Right, %	24%	8%	17%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	252	294	136
LT Vol	15	46	11	35
Through Vol	29	185	233	48
RT Vol	14	21	50	53
Lane Flow Rate	64	283	327	164
Geometry Grp	1	1	1	1
Degree of Util (X)	0.1	0.395	0.443	0.245
Departure Headway (Hd)	5.656	5.017	4.887	5.373
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	633	719	742	669
Service Time	3.696	3.026	2.896	3.408
HCM Lane V/C Ratio	0.101	0.394	0.441	0.245
HCM Control Delay	9.3	11.3	11.7	10.2
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.3	1.9	2.3	1

Synchro 9 Report

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 15.3

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	182	29	6	214	28	31	202	28	32	177	53
Future Vol, veh/h	32	182	29	6	214	28	31	202	28	32	177	53
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	230	37	6	230	30	35	227	31	37	203	61
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	19.9	15.3	12.9	12.8
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	23%	0%	13%	3%	0%	27%	0%
Vol Thru, %	77%	78%	75%	97%	0%	73%	63%
Vol Right, %	0%	22%	12%	0%	100%	0%	37%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	132	129	243	220	28	121	142
LT Vol	31	0	32	6	0	32	0
Through Vol	101	101	182	214	0	89	89
RT Vol	0	28	29	0	28	0	53
Lane Flow Rate	148	145	308	237	30	139	163
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.301	0.283	0.597	0.468	0.053	0.281	0.312
Departure Headway (Hd)	7.3	7.023	6.982	7.124	6.394	7.304	6.899
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	492	512	517	506	559	492	520
Service Time	5.05	4.773	5.028	4.874	4.144	5.056	4.65
HCM Lane V/C Ratio	0.301	0.283	0.596	0.468	0.054	0.283	0.313
HCM Control Delay	13.2	12.5	19.9	16	9.5	12.9	12.8
HCM Lane LOS	B	B	C	C	A	B	B
HCM 95th-tile Q	1.3	1.2	3.9	2.5	0.2	1.1	1.3

Synchro 9 Report

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh11.9

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱	↰	↱			↰	↱
Traffic Vol, veh/h	21	213	8	9	218	29	7	32	8	47	70	34
Future Vol, veh/h	21	213	8	9	218	29	7	32	8	47	70	34
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	239	9	11	256	34	10	46	12	64	95	46
Number of Lanes	0	1	1	0	1	1	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.6	12.3	9.8	11
HCM LOS	B	B	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	9%	0%	4%	0%	40%	0%
Vol Thru, %	0%	80%	91%	0%	96%	0%	60%	0%
Vol Right, %	0%	20%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	40	234	8	227	29	117	34
LT Vol	7	0	21	0	9	0	47	0
Through Vol	0	32	213	0	218	0	70	0
RT Vol	0	8	0	8	0	29	0	34
Lane Flow Rate	10	58	263	9	267	34	158	46
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.02	0.103	0.425	0.013	0.428	0.048	0.283	0.071
Departure Headway (Hd)	7.019	6.368	5.826	5.073	5.769	5.042	6.451	5.538
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	510	562	618	705	625	710	557	646
Service Time	4.764	4.113	3.559	2.805	3.501	2.774	4.189	3.275
HCM Lane V/C Ratio	0.02	0.103	0.426	0.013	0.427	0.048	0.284	0.071
HCM Control Delay	9.9	9.8	12.8	7.9	12.8	8	11.7	8.7
HCM Lane LOS	A	A	B	A	B	A	B	A
HCM 95th-tile Q	0.1	0.3	2.1	0	2.1	0.2	1.2	0.2

Synchro 9 Report

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 13.7

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰			↰	↱		↰↱	
Traffic Vol, veh/h	21	148	37	71	107	63	15	102	8	78	205	37
Future Vol, veh/h	21	148	37	71	107	63	15	102	8	78	205	37
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	178	45	84	126	74	19	131	10	89	233	42
Number of Lanes	0	1	1	0	1	0	0	1	1	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	12.8	16.3	12.4	12.8
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	13%	0%	12%	0%	29%	43%	0%
Vol Thru, %	87%	0%	88%	0%	44%	57%	73%
Vol Right, %	0%	100%	0%	100%	26%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	117	8	169	37	241	181	140
LT Vol	15	0	21	0	71	78	0
Through Vol	102	0	148	0	107	103	103
RT Vol	0	8	0	37	63	0	37
Lane Flow Rate	150	10	204	45	284	205	159
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.29	0.018	0.38	0.074	0.511	0.385	0.28
Departure Headway (Hd)	6.959	6.177	6.72	5.944	6.491	6.759	6.35
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	574	531	597	550	529	561
Service Time	4.759	3.976	4.511	3.735	4.579	4.545	4.135
HCM Lane V/C Ratio	0.293	0.017	0.384	0.075	0.516	0.388	0.283
HCM Control Delay	12.6	9.1	13.6	9.2	16.3	13.8	11.6
HCM Lane LOS	B	A	B	A	C	B	B
HCM 95th-tile Q	1.2	0.1	1.8	0.2	2.9	1.8	1.1

Synchro 9 Report

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	2.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	233	145	23	32	58
Future Vol, veh/h	28	233	145	23	32	58
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	265	165	26	36	64
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	251	0	-	0	627	298
Stage 1	-	-	-	-	238	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1314	-	-	-	447	741
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	685	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1239	-	-	-	386	659
Mov Cap-2 Maneuver	-	-	-	-	386	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	646	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		13.4		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1239	-	-	-	527	
HCM Lane V/C Ratio	0.026	-	-	-	0.19	
HCM Control Delay (s)	8	0	-	-	13.4	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	

Synchro 9 Report

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC Existing-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	20.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	149	83	129	103	21	51	237	124	14	202	23
Future Vol, veh/h	16	149	83	129	103	21	51	237	124	14	202	23
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	213	119	150	120	24	53	247	129	16	238	27
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	2	1		2		2						
Conflicting Approach Left	SB	NB		EB		WB						
Conflicting Lanes Left	2	2		1		2						
Conflicting Approach Right	NB	SB		WB		EB						
Conflicting Lanes Right	2	2		2		1						
HCM Control Delay	28.8	21.4		16.8		14.3						
HCM LOS	D	C		C		B						

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	6%	56%	0%	12%	0%
Vol Thru, %	70%	49%	60%	44%	0%	88%	81%
Vol Right, %	0%	51%	33%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	170	243	248	232	21	115	124
LT Vol	51	0	16	129	0	14	0
Through Vol	119	119	149	103	0	101	101
RT Vol	0	124	83	0	21	0	23
Lane Flow Rate	177	253	354	270	24	135	146
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.385	0.514	0.736	0.603	0.048	0.303	0.318
Departure Headway (Hd)	7.844	7.319	7.476	8.049	7.042	8.053	7.856
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	490	482	445	505	444	455
Service Time	5.633	5.108	5.561	5.839	4.832	5.851	5.654
HCM Lane V/C Ratio	0.387	0.516	0.734	0.607	0.048	0.304	0.321
HCM Control Delay	15.5	17.7	28.8	22.4	10.2	14.4	14.3
HCM Lane LOS	C	C	D	C	B	B	B
HCM 95th-tile Q	1.8	2.9	6	3.9	0.2	1.3	1.4

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	226	174	13	15	80
Future Vol, veh/h	50	226	174	13	15	80
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	314	238	18	21	114
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	316	0	-	0	819	367
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	512	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1244	-	-	-	345	678
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1173	-	-	-	285	603
Mov Cap-2 Maneuver	-	-	-	-	285	-
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	568	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		14.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1173	-	-	-	513	
HCM Lane V/C Ratio	0.059	-	-	-	0.265	
HCM Control Delay (s)	8.3	0	-	-	14.5	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.2	-	-	-	1.1	

Synchro 9 Report

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection												
Intersection Delay, s/veh	25.2											
Intersection LOS	D											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↗	↘		↗	↘		↗↘			↗↘	
Traffic Vol, veh/h	56	255	46	31	301	42	39	164	55	46	246	57
Future Vol, veh/h	56	255	46	31	301	42	39	164	55	46	246	57
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	283	51	34	327	46	42	178	60	51	273	63
Number of Lanes	0	1	1	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	30.9	33.9	15.4	17.4
HCM LOS	D	D	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	18%	0%	9%	0%	27%	0%
Vol Thru, %	68%	60%	82%	0%	91%	0%	73%	68%
Vol Right, %	0%	40%	0%	100%	0%	100%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	137	311	46	332	42	169	180
LT Vol	39	0	56	0	31	0	46	0
Through Vol	82	82	255	0	301	0	123	123
RT Vol	0	55	0	46	0	42	0	57
Lane Flow Rate	132	149	346	51	361	46	188	200
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.318	0.342	0.777	0.103	0.808	0.092	0.439	0.447
Departure Headway (Hd)	8.716	8.256	8.09	7.274	8.059	7.246	8.423	8.052
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	413	435	449	493	451	495	428	448
Service Time	6.472	6.012	5.838	5.021	5.759	4.988	6.176	5.805
HCM Lane V/C Ratio	0.32	0.343	0.771	0.103	0.8	0.093	0.439	0.446
HCM Control Delay	15.5	15.3	33.9	10.9	36.8	10.7	17.6	17.2
HCM Lane LOS	C	C	D	B	E	B	C	C
HCM 95th-tile Q	1.3	1.5	6.8	0.3	7.4	0.3	2.2	2.3

Synchro 9 Report

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh14.2

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	57	230	26	14	290	62	19	36	20	44	60	66
Future Vol, veh/h	57	230	26	14	290	62	19	36	20	44	60	66
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	64	258	29	16	322	69	21	40	22	53	72	80
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.5	15.8	10.4	12
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	18%	4%	26%
Vol Thru, %	48%	73%	79%	35%
Vol Right, %	27%	8%	17%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	75	313	366	170
LT Vol	19	57	14	44
Through Vol	36	230	290	60
RT Vol	20	26	62	66
Lane Flow Rate	82	352	407	205
Geometry Grp	1	1	1	1
Degree of Util (X)	0.144	0.529	0.595	0.336
Departure Headway (Hd)	6.271	5.417	5.266	5.902
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	568	661	683	606
Service Time	4.355	3.476	3.322	3.97
HCM Lane V/C Ratio	0.144	0.533	0.596	0.338
HCM Control Delay	10.4	14.5	15.8	12
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	0.5	3.1	4	1.5

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 26.2

Intersection LOS D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	227	36	7	266	35	39	251	40	40	220	66
Future Vol, veh/h	40	227	36	7	266	35	39	251	40	40	220	66
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	287	46	8	286	38	44	282	45	46	253	76
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	44.3	25	17.4	17.4
HCM LOS	E	C	C	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	24%	0%	13%	3%	0%	27%	0%
Vol Thru, %	76%	76%	75%	97%	0%	73%	62%
Vol Right, %	0%	24%	12%	0%	100%	0%	38%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	166	303	273	35	150	176
LT Vol	39	0	40	7	0	40	0
Through Vol	126	126	227	266	0	110	110
RT Vol	0	40	36	0	35	0	66
Lane Flow Rate	185	186	384	294	38	172	202
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.438	0.425	0.862	0.676	0.079	0.409	0.457
Departure Headway (Hd)	8.531	8.231	8.091	8.289	7.551	8.541	8.129
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	421	437	449	434	474	421	443
Service Time	6.287	5.988	6.145	6.043	5.305	6.299	5.887
HCM Lane V/C Ratio	0.439	0.426	0.855	0.677	0.08	0.409	0.456
HCM Control Delay	17.8	17	44.3	26.8	11	17.1	17.6
HCM Lane LOS	C	C	E	D	B	C	C
HCM 95th-tile Q	2.2	2.1	8.7	4.9	0.3	2	2.3

Synchro 9 Report

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh15.2

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗	↖	↗			↖	↗
Traffic Vol, veh/h	26	265	10	11	271	36	9	40	11	59	87	42
Future Vol, veh/h	26	265	10	11	271	36	9	40	11	59	87	42
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	298	11	13	319	42	13	58	16	80	118	57
Number of Lanes	0	1	1	0	1	1	1	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	16.9	16.1	11	13.1
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	9%	0%	4%	0%	40%	0%
Vol Thru, %	0%	78%	91%	0%	96%	0%	60%	0%
Vol Right, %	0%	22%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	51	291	10	282	36	146	42
LT Vol	9	0	26	0	11	0	59	0
Through Vol	0	40	265	0	271	0	87	0
RT Vol	0	11	0	10	0	36	0	42
Lane Flow Rate	13	74	327	11	332	42	197	57
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.028	0.144	0.571	0.017	0.573	0.065	0.383	0.096
Departure Headway (Hd)	7.784	7.017	6.282	5.526	6.218	5.488	6.985	6.066
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	463	507	572	643	577	648	513	587
Service Time	5.484	4.817	4.054	3.297	3.987	3.256	4.763	3.844
HCM Lane V/C Ratio	0.028	0.146	0.572	0.017	0.575	0.065	0.384	0.097
HCM Control Delay	10.7	11	17.2	8.4	17.1	8.6	14.1	9.5
HCM Lane LOS	B	B	C	A	C	A	B	A
HCM 95th-tile Q	0.1	0.5	3.6	0.1	3.6	0.2	1.8	0.3

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh19.9

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰			↰	↱		↰	↱
Traffic Vol, veh/h	26	184	46	88	133	78	19	127	11	97	255	46
Future Vol, veh/h	26	184	46	88	133	78	19	127	11	97	255	46
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	222	55	104	156	92	24	163	14	110	290	52
Number of Lanes	0	1	1	0	1	0	0	1	1	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	17.6	27.4	16.1	17.3
HCM LOS	C	D	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	13%	0%	12%	0%	29%	43%	0%
Vol Thru, %	87%	0%	88%	0%	44%	57%	73%
Vol Right, %	0%	100%	0%	100%	26%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	146	11	210	46	299	225	174
LT Vol	19	0	26	0	88	97	0
Through Vol	127	0	184	0	133	128	128
RT Vol	0	11	0	46	78	0	46
Lane Flow Rate	187	14	253	55	352	255	197
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.417	0.028	0.539	0.106	0.721	0.544	0.398
Departure Headway (Hd)	8.022	7.23	7.67	6.887	7.379	7.673	7.259
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	492	468	518	489	469	495
Service Time	5.806	5.014	5.446	4.662	5.451	5.447	5.033
HCM Lane V/C Ratio	0.418	0.028	0.541	0.106	0.72	0.544	0.398
HCM Control Delay	16.5	10.2	19.1	10.5	27.4	19.3	14.8
HCM Lane LOS	C	B	C	B	D	C	B
HCM 95th-tile Q	2	0.1	3.1	0.4	5.8	3.2	1.9

Synchro 9 Report

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	290	180	29	40	72
Future Vol, veh/h	35	290	180	29	40	72
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	330	205	33	44	80
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	298	0	-	0	752	342
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1263	-	-	-	378	701
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	629	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1191	-	-	-	322	623
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	593	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.9	0		15.5		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1191	-	-	-	467	
HCM Lane V/C Ratio	0.033	-	-	-	0.266	
HCM Control Delay (s)	8.1	0	-	-	15.5	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.1	-	-	-	1.1	

Synchro 9 Report

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC 2040-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	49.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔			↔	
Traffic Vol, veh/h	20	185	103	161	128	26	63	295	176	17	251	29
Future Vol, veh/h	20	185	103	161	128	26	63	295	176	17	251	29
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	264	147	187	149	30	66	307	183	20	295	34
Number of Lanes	0	1	0	0	1	1	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	1
HCM Control Delay	97.8	45.4	31.6	19.9
HCM LOS	F	E	D	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	30%	0%	6%	56%	0%	12%	0%
Vol Thru, %	70%	46%	60%	44%	0%	88%	81%
Vol Right, %	0%	54%	33%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	211	324	308	289	26	143	155
LT Vol	63	0	20	161	0	17	0
Through Vol	148	148	185	128	0	126	126
RT Vol	0	176	103	0	26	0	29
Lane Flow Rate	219	337	440	336	30	168	182
Geometry Grp	7	7	6	7	7	7	7
Degree of Util (X)	0.545	0.788	1.079	0.855	0.069	0.432	0.459
Departure Headway (Hd)	9.384	8.828	8.826	9.543	8.521	9.748	9.547
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	386	414	409	383	423	372	380
Service Time	7.084	6.528	6.898	7.243	6.221	7.448	7.247
HCM Lane V/C Ratio	0.567	0.814	1.076	0.877	0.071	0.452	0.479
HCM Control Delay	22.8	37.4	97.8	48.4	11.9	19.7	20.1
HCM Lane LOS	C	E	F	E	B	C	C
HCM 95th-tile Q	3.1	6.8	14.9	8.1	0.2	2.1	2.3

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	62	281	217	16	19	100
Future Vol, veh/h	62	281	217	16	19	100
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	390	297	22	27	143
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	379	0	-	0	990	428
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1179	-	-	-	273	627
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1112	-	-	-	219	557
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	595	-
Stage 2	-	-	-	-	505	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		17.9		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1112	-	-	-	447	
HCM Lane V/C Ratio	0.077	-	-	-	0.38	
HCM Control Delay (s)	8.5	0	-	-	17.9	
HCM Lane LOS	A	A	-	-	C	
HCM 95th %tile Q(veh)	0.3	-	-	-	1.8	

Synchro 9 Report

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	26.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↱	↱					↱↱			↱↱	
Traffic Vol, veh/h	66	393	74	0	0	0	31	132	153	37	198	46
Future Vol, veh/h	66	393	74	0	0	0	31	132	153	37	198	46
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	437	82	0	0	0	34	143	166	41	220	51
Number of Lanes	0	1	1	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	41.4	13.5	12.8
HCM LOS	E	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	14%	0%	27%	0%
Vol Thru, %	68%	30%	86%	0%	73%	68%
Vol Right, %	0%	70%	0%	100%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	219	459	74	136	145
LT Vol	31	0	66	0	37	0
Through Vol	66	66	393	0	99	99
RT Vol	0	153	0	74	0	46
Lane Flow Rate	105	238	510	82	151	161
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.21	0.43	0.921	0.131	0.302	0.305
Departure Headway (Hd)	7.173	6.508	6.503	5.722	7.187	6.82
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	497	550	556	623	497	524
Service Time	4.969	4.303	4.268	3.487	4.985	4.617
HCM Lane V/C Ratio	0.211	0.433	0.917	0.132	0.304	0.307
HCM Control Delay	11.9	14.2	46.6	9.4	13.1	12.6
HCM Lane LOS	B	B	E	A	B	B
HCM 95th-tile Q	0.8	2.1	11.3	0.4	1.3	1.3

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 23.9

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	492	21	0	0	0	0	44	14	67	101	0
Future Vol, veh/h	74	492	21	0	0	0	0	44	14	67	101	0
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	553	24	0	0	0	0	48	15	81	122	0
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	29	9.5	11.6
HCM LOS	D	A	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	13%	40%
Vol Thru, %	76%	84%	60%
Vol Right, %	24%	4%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	58	587	168
LT Vol	0	74	67
Through Vol	44	492	101
RT Vol	14	21	0
Lane Flow Rate	64	660	202
Geometry Grp	1	1	1
Degree of Util (X)	0.104	0.856	0.328
Departure Headway (Hd)	5.86	4.672	5.825
Convergence, Y/N	Yes	Yes	Yes
Cap	614	765	621
Service Time	3.868	2.758	3.829
HCM Lane V/C Ratio	0.104	0.863	0.325
HCM Control Delay	9.5	29	11.6
HCM Lane LOS	A	D	B
HCM 95th-tile Q	0.3	10.2	1.4

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 69.9

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	48	405	112	0	0	0	0	233	202	96	230	0
Future Vol, veh/h	48	405	112	0	0	0	0	233	202	96	230	0
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	513	142	0	0	0	0	262	227	110	264	0
Number of Lanes	0	1	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	133.7	17.9	16.1
HCM LOS	F	C	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	8%	56%	0%
Vol Thru, %	100%	28%	72%	44%	100%
Vol Right, %	0%	72%	20%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	280	565	173	153
LT Vol	0	0	48	96	0
Through Vol	155	78	405	77	153
RT Vol	0	202	112	0	0
Lane Flow Rate	175	314	715	198	176
Geometry Grp	7	7	2	7	7
Degree of Util (X)	0.345	0.577	1.217	0.42	0.359
Departure Headway (Hd)	7.871	7.346	6.124	8.296	8.007
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	461	493	601	437	453
Service Time	5.571	5.046	4.134	5.996	5.707
HCM Lane V/C Ratio	0.38	0.637	1.19	0.453	0.389
HCM Control Delay	14.7	19.6	133.7	16.9	15.1
HCM Lane LOS	B	C	F	C	C
HCM 95th-tile Q	1.5	3.6	26.2	2	1.6

Synchro 9 Report

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 48.7

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰		↱		↰			↰	
Traffic Vol, veh/h	71	513	132	118	0	138	0	39	8	47	104	0
Future Vol, veh/h	71	513	132	118	0	138	0	39	8	47	104	0
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	576	148	139	0	162	0	57	12	64	141	0
Number of Lanes	0	1	1	1	0	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	74.6	11.5	11.3	13.9
HCM LOS	F	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	12%	0%	100%	0%	31%
Vol Thru, %	83%	88%	0%	0%	0%	69%
Vol Right, %	17%	0%	100%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	584	132	118	138	151
LT Vol	0	71	0	118	0	47
Through Vol	39	513	0	0	0	104
RT Vol	8	0	132	0	138	0
Lane Flow Rate	68	656	148	139	162	204
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.131	1.097	0.216	0.269	0.26	0.373
Departure Headway (Hd)	7.212	6.019	5.247	7.168	5.942	6.894
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	500	604	687	504	609	524
Service Time	5.212	3.733	2.961	4.868	3.642	4.894
HCM Lane V/C Ratio	0.136	1.086	0.215	0.276	0.266	0.389
HCM Control Delay	11.3	89.3	9.4	12.5	10.7	13.9
HCM Lane LOS	B	F	A	B	B	B
HCM 95th-tile Q	0.4	19.7	0.8	1.1	1	1.7

Synchro 9 Report

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection												
Intersection Delay, s/veh	23.6											
Intersection LOS	F											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	0	111	96	458	97	15	110	0	0	283	37
Future Vol, veh/h	95	0	111	96	458	97	15	110	0	0	283	37
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	0	134	113	539	114	19	141	0	0	322	42
Number of Lanes	1	0	1	0	1	0	0	1	0	0	2	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			2			1		
Conflicting Approach Left SB				NB			EB			WB		
Conflicting Lanes Left	2			1			2			1		
Conflicting Approach Right NB				SB			WB			EB		
Conflicting Lanes Right	1			2			1			2		
HCM Control Delay	13.4			232.5			17.3			16.5		
HCM LOS	B			F			C			C		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	12%	100%	0%	15%	0%	0%
Vol Thru, %	88%	0%	0%	70%	100%	72%
Vol Right, %	0%	0%	100%	15%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	95	111	651	189	131
LT Vol	15	95	0	96	0	0
Through Vol	110	0	0	458	189	94
RT Vol	0	0	111	97	0	37
Lane Flow Rate	160	114	134	766	214	149
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.358	0.252	0.249	1.45	0.446	0.302
Departure Headway (Hd)	9.256	8.687	7.442	6.816	8.529	8.325
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	391	417	485	536	425	434
Service Time	7.256	6.387	5.142	4.882	6.229	6.025
HCM Lane V/C Ratio	0.409	0.273	0.276	1.429	0.504	0.343
HCM Control Delay	17.3	14.3	12.6	232.5	17.9	14.6
HCM Lane LOS	C	B	B	F	C	B
HCM 95th-tile Q	1.6	1	1	37.1	2.2	1.3

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	487	73	0	164
Future Vol, veh/h	0	0	487	73	0	164
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	553	83	0	182
Major/Minor		Major2		Minor2		
Conflicting Flow All		-	0	-	715	
Stage 1		-	-	-	-	
Stage 2		-	-	-	-	
Critical Hdwy		-	-	-	6.22	
Critical Hdwy Stg 1		-	-	-	-	
Critical Hdwy Stg 2		-	-	-	-	
Follow-up Hdwy		-	-	-	3.318	
Pot Cap-1 Maneuver		-	-	0	431	
Stage 1		-	-	0	-	
Stage 2		-	-	0	-	
Platoon blocked, %		-	-			
Mov Cap-1 Maneuver		-	-	-	406	
Mov Cap-2 Maneuver		-	-	-	-	
Stage 1		-	-	-	-	
Stage 2		-	-	-	-	
Approach		WB		SB		
HCM Control Delay, s		0		20.9		
HCM LOS				C		
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	406			
HCM Lane V/C Ratio	-	-	0.449			
HCM Control Delay (s)	-	-	20.9			
HCM Lane LOS	-	-	C			
HCM 95th %tile Q(veh)	-	-	2.3			

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	76.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↰	↱		↰↱			↰↱	
Traffic Vol, veh/h	0	0	0	135	426	49	81	361	0	0	216	53
Future Vol, veh/h	0	0	0	135	426	49	81	361	0	0	216	53
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	157	495	57	84	376	0	0	254	62
Number of Lanes	0	0	0	0	1	1	0	2	0	0	2	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	142.1	17.4	14.3
HCM LOS	F	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	40%	0%	24%	0%	0%	0%
Vol Thru, %	60%	100%	76%	0%	100%	58%
Vol Right, %	0%	0%	0%	100%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	201	241	561	49	144	125
LT Vol	81	0	135	0	0	0
Through Vol	120	241	426	0	144	72
RT Vol	0	0	0	49	0	53
Lane Flow Rate	210	251	652	57	169	147
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.427	0.497	1.259	0.097	0.346	0.289
Departure Headway (Hd)	8.032	7.824	6.946	6.113	8.082	7.774
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	451	464	528	587	447	465
Service Time	5.732	5.524	4.673	3.84	5.782	5.474
HCM Lane V/C Ratio	0.466	0.541	1.235	0.097	0.378	0.316
HCM Control Delay	16.6	18	153.7	9.5	15	13.6
HCM Lane LOS	C	C	F	A	B	B
HCM 95th-tile Q	2.1	2.7	26.1	0.3	1.5	1.2

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC 1 Travel Lane One Way Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	84					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	392	42	139	223
Future Vol, veh/h	0	0	392	42	139	223
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	537	58	199	319
Major/Minor	Major2		Minor2			
Conflicting Flow All			-	0	686	686
Stage 1			-	-	626	-
Stage 2			-	-	60	-
Critical Hdwy			-	-	6.42	6.22
Critical Hdwy Stg 1			-	-	5.42	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	3.518	3.318
Pot Cap-1 Maneuver			-	-	413	447
Stage 1			-	-	533	-
Stage 2			-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	367	421
Mov Cap-2 Maneuver			-	-	367	-
Stage 1			-	-	503	-
Stage 2			-	-	-	-
Approach	WB		SB			
HCM Control Delay, s	0		180.5			
HCM LOS			F			
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	398			
HCM Lane V/C Ratio	-	-	1.299			
HCM Control Delay (s)	-	-	180.5			
HCM Lane LOS	-	-	F			
HCM 95th %tile Q(veh)	-	-	23.2			

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	67.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↖↗			↖↗	
Traffic Vol, veh/h	82	489	92	0	0	0	39	164	190	46	246	57
Future Vol, veh/h	82	489	92	0	0	0	39	164	190	46	246	57
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	543	102	0	0	0	42	178	207	51	273	63
Number of Lanes	0	1	1	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	123.7	17.5	15.6
HCM LOS	F	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	14%	0%	27%	0%
Vol Thru, %	68%	30%	86%	0%	73%	68%
Vol Right, %	0%	70%	0%	100%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	272	571	92	169	180
LT Vol	39	0	82	0	46	0
Through Vol	82	82	489	0	123	123
RT Vol	0	190	0	92	0	57
Lane Flow Rate	132	296	634	102	188	200
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.272	0.559	1.229	0.176	0.39	0.396
Departure Headway (Hd)	8.081	7.409	6.974	6.19	8.117	7.747
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	491	527	581	447	468
Service Time	5.781	5.109	4.705	3.921	5.817	5.447
HCM Lane V/C Ratio	0.295	0.603	1.203	0.176	0.421	0.427
HCM Control Delay	13.8	19.1	142	10.2	15.9	15.4
HCM Lane LOS	B	C	F	B	C	C
HCM 95th-tile Q	1.1	3.4	24.4	0.6	1.8	1.9

Synchro 9 Report

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 68.3

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	92	612	26	0	0	0	0	55	17	83	126	0
Future Vol, veh/h	92	612	26	0	0	0	0	55	17	83	126	0
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	688	29	0	0	0	0	60	19	100	152	0
Number of Lanes	0	1	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	90.5	10.6	14
HCM LOS	F	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	0%	13%	40%
Vol Thru, %	76%	84%	60%
Vol Right, %	24%	4%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	72	730	209
LT Vol	0	92	83
Through Vol	55	612	126
RT Vol	17	26	0
Lane Flow Rate	79	820	252
Geometry Grp	1	1	1
Degree of Util (X)	0.135	1.116	0.423
Departure Headway (Hd)	6.544	4.898	6.394
Convergence, Y/N	Yes	Yes	Yes
Cap	551	730	567
Service Time	4.544	2.989	4.394
HCM Lane V/C Ratio	0.143	1.123	0.444
HCM Control Delay	10.6	90.5	14
HCM Lane LOS	B	F	B
HCM 95th-tile Q	0.5	23.4	2.1

Synchro 9 Report

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 148

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	60	504	139	0	0	0	0	290	251	119	286	0
Future Vol, veh/h	60	504	139	0	0	0	0	290	251	119	286	0
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	638	176	0	0	0	0	326	282	137	329	0
Number of Lanes	0	1	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	1	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	1
HCM Control Delay	297.6	26.6	20.7
HCM LOS	F	D	C

Lane	NBLn1	NBLn2	EBLn1	SBLn1	SBLn2
Vol Left, %	0%	0%	9%	56%	0%
Vol Thru, %	100%	28%	72%	44%	100%
Vol Right, %	0%	72%	20%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	193	348	703	214	191
LT Vol	0	0	60	119	0
Through Vol	193	97	504	95	191
RT Vol	0	251	139	0	0
Lane Flow Rate	217	391	890	246	219
Geometry Grp	7	7	2	7	7
Degree of Util (X)	0.44	0.736	1.604	0.527	0.452
Departure Headway (Hd)	8.931	8.399	6.49	9.382	9.089
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	406	434	570	387	399
Service Time	6.631	6.099	4.49	7.082	6.789
HCM Lane V/C Ratio	0.534	0.901	1.561	0.636	0.549
HCM Control Delay	18.5	31.1	297.6	22.1	19.1
HCM Lane LOS	C	D	F	C	C
HCM 95th-tile Q	2.2	5.9	48.7	3	2.3

Synchro 9 Report

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 21.2

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰		↱		↰			↰	
Traffic Vol, veh/h	88	639	164	147	0	172	0	49	10	59	129	0
Future Vol, veh/h	88	639	164	147	0	172	0	49	10	59	129	0
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	99	718	184	173	0	202	0	71	14	80	174	0
Number of Lanes	0	1	1	1	0	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	197	13.8	12.9	17.6
HCM LOS	F	B	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	12%	0%	100%	0%	31%
Vol Thru, %	83%	88%	0%	0%	0%	69%
Vol Right, %	17%	0%	100%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	727	164	147	172	188
LT Vol	0	88	0	147	0	59
Through Vol	49	639	0	0	0	129
RT Vol	10	0	164	0	172	0
Lane Flow Rate	86	817	184	173	202	254
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.174	1.469	0.292	0.353	0.346	0.486
Departure Headway (Hd)	8.194	6.472	5.697	7.943	6.707	7.603
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	440	564	630	457	540	478
Service Time	6.194	4.22	3.444	5.643	4.407	5.603
HCM Lane V/C Ratio	0.195	1.449	0.292	0.379	0.374	0.531
HCM Control Delay	12.9	239	10.8	14.9	12.9	17.6
HCM Lane LOS	B	F	B	B	B	C
HCM 95th-tile Q	0.6	40	1.2	1.6	1.5	2.6

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 44.2

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	118	0	138	119	570	121	19	137	0	0	352	46
Future Vol, veh/h	118	0	138	119	570	121	19	137	0	0	352	46
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	142	0	166	140	671	142	24	176	0	0	400	52
Number of Lanes	1	0	1	0	1	0	0	1	0	0	2	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	1	2		2		1						
Conflicting Approach Left SB		NB		EB		WB						
Conflicting Lanes Left	2	1		2		1						
Conflicting Approach Right NB		SB		WB		EB						
Conflicting Lanes Right	1	2		1		2						
HCM Control Delay	16.9	469.1		23.7		22.8						
HCM LOS	C	F		C		C						

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	12%	100%	0%	15%	0%	0%
Vol Thru, %	88%	0%	0%	70%	100%	72%
Vol Right, %	0%	0%	100%	15%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	118	138	810	235	163
LT Vol	19	118	0	119	0	0
Through Vol	137	0	0	570	235	117
RT Vol	0	0	138	121	0	46
Lane Flow Rate	200	142	166	953	267	186
Geometry Grp	6	7	7	6	7	7
Degree of Util (X)	0.474	0.335	0.337	1.986	0.582	0.395
Departure Headway (Hd)	11.106	10.149	8.886	7.502	9.977	9.77
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	328	357	407	486	365	371
Service Time	9.106	7.849	6.586	5.598	7.677	7.47
HCM Lane V/C Ratio	0.61	0.398	0.408	1.961	0.732	0.501
HCM Control Delay	23.7	17.9	16	469.1	25.7	18.7
HCM Lane LOS	C	C	C	F	D	C
HCM 95th-tile Q	2.4	1.4	1.5	63.9	3.5	1.8

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	7.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	606	91	0	204
Future Vol, veh/h	0	0	606	91	0	204
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	689	103	0	227
Major/Minor		Major2		Minor2		
Conflicting Flow All		-		0		
Stage 1		-		-		
Stage 2		-		-		
Critical Hdwy		-		6.22		
Critical Hdwy Stg 1		-		-		
Critical Hdwy Stg 2		-		-		
Follow-up Hdwy		-		3.318		
Pot Cap-1 Maneuver		-		0		
Stage 1		-		0		
Stage 2		-		0		
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver		-		335		
Mov Cap-2 Maneuver		-		-		
Stage 1		-		-		
Stage 2		-		-		
Approach		WB		SB		
HCM Control Delay, s		0		35.5		
HCM LOS				E		
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	335			
HCM Lane V/C Ratio	-	-	0.677			
HCM Control Delay (s)	-	-	35.5			
HCM Lane LOS	-	-	E			
HCM 95th %tile Q(veh)	-	-	4.7			

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	155
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↰	↱		↰↱			↰↱	
Traffic Vol, veh/h	0	0	0	168	530	61	101	449	0	0	269	66
Future Vol, veh/h	0	0	0	168	530	61	101	449	0	0	269	66
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	195	616	71	105	468	0	0	316	78
Number of Lanes	0	0	0	0	1	1	0	2	0	0	2	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	301.4	23.9	17.8
HCM LOS	F	C	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	40%	0%	24%	0%	0%	0%
Vol Thru, %	60%	100%	76%	0%	100%	58%
Vol Right, %	0%	0%	0%	100%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	251	299	698	61	179	156
LT Vol	101	0	168	0	0	0
Through Vol	150	299	530	0	179	90
RT Vol	0	0	0	61	0	66
Lane Flow Rate	261	312	812	71	211	183
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.544	0.632	1.665	0.129	0.443	0.369
Departure Headway (Hd)	9.051	8.84	7.387	6.551	9.108	8.796
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	402	412	495	548	399	412
Service Time	6.751	6.54	5.114	4.278	6.808	6.496
HCM Lane V/C Ratio	0.649	0.757	1.64	0.13	0.529	0.444
HCM Control Delay	22	25.5	326.9	10.2	18.9	16.5
HCM Lane LOS	C	D	F	B	C	C
HCM 95th-tile Q	3.1	4.2	46.8	0.4	2.2	1.7

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC 1 Travel Lane One Way 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	214.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	488	52	173	278
Future Vol, veh/h	0	0	488	52	173	278
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	668	71	247	397
Major/Minor	Major2		Minor2			
Conflicting Flow All			-	0	824	824
Stage 1			-	-	764	-
Stage 2			-	-	60	-
Critical Hdwy			-	-	6.42	6.22
Critical Hdwy Stg 1			-	-	5.42	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	3.518	3.318
Pot Cap-1 Maneuver			-	-	343	~ 373
Stage 1			-	-	460	-
Stage 2			-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	305	~ 352
Mov Cap-2 Maneuver			-	-	305	-
Stage 1			-	-	434	-
Stage 2			-	-	-	-
Approach	WB		SB			
HCM Control Delay, s	0		\$ 460.4			
HCM LOS			F			
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	332			
HCM Lane V/C Ratio	-	-	1.941			
HCM Control Delay (s)	-	-	\$ 460.4			
HCM Lane LOS	-	-	F			
HCM 95th %tile Q(veh)	-	-	44.5			
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

Synchro 9 Report

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	393	74	0	0	0	31	132	153	37	198	46
Future Vol, veh/h	66	393	74	0	0	0	31	132	153	37	198	46
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	437	82	0	0	0	34	143	166	41	220	51
Number of Lanes	0	2	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	15.8	12.8	12.2
HCM LOS	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	25%	0%	27%	0%
Vol Thru, %	68%	30%	75%	73%	73%	68%
Vol Right, %	0%	70%	0%	27%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	219	263	271	136	145
LT Vol	31	0	66	0	37	0
Through Vol	66	66	197	197	99	99
RT Vol	0	153	0	74	0	46
Lane Flow Rate	105	238	292	301	151	161
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.202	0.413	0.527	0.517	0.29	0.293
Departure Headway (Hd)	6.909	6.246	6.51	6.189	6.914	6.548
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	518	574	554	580	518	546
Service Time	4.672	4.009	4.26	3.939	4.679	4.313
HCM Lane V/C Ratio	0.203	0.415	0.527	0.519	0.292	0.295
HCM Control Delay	11.4	13.4	16.3	15.4	12.5	12
HCM Lane LOS	B	B	C	C	B	B
HCM 95th-tile Q	0.7	2	3.1	3	1.2	1.2

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 12.4

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	74	492	21	0	0	0	0	44	14	67	101	0
Future Vol, veh/h	74	492	21	0	0	0	0	44	14	67	101	0
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	553	24	0	0	0	0	48	15	81	122	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	13.2	9.2	11
HCM LOS	B	A	B

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	23%	0%	40%
Vol Thru, %	76%	77%	92%	60%
Vol Right, %	24%	0%	8%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	58	320	267	168
LT Vol	0	74	0	67
Through Vol	44	246	246	101
RT Vol	14	0	21	0
Lane Flow Rate	64	360	300	202
Geometry Grp	2	7	7	2
Degree of Util (X)	0.097	0.536	0.433	0.309
Departure Headway (Hd)	5.501	5.363	5.192	5.502
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	646	669	690	650
Service Time	3.583	3.127	2.955	3.564
HCM Lane V/C Ratio	0.099	0.538	0.435	0.311
HCM Control Delay	9.2	14.2	11.9	11
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.3	3.2	2.2	1.3

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh20.1

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔↔			↔↔	
Traffic Vol, veh/h	48	405	112	0	0	0	0	233	202	96	230	0
Future Vol, veh/h	48	405	112	0	0	0	0	233	202	96	230	0
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	513	142	0	0	0	0	262	227	110	264	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	24.2	17.5	15.5
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	19%	0%	56%	0%
Vol Thru, %	100%	28%	81%	64%	44%	100%
Vol Right, %	0%	72%	0%	36%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	155	280	251	315	173	153
LT Vol	0	0	48	0	96	0
Through Vol	155	78	203	203	77	153
RT Vol	0	202	0	112	0	0
Lane Flow Rate	175	314	317	398	198	176
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.359	0.601	0.623	0.743	0.431	0.369
Departure Headway (Hd)	7.41	6.891	7.176	6.825	7.825	7.539
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	489	528	507	533	462	479
Service Time	5.11	4.591	4.876	4.525	5.537	5.251
HCM Lane V/C Ratio	0.358	0.595	0.625	0.747	0.429	0.367
HCM Control Delay	14.2	19.4	21	26.7	16.3	14.6
HCM Lane LOS	B	C	C	D	C	B
HCM 95th-tile Q	1.6	3.9	4.2	6.3	2.1	1.7

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh16.2

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔		↔		↔			↔	
Traffic Vol, veh/h	71	513	132	118	0	138	0	39	8	47	104	0
Future Vol, veh/h	71	513	132	118	0	138	0	39	8	47	104	0
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	576	148	139	0	162	0	57	12	64	141	0
Number of Lanes	0	2	0	1	0	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	19.1	11.5	10.8	13.3
HCM LOS	C	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	22%	0%	100%	0%	31%
Vol Thru, %	83%	78%	66%	0%	0%	69%
Vol Right, %	17%	0%	34%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	328	389	118	138	151
LT Vol	0	71	0	118	0	47
Through Vol	39	257	257	0	0	104
RT Vol	8	0	132	0	138	0
Lane Flow Rate	68	368	437	139	162	204
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.128	0.615	0.687	0.271	0.262	0.368
Departure Headway (Hd)	6.75	6.018	5.667	7.04	5.817	6.495
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	529	600	637	508	614	553
Service Time	4.822	3.768	3.416	4.807	3.583	4.549
HCM Lane V/C Ratio	0.129	0.613	0.686	0.274	0.264	0.369
HCM Control Delay	10.8	18	20	12.4	10.7	13.3
HCM Lane LOS	B	C	C	B	B	B
HCM 95th-tile Q	0.4	4.2	5.4	1.1	1	1.7

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection

Intersection Delay, s/veh 20.9

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	0	111	96	458	97	15	110	0	0	283	37
Future Vol, veh/h	95	0	111	96	458	97	15	110	0	0	283	37
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	114	0	134	113	539	114	19	141	0	0	322	42
Number of Lanes	1	0	1	0	2	0	0	1	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	13.1	27	15.7	15.6
HCM LOS	B	D	C	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	100%	0%	30%	0%	0%	0%
Vol Thru, %	88%	0%	0%	70%	70%	100%	72%
Vol Right, %	0%	0%	100%	0%	30%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	95	111	325	326	189	131
LT Vol	15	95	0	96	0	0	0
Through Vol	110	0	0	229	229	189	94
RT Vol	0	0	111	0	97	0	37
Lane Flow Rate	160	114	134	382	384	214	149
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.361	0.264	0.263	0.757	0.721	0.461	0.313
Departure Headway (Hd)	8.109	8.317	7.079	7.128	6.763	7.744	7.542
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	444	432	507	509	533	465	478
Service Time	6.156	6.067	4.829	4.868	4.503	5.486	5.283
HCM Lane V/C Ratio	0.36	0.264	0.264	0.75	0.72	0.46	0.312
HCM Control Delay	15.7	14	12.4	28.9	25.1	17	13.7
HCM Lane LOS	C	B	B	D	D	C	B
HCM 95th-tile Q	1.6	1	1	6.5	5.9	2.4	1.3

Synchro 9 Report

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↑
Traffic Vol, veh/h	0	0	487	73	0	164
Future Vol, veh/h	0	0	487	73	0	164
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	553	83	0	182
Major/Minor	Major2		Minor2			
Conflicting Flow All			-	0	-	438
Stage 1			-	-	-	-
Stage 2			-	-	-	-
Critical Hdwy			-	-	-	6.94
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	-	3.32
Pot Cap-1 Maneuver			-	-	0	567
Stage 1			-	-	0	-
Stage 2			-	-	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	-	535
Mov Cap-2 Maneuver			-	-	-	-
Stage 1			-	-	-	-
Stage 2			-	-	-	-
Approach	WB		SB			
HCM Control Delay, s			0	15.2		
HCM LOS				C		
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	535			
HCM Lane V/C Ratio	-	-	0.341			
HCM Control Delay (s)	-	-	15.2			
HCM Lane LOS	-	-	C			
HCM 95th %tile Q(veh)	-	-	1.5			

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	20
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕↕			↕↕			↕↕	
Traffic Vol, veh/h	0	0	0	135	426	49	81	361	0	0	216	53
Future Vol, veh/h	0	0	0	135	426	49	81	361	0	0	216	53
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	157	495	57	84	376	0	0	254	62
Number of Lanes	0	0	0	0	2	0	0	2	0	0	2	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	25.2	16.4	13.5
HCM LOS	D	C	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	40%	0%	39%	0%	0%	0%
Vol Thru, %	60%	100%	61%	81%	100%	58%
Vol Right, %	0%	0%	0%	19%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	201	241	348	262	144	125
LT Vol	81	0	135	0	0	0
Through Vol	120	241	213	213	144	72
RT Vol	0	0	0	49	0	53
Lane Flow Rate	210	251	405	305	169	147
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.43	0.5	0.785	0.563	0.349	0.291
Departure Headway (Hd)	7.386	7.18	6.988	6.658	7.425	7.12
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	499	518	539	481	501
Service Time	5.171	4.964	4.759	4.43	5.217	4.912
HCM Lane V/C Ratio	0.434	0.503	0.782	0.566	0.351	0.293
HCM Control Delay	15.7	17	30.9	17.7	14.2	12.8
HCM Lane LOS	C	C	D	C	B	B
HCM 95th-tile Q	2.1	2.8	7.2	3.5	1.5	1.2

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC 2 Travel Lanes One Way Existing-PM

01/28/2021

Intersection						
Int Delay, s/veh	58.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑		↓	
Traffic Vol, veh/h	0	0	392	42	139	223
Future Vol, veh/h	0	0	392	42	139	223
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	537	58	199	319
Major/Minor	Major2		Minor2			
Conflicting Flow All			-	0	686	418
Stage 1			-	-	626	-
Stage 2			-	-	60	-
Critical Hdwy			-	-	6.84	6.94
Critical Hdwy Stg 1			-	-	5.84	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	3.52	3.32
Pot Cap-1 Maneuver			-	-	381	584
Stage 1			-	-	495	-
Stage 2			-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	339	551
Mov Cap-2 Maneuver			-	-	339	-
Stage 1			-	-	467	-
Stage 2			-	-	-	-
Approach	WB		SB			
HCM Control Delay, s	0		125.2			
HCM LOS			F			
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	444			
HCM Lane V/C Ratio	-	-	1.165			
HCM Control Delay (s)	-	-	125.2			
HCM Lane LOS	-	-	F			
HCM 95th %tile Q(veh)	-	-	19.2			

Synchro 9 Report

15: Redington St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	19.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔↔			↔↔	
Traffic Vol, veh/h	82	489	92	0	0	0	39	164	190	46	246	57
Future Vol, veh/h	82	489	92	0	0	0	39	164	190	46	246	57
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	543	102	0	0	0	42	178	207	51	273	63
Number of Lanes	0	2	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	24.1	16.6	14.8
HCM LOS	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	32%	0%	25%	0%	27%	0%
Vol Thru, %	68%	30%	75%	73%	73%	68%
Vol Right, %	0%	70%	0%	27%	0%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	272	327	337	169	180
LT Vol	39	0	82	0	46	0
Through Vol	82	82	245	245	123	123
RT Vol	0	190	0	92	0	57
Lane Flow Rate	132	296	363	374	188	200
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.274	0.561	0.704	0.693	0.392	0.397
Departure Headway (Hd)	7.503	6.835	6.991	6.669	7.519	7.151
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	476	523	515	538	475	500
Service Time	5.294	4.626	4.767	4.445	5.312	4.944
HCM Lane V/C Ratio	0.277	0.566	0.705	0.695	0.396	0.4
HCM Control Delay	13.1	18.1	24.9	23.3	15.1	14.6
HCM Lane LOS	B	C	C	C	C	B
HCM 95th-tile Q	1.1	3.4	5.5	5.4	1.8	1.9

Synchro 9 Report

16: Irwin St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh16.1

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔			↔	
Traffic Vol, veh/h	92	612	26	0	0	0	0	55	17	83	126	0
Future Vol, veh/h	92	612	26	0	0	0	0	55	17	83	126	0
Peak Hour Factor	0.89	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	688	29	0	0	0	0	60	19	100	152	0
Number of Lanes	0	2	0	0	0	0	0	1	0	0	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	1	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	17.7	9.9	12.8
HCM LOS	C	A	B

Lane	NBLn1	EBLn1	EBLn2	SBLn1
Vol Left, %	0%	23%	0%	40%
Vol Thru, %	76%	77%	92%	60%
Vol Right, %	24%	0%	8%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	398	332	209
LT Vol	0	92	0	83
Through Vol	55	306	306	126
RT Vol	17	0	26	0
Lane Flow Rate	79	447	373	252
Geometry Grp	2	7	7	2
Degree of Util (X)	0.131	0.692	0.559	0.404
Departure Headway (Hd)	5.968	5.568	5.396	5.774
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	604	644	660	619
Service Time	3.968	3.365	3.193	3.859
HCM Lane V/C Ratio	0.131	0.694	0.565	0.407
HCM Control Delay	9.9	20.1	14.9	12.8
HCM Lane LOS	A	C	B	B
HCM 95th-tile Q	0.4	5.5	3.5	2

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

17: Douty St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh40.5

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔						↔↔			↔↔	
Traffic Vol, veh/h	60	504	139	0	0	0	0	290	251	119	286	0
Future Vol, veh/h	60	504	139	0	0	0	0	290	251	119	286	0
Peak Hour Factor	0.79	0.79	0.79	0.93	0.93	0.93	0.89	0.89	0.89	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	638	176	0	0	0	0	326	282	137	329	0
Number of Lanes	0	2	0	0	0	0	0	2	0	0	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left SB		EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right NB			EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	58.5	29.2	20.8
HCM LOS	F	D	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	19%	0%	56%	0%
Vol Thru, %	100%	28%	81%	64%	44%	100%
Vol Right, %	0%	72%	0%	36%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	193	348	312	391	214	191
LT Vol	0	0	60	0	119	0
Through Vol	193	97	252	252	95	191
RT Vol	0	251	0	139	0	0
Lane Flow Rate	217	391	395	495	246	219
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.481	0.809	0.851	1.018	0.578	0.497
Departure Headway (Hd)	8.123	7.601	7.755	7.402	8.607	8.319
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	480	470	495	421	436
Service Time	5.823	5.301	5.455	5.102	6.307	6.019
HCM Lane V/C Ratio	0.485	0.815	0.84	1	0.584	0.502
HCM Control Delay	18.1	35.3	40.9	72.5	22.4	19
HCM Lane LOS	C	E	E	F	C	C
HCM 95th-tile Q	2.6	7.6	8.6	14.2	3.5	2.7

Synchro 9 Report

18: Harris St & Seventh St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh30.2

Intersection LOS D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔		↔		↔		↔			↔	
Traffic Vol, veh/h	88	639	164	147	0	172	0	49	10	59	129	0
Future Vol, veh/h	88	639	164	147	0	172	0	49	10	59	129	0
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.69	0.69	0.69	0.74	0.74	0.74
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	99	718	184	173	0	202	0	71	14	80	174	0
Number of Lanes	0	2	0	1	0	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	41.3	14	12.2	16.7
HCM LOS	E	B	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	0%	22%	0%	100%	0%	31%
Vol Thru, %	83%	78%	66%	0%	0%	69%
Vol Right, %	17%	0%	34%	0%	100%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	408	484	147	172	188
LT Vol	0	88	0	147	0	59
Through Vol	49	320	320	0	0	129
RT Vol	10	0	164	0	172	0
Lane Flow Rate	86	458	543	173	202	254
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.179	0.831	0.933	0.375	0.37	0.492
Departure Headway (Hd)	7.549	6.535	6.182	7.813	6.582	6.978
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	549	581	463	550	513
Service Time	5.563	4.333	3.98	5.517	4.286	5.064
HCM Lane V/C Ratio	0.18	0.834	0.935	0.374	0.367	0.495
HCM Control Delay	12.2	34	47.4	15.1	13.1	16.7
HCM Lane LOS	B	D	E	C	B	C
HCM 95th-tile Q	0.6	8.5	12	1.7	1.7	2.7

Synchro 9 Report

22: Redington St & Sixth St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection

Intersection Delay, s/veh 48.2

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	118	0	138	119	570	121	19	137	0	0	352	46
Future Vol, veh/h	118	0	138	119	570	121	19	137	0	0	352	46
Peak Hour Factor	0.83	0.83	0.83	0.85	0.85	0.85	0.78	0.78	0.78	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	142	0	166	140	671	142	24	176	0	0	400	52
Number of Lanes	1	0	1	0	2	0	0	1	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	16.1	77.3	20.1	21.1
HCM LOS	C	F	C	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	100%	0%	29%	0%	0%	0%
Vol Thru, %	88%	0%	0%	71%	70%	100%	72%
Vol Right, %	0%	0%	100%	0%	30%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	118	138	404	406	235	163
LT Vol	19	118	0	119	0	0	0
Through Vol	137	0	0	285	285	235	117
RT Vol	0	0	138	0	121	0	46
Lane Flow Rate	200	142	166	475	478	267	186
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.487	0.359	0.362	1.05	1.007	0.618	0.42
Departure Headway (Hd)	8.915	9.297	8.048	7.956	7.588	8.512	8.308
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	406	390	451	461	482	427	436
Service Time	6.915	6.997	5.748	5.656	5.288	6.212	6.008
HCM Lane V/C Ratio	0.493	0.364	0.368	1.03	0.992	0.625	0.427
HCM Control Delay	20.1	17.1	15.2	84.2	70.5	24	16.9
HCM Lane LOS	C	C	C	F	F	C	C
HCM 95th-tile Q	2.6	1.6	1.6	14.8	13.6	4	2

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

23: Sixth St & Irwin St
HCM 2010 TWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑			↑
Traffic Vol, veh/h	0	0	606	91	0	204
Future Vol, veh/h	0	0	606	91	0	204
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	689	103	0	227
Major/Minor		Major2		Minor2		
Conflicting Flow All			-	0	-	516
Stage 1			-	-	-	-
Stage 2			-	-	-	-
Critical Hdwy			-	-	-	6.94
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	-	3.32
Pot Cap-1 Maneuver			-	-	0	504
Stage 1			-	-	0	-
Stage 2			-	-	0	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	-	475
Mov Cap-2 Maneuver			-	-	-	-
Stage 1			-	-	-	-
Stage 2			-	-	-	-
Approach			WB		SB	
HCM Control Delay, s			0		19.3	
HCM LOS					C	
Minor Lane/Major Mvmt		WBT	WBR	SBLn1		
Capacity (veh/h)		-	-	475		
HCM Lane V/C Ratio		-	-	0.477		
HCM Control Delay (s)		-	-	19.3		
HCM Lane LOS		-	-	C		
HCM 95th %tile Q(veh)		-	-	2.5		

Synchro 9 Report

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

24: Douty St & Sixth St
HCM 2010 AWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection	
Intersection Delay, s/veh	39.4
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕↕			↕↕			↕↕	
Traffic Vol, veh/h	0	0	0	168	530	61	101	449	0	0	269	66
Future Vol, veh/h	0	0	0	168	530	61	101	449	0	0	269	66
Peak Hour Factor	0.70	0.70	0.70	0.86	0.86	0.86	0.96	0.96	0.96	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	195	616	71	105	468	0	0	316	78
Number of Lanes	0	0	0	0	2	0	0	2	0	0	2	0

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	60.1	23.1	16.9
HCM LOS	F	C	C

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	40%	0%	39%	0%	0%	0%
Vol Thru, %	60%	100%	61%	81%	100%	58%
Vol Right, %	0%	0%	0%	19%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	251	299	433	326	179	156
LT Vol	101	0	168	0	0	0
Through Vol	150	299	265	265	179	90
RT Vol	0	0	0	61	0	66
Lane Flow Rate	261	312	503	379	211	183
Geometry Grp	7	7	7	7	7	7
Degree of Util (X)	0.57	0.663	1.053	0.758	0.467	0.391
Departure Headway (Hd)	8.116	7.908	7.53	7.199	8.249	7.942
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	447	458	483	500	439	456
Service Time	5.816	5.608	5.286	4.955	5.949	5.642
HCM Lane V/C Ratio	0.584	0.681	1.041	0.758	0.481	0.401
HCM Control Delay	21	24.8	83.3	29.3	18	15.6
HCM Lane LOS	C	C	F	D	C	C
HCM 95th-tile Q	3.5	4.7	15.4	6.5	2.4	1.8

Synchro 9 Report

25: Sixth St & Harris St
HCM 2010 TWSC

AWSC 2 Travel Lanes One Way 2040-PM

01/28/2021

Intersection						
Int Delay, s/veh	163.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑		↑↑	
Traffic Vol, veh/h	0	0	488	52	173	278
Future Vol, veh/h	0	0	488	52	173	278
Conflicting Peds, #/hr	60	0	0	60	60	60
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	72	72	73	73	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	668	71	247	397
Major/Minor	Major2		Minor2			
Conflicting Flow All			-	0	824	490
Stage 1			-	-	764	-
Stage 2			-	-	60	-
Critical Hdwy			-	-	6.84	6.94
Critical Hdwy Stg 1			-	-	5.84	-
Critical Hdwy Stg 2			-	-	-	-
Follow-up Hdwy			-	-	3.52	3.32
Pot Cap-1 Maneuver			-	-	311	524
Stage 1			-	-	420	-
Stage 2			-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver			-	-	276	494
Mov Cap-2 Maneuver			-	-	276	-
Stage 1			-	-	396	-
Stage 2			-	-	-	-
Approach	WB		SB			
HCM Control Delay, s	0		\$ 351.1			
HCM LOS			F			
Minor Lane/Major Mvmt	WBT	WBR	SBLn1			
Capacity (veh/h)	-	-	379			
HCM Lane V/C Ratio	-	-	1.7			
HCM Control Delay (s)	-	-	\$ 351.1			
HCM Lane LOS	-	-	F			
HCM 95th %tile Q(veh)	-	-	39.3			
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

Synchro 9 Report

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 10-23-18

CALC _____ DATE _____

CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: SEVENTH ST.

Minor St: IRWIN ST.

Critical Approach Speed 25 mph

Critical Approach Speed 25 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☒ } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☐ NO ☒ 1 MET
80% SATISFIED YES ☐ NO ☒ 7 MET

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)					80% SATISFIED YES ☐ NO ☒										
U		R		U		R									
APPROACH LANES	1		2 or More										Hour		
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	529	558	567	539	479	514	528				
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	120	152	127	128	123	131	124				

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED YES ☐ NO ☒											
U		R		U		R									
APPROACH LANES	1			2 or More										Hour	
Both Approaches Major Street	750 (600)	525 (420)		900 (720)	630 (504)										NONE
Highest Approach Minor Street	75 (60)	53 (42)		100 (80)	70 (56)										

Combination of Conditions A & B

SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	K		NONE
Higher Approach - Minor Street	K		

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES ☐ NO ☐

PART A

SATISFIED YES ☐ NO ☐

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes ☐	No ☐	N/A
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes ☒	No ☐	
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☒	No ☐	8/3

PART B

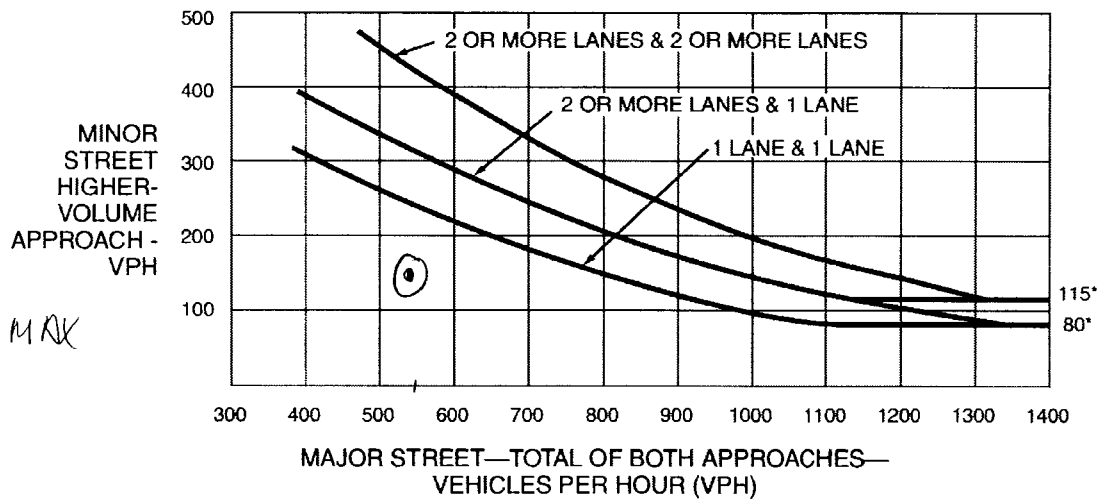
SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	K		578
Higher Approach - Minor Street	K		133

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

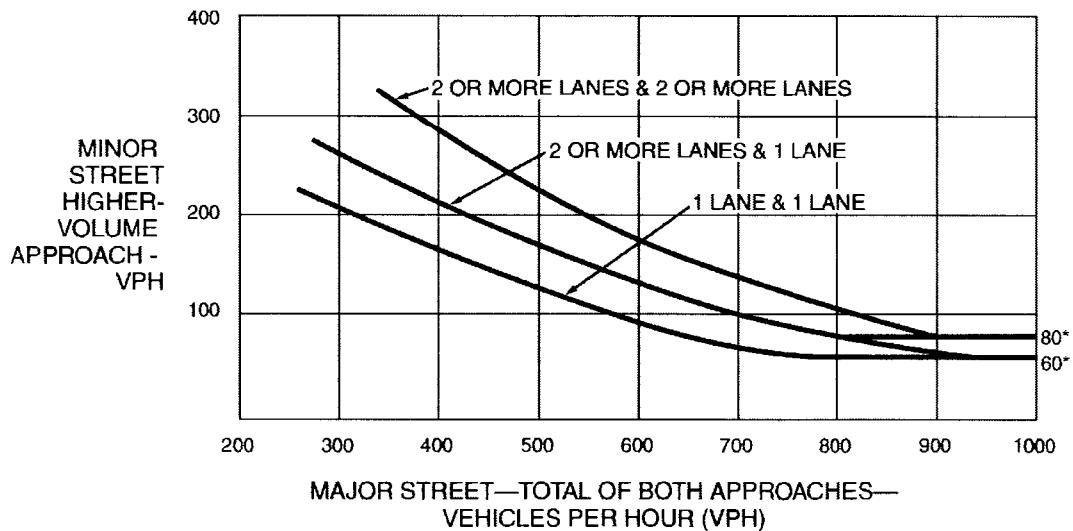
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

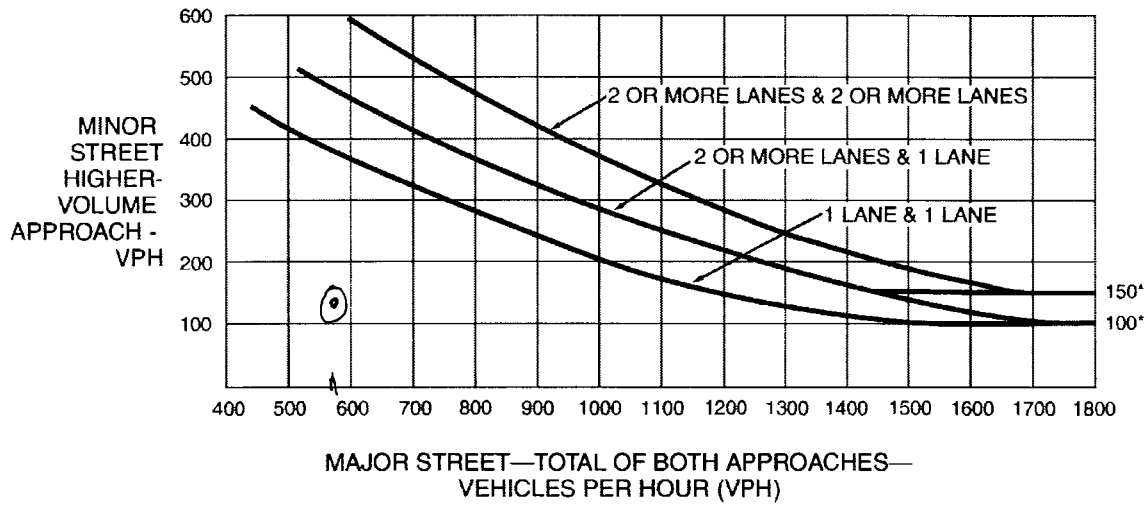
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



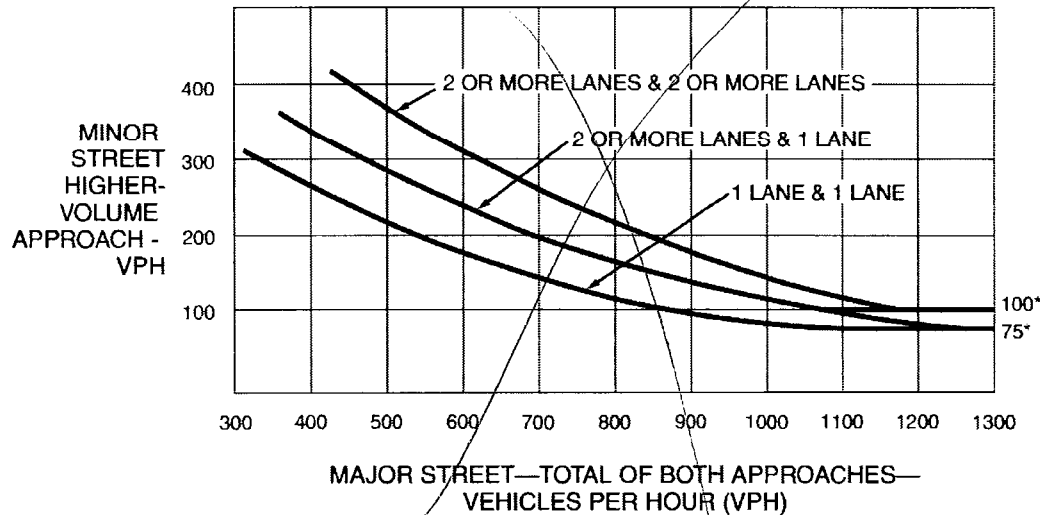
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Part 1 (Parts A or B must be satisfied)

Hours -- -->					
A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☐

Hours -- -->					
B.	Vehicles per hour for any 1 hour				
	Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☐

Part 2

SATISFIED YES ☐ NO ☐

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐	No ☐

WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Part A
Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☐

		Hour
Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		
Gaps < Minutes		YES ☐ NO ☐
<u>AND</u> Children > 20/hr		YES ☐ NO ☐
<u>AND</u> , Consideration has been given to less restrictive remedial measures.		Yes ☐ No ☐

Part B

SATISFIED YES ☐ NO ☐

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes ☐ No ☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes ☐ No ☐	
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes ☐ No ☐	
5 OR MORE			
REQUIREMENTS	CONDITIONS	Yes ☐ No ☐	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol $\geq$ 80% of Figure 4C-5 through Figure 4C-8		

**WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☐
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets		Yes ☐ No ☐	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

<u>PART A</u> A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
<u>PART B</u> There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH <u>OR</u>, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 10-23-18

DIST _____ CO _____ RTE _____ PM _____

Major St: SEVENTH ST (5,945)

Minor St: DOUG ST (5,668)

CALC _____ DATE _____

CHK _____ DATE _____

Critical Approach Speed 25 mph

Critical Approach Speed 25 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☒ } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☐ NO ☒ 3 HRS
80% SATISFIED YES ☒ NO ☐ 9 HRS

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED ☒ NO ☐													
		U	R	U	R												
APPROACH LANES	1		2 or More														
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	0945-1045 (420)	1045-1145 (496)	1145-1245 550	1245-1345 510	1345-1445 (475)	1445-1545 (459)	1545-1645 (482)	1645-1745 508	Hour				
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	211	250	205	231	244	280	268	273					

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒ 0 HRS
80% SATISFIED YES ☐ NO ☒ 0 HRS

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED YES ☐ NO ☒											
		U	R	U	R										
APPROACH LANES	1		2 or More												
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)											
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)											Hour

Combination of Conditions A & B

SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street			NONE
Higher Approach - Minor Street			

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES ☐ NO ☒

PART A

SATISFIED YES ☐ NO ☐

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes ☐	No ☐	N/A
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes ☒	No ☐	
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☒	No ☐	

PART B

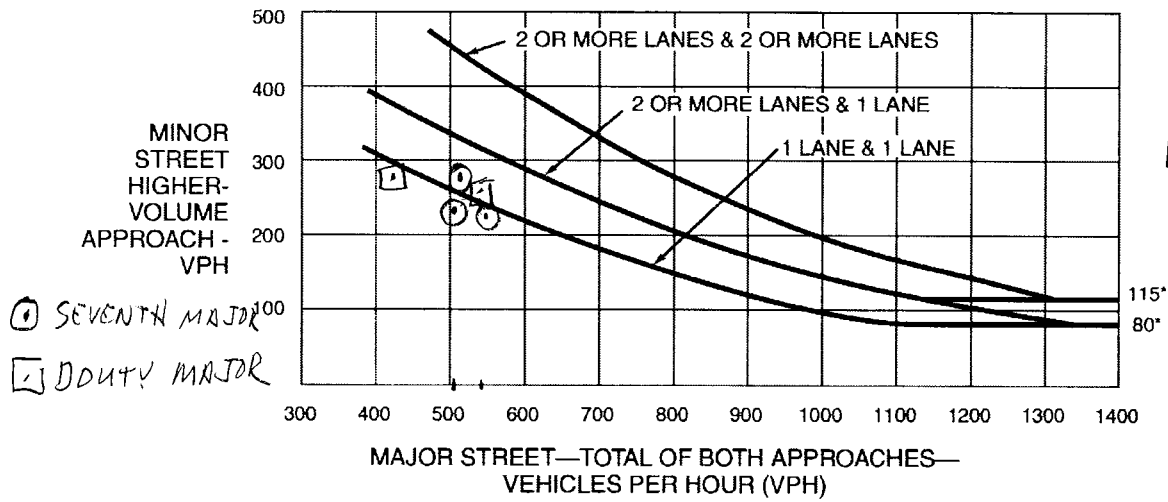
SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	X		523
Higher Approach - Minor Street		X	262

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

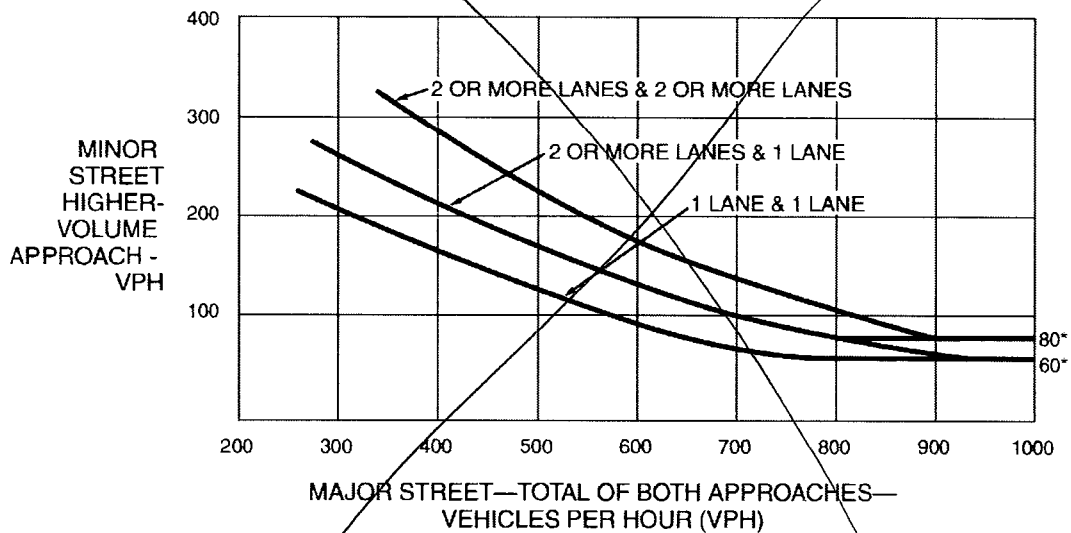
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

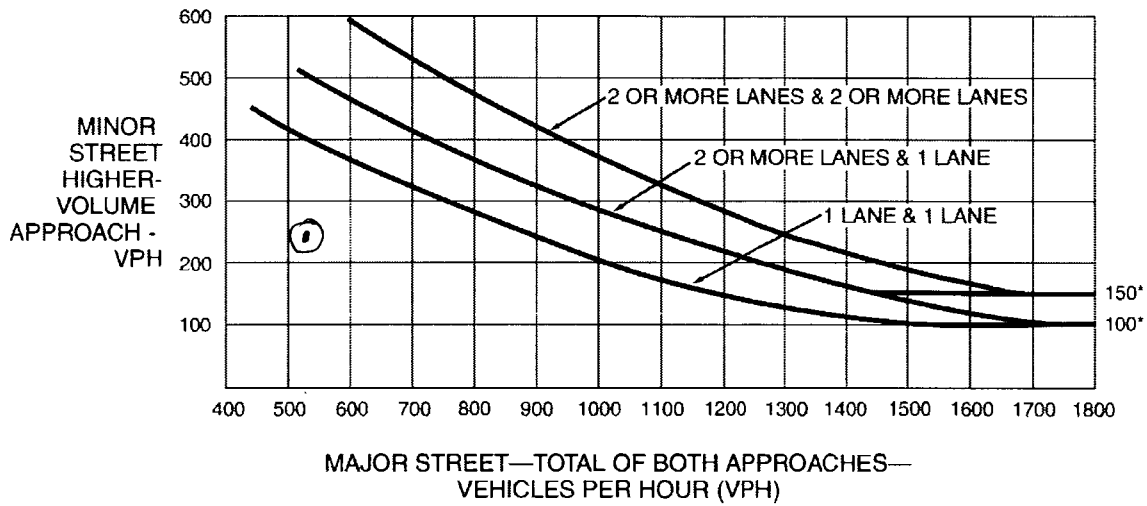
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



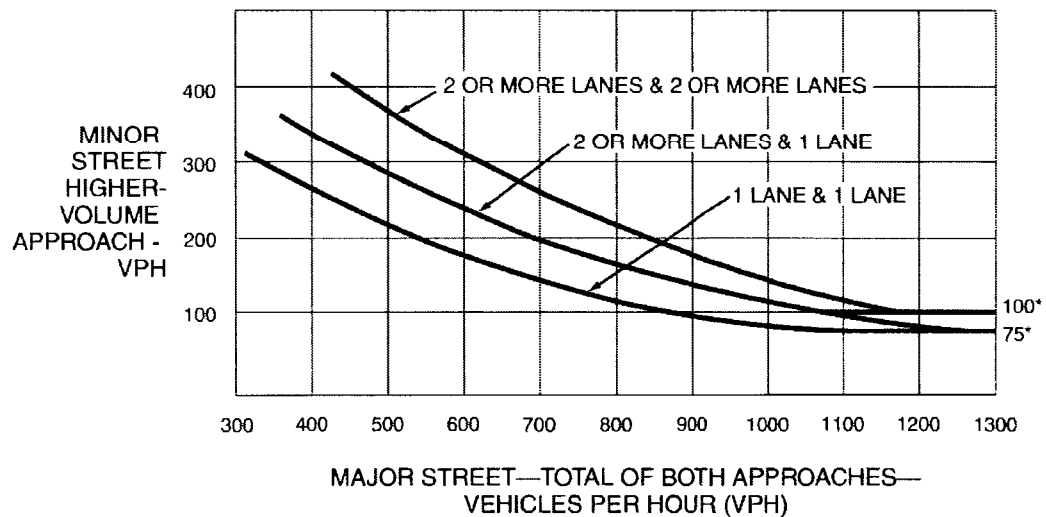
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Part 1 (Parts A or B must be satisfied)

Hours -->					
A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☐

Hours -->					
B.	Vehicles per hour for any 1 hour				
	Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☐

Part 2

SATISFIED YES ☐ NO ☐

<u>AND</u> . The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> . The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐	No ☐

WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Part A
Gap/Minutes and # of Children

SATISFIED YES ☐ NO ☐

Hour		
Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		
Gaps < Minutes		YES ☐ NO ☐
<u>AND</u> Children > 20/hr		YES ☐ NO ☐
<u>AND</u> . Consideration has been given to less restrictive remedial measures.		Yes ☐ No ☐

Part B

SATISFIED YES ☐ NO ☐

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> . The proposed signal will not restrict the progressive movement of traffic.	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes ☐ No ☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes ☐ No ☐	
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes ☐ No ☐	
5 OR MORE			
REQUIREMENTS	CONDITIONS	Yes ☐ No ☐	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol $\geq$ 80% of Figure 4C-5 through Figure 4C-8		

**WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☐
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets		Yes ☐ No ☐	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

<u>PART A</u> A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
<u>PART B</u> There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH <u>OR</u>, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 10-23-18
 CALC _____ DATE _____
 CHK _____ DATE _____
 Major St: SEVENTH ST (5881) Critical Approach Speed 25 mph
 Minor St: HARRIS ST (2002) Critical Approach Speed 25 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ }
 or } **RURAL (R)**
 In built up area of isolated community of < 10,000 population..... ☐ }
☐ **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES ☐ NO ☒
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☐ NO ☒ 0 MET
 80% SATISFIED YES ☐ NO ☒ 6 MET

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)					80% SATISFIED YES ☐ NO ☒												
		(U)	R			U	R										
APPROACH LANES		(1)		2 or More		1115 1215 1215 1315 1345 1445 1445 1545 1545 1645 1745										Hour	
Both Approaches Major Street		500 (400)	350 (280)	600 (480)	420 (336)	490	495	509	458	488	498						
Highest Approach Minor Street		150 (120)	105 (84)	200 (160)	140 (112)	129	138	126	135	122	151						

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒
 80% SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED YES ☐ NO ☒										
APPROACH LANES	U	R	U	R									Hour	
	1		2 or More											
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)										
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)										

Combination of Conditions A & B

SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Attachment: Downtown Ped Safety and Traffic Circulation (1-27-21) (PW: Downtown Pedestrian Safety & Traffic Circulation Study)

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More				Hour
Both Approaches - Major Street						NONE
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

WARRANT 3 - Peak Hour

(Part A or Part B must be satisfied)

SATISFIED YES ☐ NO ☒

PART A

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

SATISFIED YES ☐ NO ☒

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes ☐	No ☐	N/A
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes ☒	No ☐	
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☐	No ☒	714

PART B

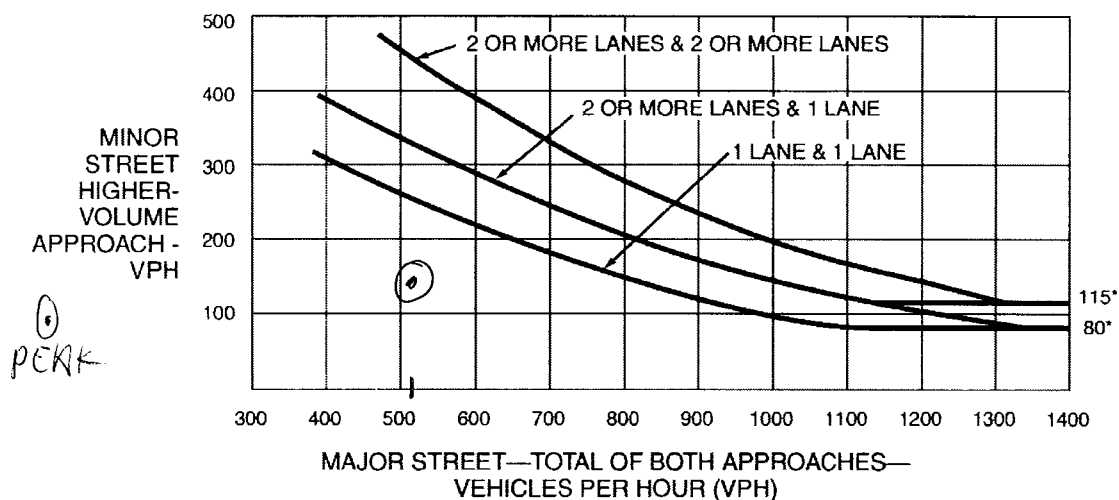
SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	4		515
Higher Approach - Minor Street	2		147

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

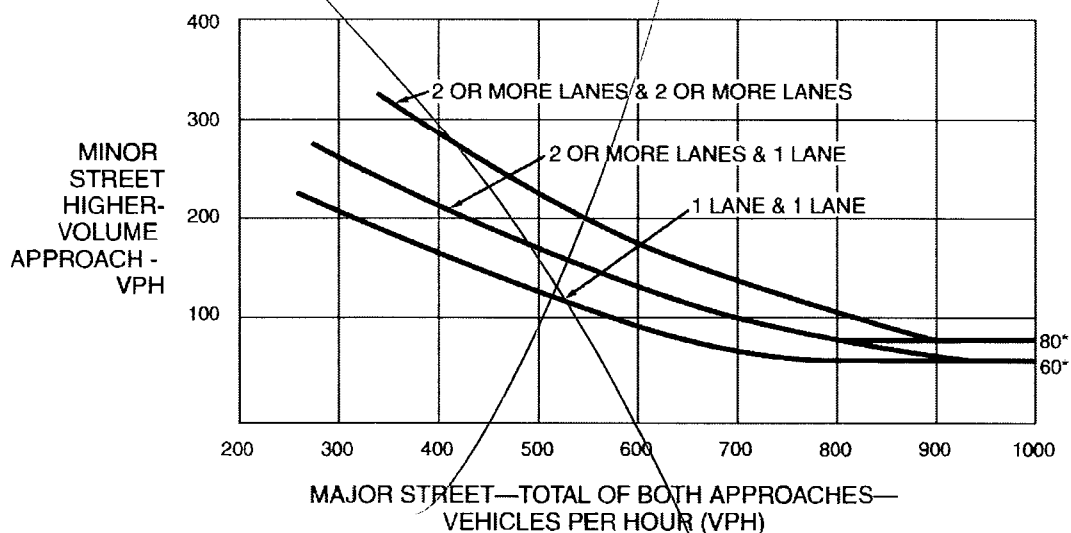
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

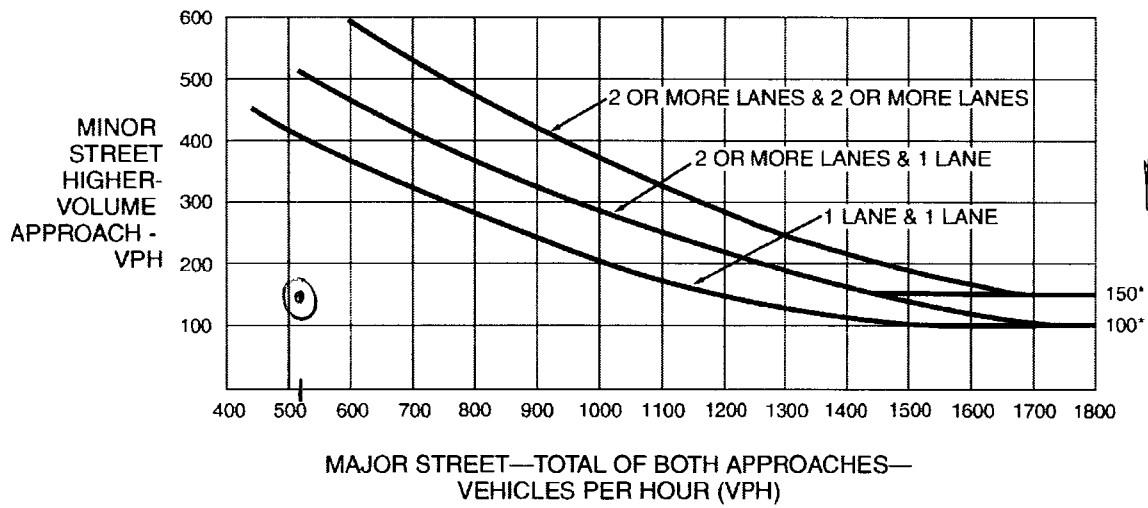
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



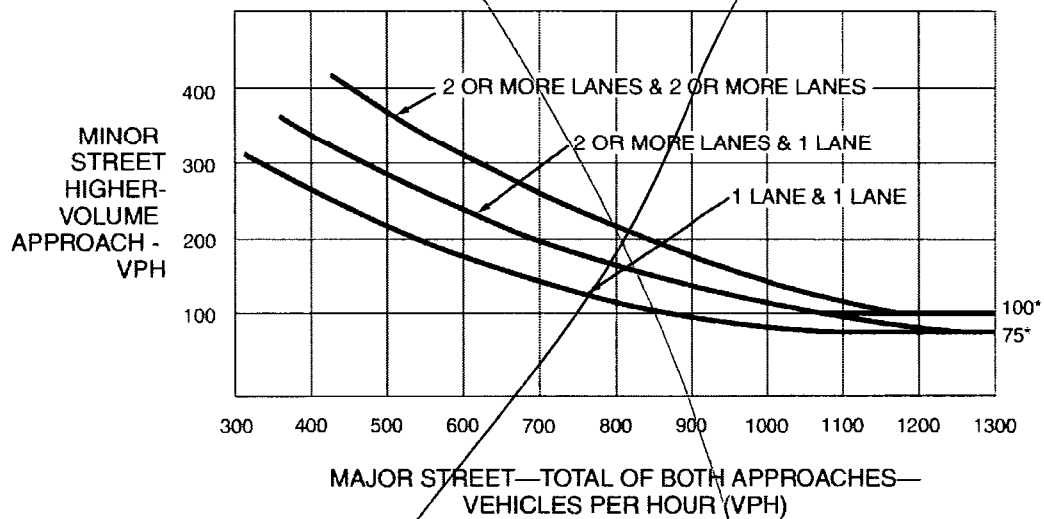
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

Part 1 (Parts A or B must be satisfied)

Hours -- -->

A. Vehicles per hour for any 4 hours				
Pedestrians per hour for any 4 hours				

**Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☐**

Hours -- -->

B. Vehicles per hour for any 1 hour				
Pedestrians per hour for any 1 hour				

**Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☐**

Part 2

SATISFIED YES ☐ NO ☐

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐	No ☐

**WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

**Part A
Gap/Minutes and # of Children**

SATISFIED YES ☐ NO ☐

Gaps vs Minutes	Minutes Children Using Crossing	Hour	
	Number of Adequate Gaps		
School Age Pedestrians Crossing Street / hr			

Gaps < Minutes YES ☐ NO ☐

AND Children > 20/hr YES ☐ NO ☐

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes ☐	No ☐
--	------------------------------	-----------------------------

Part B

SATISFIED YES ☐ NO ☐

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes ☐ No ☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes ☐ No ☐	
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes ☐ No ☐	
5 OR MORE			
REQUIREMENTS	CONDITIONS	Yes ☐ No ☐	
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume		
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic		
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol $\geq$ 80% of Figure 4C-5 through Figure 4C-8		

WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☐
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

<u>PART A</u> A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
<u>PART B</u> There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH <u>OR</u>, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE 10-23-18

DIST _____ CO _____ RTE _____ PM _____

Major St: SEVENTH ST. Critical Approach Speed 25 mph

Minor St: REDINGTON ST. Critical Approach Speed 25 mph

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or ☐ } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... ☒ } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume **SATISFIED** YES ☒ NO ☐
(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume

100% SATISFIED YES ☒ NO ☐
80% SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED YES ☐ NO ☐									
	U	R	U	R									
APPROACH LANES	①		② or More		945	1045	1145	1245	1345	1445	1545	1645	Hour
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)	537	622	632	615	566	582	585	585	
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	214	235	276	245	208	252	228	265	

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES ☐ NO ☒
80% SATISFIED YES ☐ NO ☒

MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				80% SATISFIED YES ☐ NO ☒									
U		R		U		R							
APPROACH LANES	1		2 or More		1630	1130	1230	1515					Hour
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)	600	648	604	609					
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	232	273	252	219					

Combination of Conditions A & B

SATISFIED YES ☐ NO ☒

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☒
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES ☐ NO ☒

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	X	632	ONE MET
Higher Approach - Minor Street		276	

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐	No ☐

**WARRANT 3 - Peak Hour
(Part A or Part B must be satisfied)**

SATISFIED YES ☐ NO ☐

PART A

SATISFIED YES ☐ NO ☐

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes ☐	No ☐
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes ☒	No ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☒	No ☐

PART B

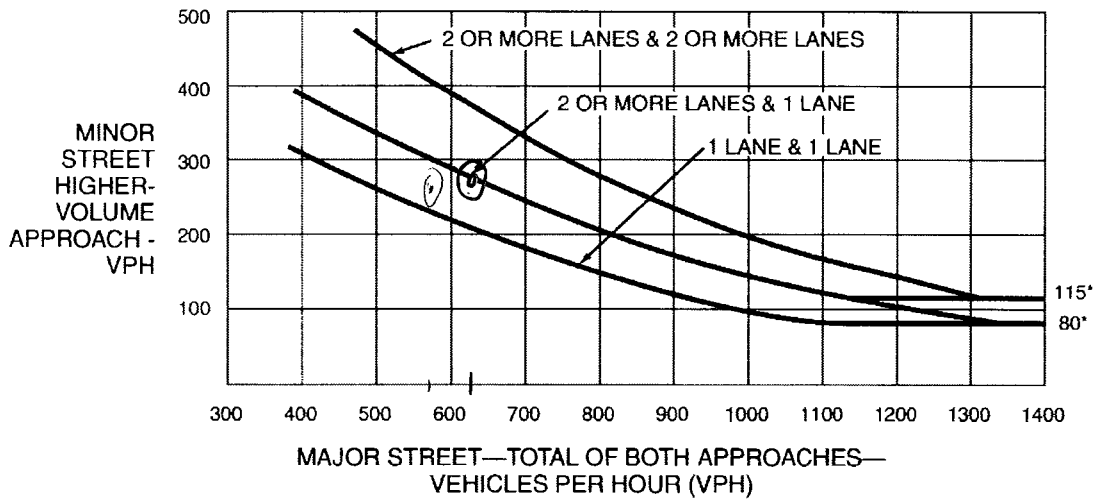
SATISFIED YES ☐ NO ☒

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street	X	650	1145
Higher Approach - Minor Street		272	

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐	No ☒
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

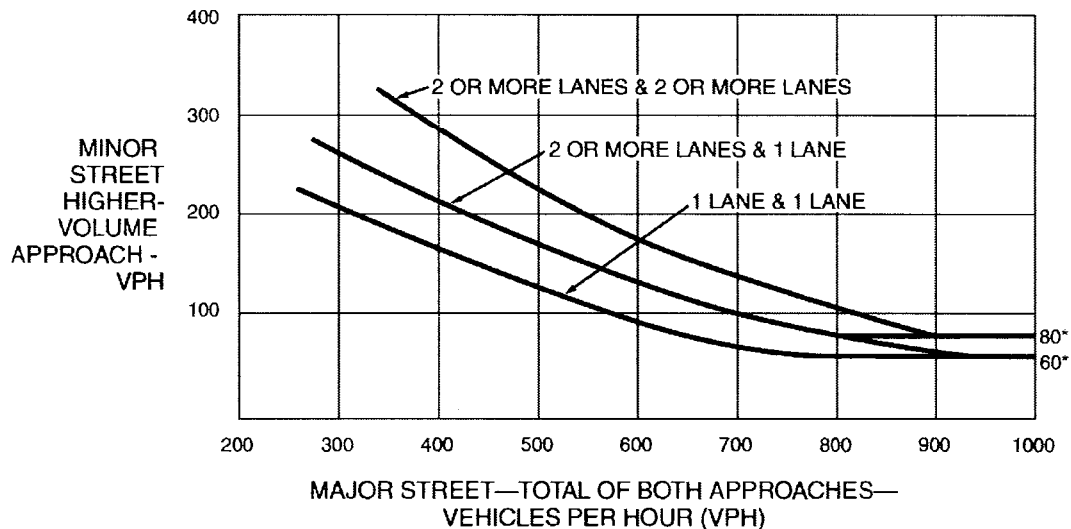
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

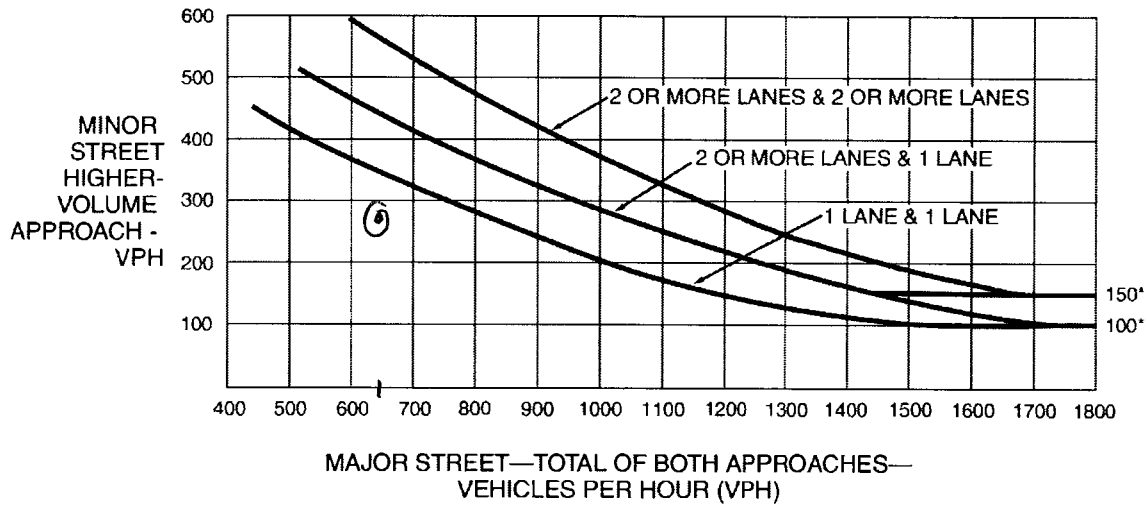
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



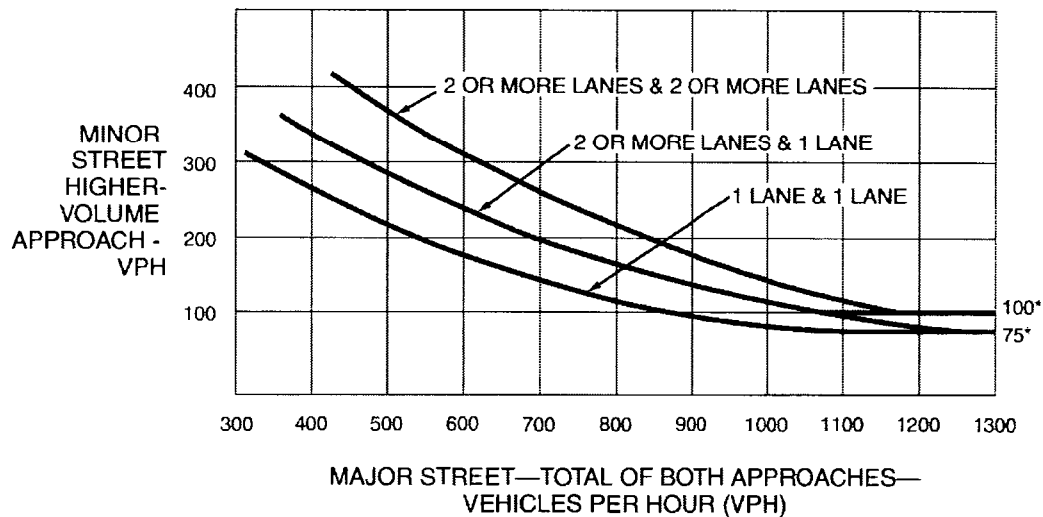
*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
(Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

Part 1 (Parts A or B must be satisfied)

Hours -->

A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

**Figure 4C-5 or Figure 4C-6
SATISFIED YES ☐ NO ☐**

Hours -->

B.	Vehicles per hour for any 1 hour				
	Pedestrians per hour for any 1 hour				

**Figure 4C-7 or Figure 4C-8
SATISFIED YES ☐ NO ☐**

Part 2

SATISFIED YES ☐ NO ☐

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes ☐	No ☐

**WARRANT 5 - School Crossing
(Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

**Part A
Gap/Minutes and # of Children**

SATISFIED YES ☐ NO ☐

Gaps vs Minutes	Minutes Children Using Crossing	Hour	Gaps < Minutes	YES ☐	NO ☐
	Number of Adequate Gaps				
School Age Pedestrians Crossing Street / hr					

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes ☐	No ☐
--	------------------------------	-----------------------------

Part B

SATISFIED YES ☐ NO ☐

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes ☐	No ☐
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes ☐	No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

WARRANT 6 - Coordinated Signal System
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	Yes ☐ No ☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes ☐ No ☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

WARRANT 7 - Crash Experience Warrant
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes ☐ No ☐
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes ☐ No ☐
5 OR MORE		
REQUIREMENTS	CONDITIONS	✓
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	Yes ☐ No ☐
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic	
	OR, Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8	

WARRANT 8 - Roadway Network
(All Parts Must Be Satisfied)

SATISFIED YES ☐ NO ☐

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES	✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.		Yes ☐ No ☐
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr		
CHARACTERISTICS OF MAJOR ROUTES		MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			
Appears as Major Route on an Official Plan			
Any Major Route Characteristics Met, Both Streets		Yes ☐ No ☐	

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

**WARRANT 9 - Intersection Near a Grade Crossing
(Both Parts A and B Must Be Satisfied)**

SATISFIED YES ☐ NO ☐

<u>PART A</u> A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	Yes ☐ No ☐
<u>PART B</u> There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH <u>OR</u>, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	Yes ☐ No ☐

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: B
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SUBJECT:

City Clerk: Denial of a claim for damages and authorization for the City Clerk to send out notification of such to Julia Padilla.

RECOMMENDATION:

That the City Council, by motion, approve the denial of the following claim as the original claim form was insufficient and no amended claim form has been received and authorize 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: Julia Padilla

After review by the Third Party Administrator, it is the City Manager's decision to act in accordance with the recommendation of the Administrator to deny the claim.

FISCAL IMPACT:

ATTACHMENTS:



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: C
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SUBJECT:

City Clerk: Denial of a claim for damages and authorization for the City Clerk to send out notification of such to Arnold Avila.

RECOMMENDATION:

That the City Council, by motion, approve the denial of the following claim as the original claim form was insufficient and no amended claim form has been received and authorize 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: Arnold Avila.

After review by the Third Party Administrator, it is the City Manager's decision to act in accordance with the recommendation of the Administrator to deny the claim.

FISCAL IMPACT:

ATTACHMENTS:



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: D
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SUBJECT:

Administration: Reject notice of government claim

RECOMMENDATION:

The Council, by motion, reject the attached claim from Darlene Mata, and direct the City Attorney's office and staff to send a notice of rejection of the claim.

FISCAL IMPACT:

ATTACHMENTS:

Government claim.

FISCAL IMPACT:

ATTACHMENTS:

RB Ltr to M. Zamora (1-6-2021)



January 6, 2021

Via Electronic Mail Only

Mario Zamora, Esq.
GRISWALD LaSALLE COBB DOWD & GIN, LLP
111 East Seventh Street
Hanford California 93230
Email: zamora@griswoldlasalle.com

Re: Darlene R. Mata, Community Development Director
Confidential Settlement Demand
California Tort Claim Submission

Dear Mr. Zamora:

Thank you for your recent communications over the holidays, and for providing me with a copy of the November 25, 2020 investigative report.

The investigative report, along with the documents produced to my office in response to my earlier public records act request, confirm my client's legal rights have been violated. While not an exhaustive analysis of what these documents prove, the facts below evidence Ms. Mata was subjected to unlawful workplace conduct, over her repeated objections. For additional context and based on City records, it is important to note Mr. Brieno did not participate in or complete the legally required AB1661 Anti-Harassment training.

Legal Issues

1. Harassment based on gender.

Supporting evidence:

- Mr. Brieno said, "... he did not trust a woman to hold the job Ms. Mata held; that a man was better suited for that job, and that he did not know how a woman got that job over a man." (Investigative Report, p. 32.)
- Mr. Brieno told others Ms. Mata and Mr. Cifuentez were having an affair. (*Id.*, p. 34.)
- "... the weight of this evidence supports the conclusion that Mr. Brieno's treatment of Ms. Mata ... is based, at least in part, on the fact that she is female and/or a strong female. Therefore, this allegation is sustained." (*Ibid.*)

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HANFORD, CA 93230
TELEPHONE: (559) 410-8560
FACSIMILE: (559) 410-8922

2. Harassment based on actual and/or perceived disability.

Supporting evidence:

- On June 17, 2020, Mario Cifuentez emailed City Attorney Mario Zamora indicating Ms. Mata “just left” his office and “was in tears” because she had to perform a work task she knew would cause Mr. Brieno to be upset with her. The City Manager wrote, “This man is creating an atmosphere where she can’t even feel comfortable performing her daily duties.” (Exhibit 4 to the Investigative Report; Email dated June 17, 2020.)
- On July 13, 2020, City Attorney Ty Mizote was compelled to email Mr. Brieno as a follow-up to their July 10, 2020 meeting reminding him, “(i) statements of a personal nature [Ms. Mata’s medical condition and job performance] should not be made about City staff at public meetings; and (ii) a City staff member should not be disciplined or terminated for following the law.” (Exhibit 4 to the Investigative Report; Email dated July 13, 2020.)
- On July 28, 2020, Mr. Mizote sent a follow-up email to all council members, noting the legal implications of wrongfully disclosing medical information. This email was sent in reference to members “becoming aware of the recent medical leave of one of the City’s senior staff members” – Ms. Mata. (*Id.* Email dated July 28, 2020.)

3. Hostile work environment harassment.

Supporting evidence:

- See Number 1 above.
- Mr. Brieno wanted Ms. Mata fired and shared his view with others. (*Id.* pp. 32-33.)
- Mr. Brieno “made negative comments about Ms. Mata [during the May 5, 2020 City Council meeting].” (*Id.* p. 32.)
- Mr. Brieno said to Mr. Sanchez, “Ms. Mata could not handle the work and if she could not handle the work, maybe she should step aside.” (*Ibid.*)
- Mr. Brieno publicly accused Ms. Mata of pushing a particular project, a project that was contrary to Mr. Brieno’s wants. (*Id.* p. 33.)
- During the July 7, 2020 City Council meeting, Mr. Brieno publicly admonished Ms. Mata and her staff for being “heavy handed.” (*Id.* p. 33.)

4. Invasion of privacy.

Supporting evidence:

- Mr. Brieno told Mr. Sanchez that Ms. Mata was on stress leave. (*Id.* p. 34.)

5. Disclosure of Constitutionally protected privacy interests.

Supporting evidence:

- See Numbers 2 and 4 above.

6. **Improper disclosure of medical information.**

Supporting evidence:

- See Numbers 2 and 4 above.

7. **Disclosure of confidential personnel information.**

Supporting evidence:

- During the July 7, 2020 City Council meeting, Mr. Brieno publicly admonished Ms. Mata and her staff for being “heavy handed.” (*Id.* p. 33.)
- On July 13, 2020, City Attorney Ty Mizote was compelled to email Mr. Brieno as a follow-up to their July 10, 2020 meeting reminding him, “(i) statements of a personal nature [Ms. Mata’s medical condition] should not be made about City staff at public meetings; and (ii) a City staff member should not be discipline or terminated for following the law.” (Exhibit 4 to the Investigative Report; Email dated July 13, 2020.)

8. **Retaliation.**

Supporting evidence:

- Mr. Brieno told Mr. Pyle that he and Mr. Ramirez believed Ms. Mata should be fired. (*Id.* p. 32.)
- Mr. Brieno asked Mr. Olmos, during his job interview, if he would fire a department head. (*Ibid.*)
- During the July 7, 2020 Council meeting, Mr. Brieno publicly admonished Ms. Mata and her staff for being “heavy handed.” (*Id.* p. 33.)

9. **False light.**

Supporting evidence:

- Mr. Brieno said, “. . . he did not trust a woman to hold the job Ms. Mata held; that a man was better suited for that job, and that he did not know how a woman got that job over a man.” (Investigative Report, p. 32.)
- Mr. Brieno told others Ms. Mata and Mr. Cifuentez were having an affair. (*Id.* p. 34.)
- Mr. Brieno told Mr. Cifuentez “it seemed [Ms. Mata] had a backroom deal [with Self Help Enterprises] to him.” (*Id.* p. 33.)
- During the July 7, 2020 Council meeting, Mr. Brieno publicly admonished Ms. Mata and her staff for being “heavy handed.” (*Ibid.*)

In addition to the above, the investigative report also confirms Mr. Brieno engaged in **misfeasance and abuse of power** while acting in the capacity of a City of Hanford Council member.

Supporting evidence:

- Mr. Brieno admitted that . . . after he became a Council member, he met with Ms. Mata on this matter [the mobile home application] on behalf of the owners. (*Id.* p. 33.)

Attachment: RB Ltr to M. Zamora (1-6-2021) (Administration: Reject notice of government claim.)

Mr. Brieno's conduct is a clear violation of the **City Council Handbook**, which prohibits interference in staff functions. Specifically:

- Council Members shall accord the utmost courtesy to each other, City employees and the public appearing before the City Council, and shall refrain at all times from rude and derogatory remarks, public criticism of staff, remarks as to integrity, abusive comments and statement as to motives and personalities. (Handbook of Rules and Procedures of Hanford City Council, Section C(1), p. 19.)
- The "City Council shall deal with the administrative services of the City through the City Manager, except for the purpose of inquiry, and neither the City Council nor any member thereof, shall give orders to subordinates of the City Manager. No member of the City Council shall publicly criticize or censure any staff member of the City, and shall instead relay any criticism of a staff member privately through the City Manager."(Handbook of Rules and Procedures of Hanford City Council, Section M, p. 5.)

Damages

Despite all of the above, the conclusions contained in the report, and the statements Mr. Brieno made during his interview, it is evident Mr. Brieno denies any form of wrongdoing on his part, or that he is capable of even recognizing his illegal conduct. These events have resulted in intolerable and aggravated working conditions – conditions that Ms. Mata has been forced to endure for over a year. Conditions that have had a significant impact on her health and well-being. Conditions that have impacted her reputation. Conditions that have resulted in feelings of shame and embarrassment.

Based on information and belief, we believe Mr. Brieno, even prior to the investigation, had been coached, counseled and even admonished about his unlawful conduct of Ms. Mata. During his investigative interview, at a time when he should have fully understood the significance of his conduct, he reaffirmed his bias against women, his bias against strong women and his bias against Ms. Mata, evidencing his conduct has been intentional and motivated by malice.

Ms. Mata's damages are significant. She is entitled to backpay, frontpay, reimbursement of medical expenses, attorney fees, interest, compensation for emotional pain and suffering and, from Mr. Brieno directly, punitive damages.

Settlement Demand

Mr. Brieno's public censure is not enough to remedy his conduct. A public censure – at least alone – will only add to the harm suffered by Ms. Mata.

In his role as a City council member, Mr. Brieno is viewed as a supervisor, making the City of Hanford strictly liable for his conduct. Although prepared to litigate these matters to resolution, my client prefers to resolve them quietly and informally.

Therefore, my client seeks all of the following in exchange for a release of claims:

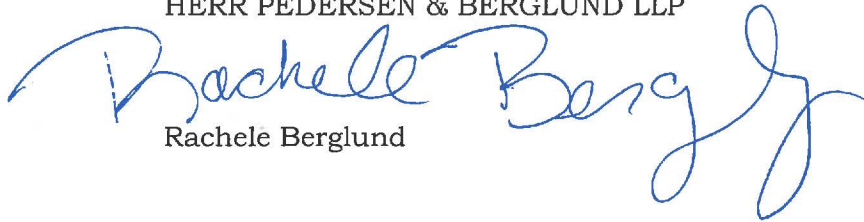
- The immediate resignation of Council member Art Brieno.
- Competent AB 1661, conflicts of interest and council member roles/responsibilities training for all Council members.
- Payment in the amount of \$1,250,000.

Please consider this a Claim pursuant to the California Tort Claims Act (Gov. Code §§ 810 *et seq.*) All notices may be sent directly to me. If you require completion of a separate form, please provide a copy of that form. In no way does the requirement of a separate form impact the timeliness of this Claim.

Please contact me with any questions. Thank you in advance for your ongoing courtesies and cooperation.

Very truly yours,

HERR PEDERSEN & BERGLUND LLP



Rachele Berglund

cc: Client

RB

RB Ltr to M. Zamora (1-6-2021).doc

Attachment: RB Ltr to M. Zamora (1-6-2021) (Administration: Reject notice of government claim.)



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: E
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SUBJECT:

Parks and Community Services: Approval of a new 3-year Ground Lease Agreement with Framework Racing for the Hanford BMX Track

RECOMMENDATION

That the City Council by motion, approve a ground lease agreement between the City of Hanford and Framework Racing, a non- profit organization, for the use of the Hanford BMX Track located at 501 S. 10th Ave.

BACKGROUND:

The original Kings County BMX track was located at the Kings County Fairgrounds and in February of 2005 the City of Hanford entered into a lease agreement with George Badasci, to relocate the track to its present location. Mr. Badasci moved all of the soil from the track at the fairgrounds and rebuilt the track at his own expense: where he operated the track until 2009. Hanford BMX was the next lessee and they leased and operated the property from 2009 to 2016. Since 2016, the track has been leased to Framework Racing up to the present day. Framework Racing is a member of USA BMX and has been able to keep the track sanctioned so that local, regional and state events can be secured.

Staff put together a Request for Applications (RFA) and put the notice out to the public on December 21, 2020 with an original deadline date of Friday January 15, 2021. The RFA was advertised on social media and on the City's web page. As the deadline loomed, the City had only received one application, so the deadline was extended to Friday January 22, 2020. When the application processed closed, the City had only received one application and it was from Framework Racing out of Hanford and Lemoore.

The president of Framework Racing is Michelle Weisser. Over the last few years Framework racing has performed several maintenance projects at their own expense to keep the track sanctioned as a USA BMX facility and hosted the following events:

- Weekly BMX events that have 80- 100 riders
- A USA BMX state qualifier in 2018 and 2019 that drew over 500 riders
- Toy Drives, Can Food Drives, Clinics and lessons for local riders

The highlights of the lease agreement are as follows:

- The lessee is responsible for all utilities on the property including the electrical bill.
- The lessee maintains the property and keeps it a sanction BMX USA track
- The lease is for 3 years with 2 one year renewals

FISCAL IMPACT:

ATTACHMENTS:

RFA (Public Notice)

FrameworkApp_

BMX Lease Agreement-TEMPLATE



PUBLIC NOTICE

REQUEST FOR APPLICATIONS (RFA)

Hanford BMX

Release Date: January 3, 2020
Deadline for Submission: January 22, 2020
Contact Person: Jason Glick, Parks Manager

City of Hanford
Parks and Community Services Department
321 N. Douty St. Suite B
Hanford, CA. 93230

REQUEST FOR APPLICATIONS

Hanford BMX

RELEASE DATE: January 3, 2020

CLOSING DATE: Applications must be received by January 23, 2020
by 5:00 P.M. PDT at the address listed below

CONTACT PERSON: Jason Glick, Parks Manager
(559) 585-2528
jglick@cityofhanfordca.com

ADDRESS: 321 N. Douty St. Suite B
Hanford, CA 93230

HOURS: MONDAY-FRIDAY 8:00 A.M.-5:00 P.M.

INTRODUCTION:

The City of Hanford desires qualified applicants to lease and operate the Hanford BMX Track located at (Attachment B Map)
501 S. Brown St. Hanford, CA 93230

Applicants should have strong knowledge in the operation and guidelines of a sanctioned USA BMX track. Have previous years of experience in the sport of BMX and have good administration skills.

Applicants must submit a one to two-page summary of their qualifications, plans for the future of the track and history in the sport of BMX racing.

Hanford BMX Request for Application

City of Hanford
Parks and Community Services Department
321 N. Douty St. Suite B
Hanford, CA. 93230

Framework Racing Inc.

A Non- Profit Organization

Michelle Weisser, Chairman

PO BOX 534

Lemoore CA, 93245

(559)212-7954

HanfordBMXRaceway@yahoo.com

Hello,

My Name is Michelle Weisser, I am the Chairman of the non-profit organization Framework Racing Inc, Framework Racing operates Hanford BMX Raceway and Lemoore BMX Raceway. Framework Racing Inc. was established in 2014. Framework Racing Inc. consists of 7 board members and multiple members/ volunteers. Each of the board members brings different ideas to support the organization.

Chairman- Michelle Weisser, Hanford Ca. has been involved with BMX since 2011. I have volunteered at several USABMX tracks throughout the local and state area. I have also assisted USABMX at regional championships. I have organized a National Event @ Lemoore BMX, organized multiple community events @ both Hanford BMX and Lemoore BMX. I have held several positions as a volunteer chairman, announcer, scorer, track administrator, fundraising coordinator, track sponsorship, and working with new riders to get them ready to ride the track.

Vice- Chairman- Marty Perryman, Hanford Ca. has been involved with BMX since 2018, when his two daughters started racing BMX. Marty has volunteered at the local track, helping with track maintenance, helping new riders get sized for gear and bikes, track officiating, and operating the starting gate. Marty has also been a reliable volunteer for Framework Racing through the years.

Treasurer- Allison Medley, Madera Ca. has been involved with BMX since 2015 when her children started racing BMX. Allison has volunteered wherever needed at multiple tracks, scoring, registering riders and at the snack bar. Allison most of the time can be found helping riders get signed up for racing and explaining the sport to new riders and families.

Secretary- Tai Alexander, Visalia Ca. has been involved with BMX since 2019 when her son started racing BMX. Tai has just begun her time volunteering at the track, due to her son now being able to do more on his own at the track. Tai can be found helping with scoring at the local track but is ready to learn more and help wherever needed.

Track Maintenance- Will Blackwell, Hanford Ca. Will has been involved with BMX since his daughter started racing in 2019. Will is a Firefighter for the city of Selma. Will spends most of his days off making sure the tracks are taken care of. Will has been maintaining the weeds, fixing broken bleachers, and maintaining the strider track @ Hanford BMX.

Track Maintenance- Larry Banuelos, Lemoore Ca. Larry has been involved with BMX since his son started racing BMX in 2019. Larry is a construction worker and had been very handy fixing items around both facilities, Hanford, and Lemoore BMX. Larry arrives early to all events and helps set up the track for race days.

Rider Support- Jaime Cuadros- Hanford ca. Jaime has been involved with BMX since 2019, when his daughter started racing BMX. Jaime volunteers at races by helping new riders and families understand the sport. Jaime gets the new riders set up with bikes and helmets and can answer any questions that may be asked. Both Jaime's sons have also started racing, Jaime and all three of his children have been traveling for racing and getting more involved with the sport.

For the past 3 years Framework Racing Inc, along with multiple volunteers have run and operated two local BMX facilities. Prior to taking over Hanford BMX, Framework Racing built and operated Lemoore BMX. There have been many times when things have not gone as planned, through those times it has grown the organizations strength and knowledge. Multiple members and Volunteers of Framework Racing have attended seminars and meetings that have focused on how to run a successful BMX track and BMX program. Framework Racing plans on sending all its board members to the next seminar so was can keep improving the BMX programs.

Framework Racing has made many improvements at Hanford BMX Raceway over the past 3 years. When Framework Racing took over Hanford BMX in 2017, there were many things that needed to be fixed and updated. The first projects there were completed were deep cleaning on bathrooms, landscaping, and some major track maintenance. Framework Racing has painted the building, fixed plumbing problems in both men's and women's bathrooms, repaired bleachers, fixed fencing, added new starting gate lights, re-built the BMX track, added railing to the starting hill, removed and repaired the shade structure on the starting hill, added concrete to back side of starting hill for staging riders, built a strider track for the little balance bike riders, and maintained to landscaping around the facility.

Framework Racing has also held many local and state events at Hanford BMX Raceway. Some of the community events have included, Ride a Bike with a Firefighter, canned food drives, free open house events for new riders, clinic and lessons with local Professional BMX racers, and Christmas toy drives. Hanford BMX Raceway hosts local weekly events, and yearly state race events that draw riders from all over California. Hanford BMX Raceway had one of the largest State qualifier races in 2018, and 2019, with over 500 riders at those events. Hanford BMX Raceway has also hosted multiple Race for life events which benefit the Leukemia & Lymphoma Society, Olympic Day races, and Bob Warnicke Scholarship races. All three of those races are either free races or fundraiser races.

Framework Racing has attended local community events to help promote Hanford BMX Raceway, such as Thursday night Market. At those events we talk about the sport, and recruit riders. Before taking over Hanford BMX Raceway the average riders at the track were around 12. Since taking over Hanford BMX Raceway we have recruited new riders and are continuing to see new riders come out to the track to try the sport. In 2020 Hanford BMX finished the year number 8 out of 14 tracks. On a regular Wednesday night at Hanford BMX, you will see between 80- 100 riders at the track. This shows that the sport of BMX is alive and thriving.

Framework Racing is planning on more projects soon. We will be adding fencing along the last straight of the track, to separate the strider track from the big track. We have been working on the track surface and will continue to improve the surface. We are looking into more landscape upgrading. We will be removing the tower that is in the middle of the track, the tower is not being used and is not a steady structure. We are also improving the track and the surrounding areas of the track.

Framework Racing and its volunteers have taken pride in maintaining and improving Hanford BMX Raceway. We believe that with the volunteerism we have and the dedication that we can continue to improve Hanford BMX Raceway, and provide a good and safe environment for local riders as well as riders that travel from throughout the state. To continue with future projects at Hanford BMX Raceway we will be participating in fundraising events and asking local businesses for donations or sponsorships. Framework Racing looks forward to the years ahead @ Hanford BMX Raceway.

I have attached a few pictures of projects and before and after photos. Please contact me with any questions or concerns regarding Hanford BMX Raceway.

Thank you,

Michelle Weisser, Framework Racing Chairman

(559)212-7954



Starting Hill, and staging area when we took over Hanford BMX

Starting Hill and staging area upgrades



New Window/ door on concession stand building.





Overgrown grass and broken bleachers when we took over track



Cut grass and removed old shade structure



Cleaned up first straight fixed bleachers and fresh cut grass

Below: Track rebuild, and building strider track



**CITY OF HANFORD
GROUND LEASE**

This Ground Lease ("Lease") is made and entered into effective the [REDACTED] day of [REDACTED], [REDACTED], by and between the **CITY OF HANFORD**, a municipal corporation, with its principal place of business in Hanford, California ("Lessor"), and [REDACTED], a non-profit organization, with its principal place of business in Hanford, California ("Lessee"). Lessor and Lessee are collectively referred to as the "Parties and singularly as a "Party".

RECITALS

A. Lessor is the owner of that certain property and improvements thereon ("Premises"), including, without limitation, a structure ("Concession Building"), as more particularly described in Exhibit "A" attached hereto and incorporated herein by reference.

B. Lessee desires to lease the Premises from Lessor, and Lessor wishes to lease the Premises to Lessee.

NOW THEREFORE, in consideration of the mutual covenants set forth herein and for the good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties agree as follows:

1. PREMISES

Lessor hereby leases the Premises to Lessee and Lessee hereby leases the Premises from Lessor on the terms and conditions set forth in this Lease.

2. TERM OF LEASE AND CONDITIONS TO COMMENCEMENT

A. Except as otherwise provided, this term of this Lease shall be one (1) year, effective at 12:00 a.m., [REDACTED] ("Commencement Date") and terminating at 11:59 p.m. on [REDACTED] ("Term"). The Lease will, however, automatically renew for three (3) additional one (1) year periods unless either Party informs the other in writing, at least thirty (30) calendar days prior to the end of the then-current annual term of the Party's decision to forego the automatic renewal.

B. Commencement of this Lease will be conditioned upon: i) Lessor's receipt from Lessee of three (3) letters of recommendation that generally reference and describe the Lessee's BMX track operator's ("Operator's") character and ability to undertake the responsibility of operating at the Premises, a youth bicycle competition program described herein; (ii) Operator's successful completion of a fingerprint background check, with Operator satisfying the City's guidelines for volunteers working with children; (iii) Lessor's determination, in its sole discretion, that Tenant satisfies Lessor's security requirements and guidelines; and (iv) Lessee's submission of a calendar of events that Lessee intends to offer at the Premises from the Commencement Date through [REDACTED]. Thereafter, Lessee shall submit a six (6) month calendar of events to Lessor on or before November 15 and May 15 of

each year as long as the lease remains in effect.

3. RENT

In lieu of the payment of rent, Lessee shall satisfy the obligations outlined in this Lease.

4. USE OF PREMISES AND UTILITIES

A. The Premises shall be used by Lessee only for the purpose of operating a youth bicycle competition (BMX) program and for no other use or purpose without Lessor's prior written consent, which consent may be withheld in the sole and absolute discretion of Lessor. Lessee may conduct concession sales in the Concession Building; however, Lessee may not sell, nor allow at any time, the possession of alcohol or tobacco products in, on, or about the Premises, including, without limitation, the parking area.

B. Lessee shall not use or occupy the Premises for any other purpose or in violation of any Federal, State or local law or ordinance. Additionally, Lessee shall not do or permit anything to be done in, on, or about the Premises or use or allow the Premises to be used for any unlawful or objectionable purpose. Lessee will adhere to all applicable Federal, State, and local laws, ordinances, rules, and regulations.

C. Lessee shall establish and pay for all utilities and services furnished to the Premises, including, without limitation, the Concession Building, or used by Lessee including, without limitation, water, sewer, refuse, natural gas, electricity and telephone service and all connection charges or other charges related thereto. All utility charges shall be paid by Lessee before they become delinquent.

D. Lessor and Lessee agree that the Premises' primary use shall be as a storm drainage basin. Nothing in this Lease shall prevent Lessor from using the Premises as a storm drainage basin. Lessee agrees that its use of the Premises pursuant to this section shall be subordinate to Lessor's use of the Premises as a storm drainage basin. Lessee's use and possession of the Premises is subject to Lessor's sole determination that the Premises are not required for use as a storm drainage basin. Lessee further agrees that Lessor may terminate this Lease and revoke Lessee's possession and use of the Premises at any time when, in the sole and absolute determination of Lessor, the Premises are required for use by Lessor as a storm drainage basin or other such facility needed to serve the citizens of Hanford.

5. CONDITION AND MAINTENANCE OF PREMISES

A. Lessee acknowledges that: (i) it is familiar with the Premises; (ii) the Premises are in good and safe condition; and (iii) Lessee accepts the Premises in an "as-is," "where-is" condition. Lessee further acknowledges that Lessor will have no duty or responsibility, under any circumstances, to repair or improve the Premises under California Civil Code Sections 1931 or 1941 or any other law, ordinance, rule, or regulation.

B. Lessee shall, at Lessee's sole cost and expense, keep the Premises and all

improvements located on the Premises, including, without limitation, the Concession Building and the restrooms, in good, safe, and sanitary condition and repair, ordinary wear and tear excepted. Lessee shall repair, maintain, and improve all systems in, on and about the Premises, including, without limitation, all HVAC or other heating and cooling systems, roofs, walls, and foundations, and all water, sewer and plumbing systems. Lessee shall maintain, repair, and improve the BMX track in a safe condition to prevent injury to all persons utilizing the facility.

C. Lessee shall keep the Premises and Concession Building clean and free of any unsightly dirt, trash and garbage.

D. Lessee shall be responsible for the maintenance of the grounds utilizing good grounds maintenance procedures as determined by Lessor, including without limitation, satisfaction of the duties contained in Exhibit "B" attached hereto and incorporated herein.

E. If, at any time, the Premises fall into disrepair, in the opinion of Lessor, or should the Premises not be maintained in a clean, proper and safe operating condition as determined by Lessor, Lessee shall have ten (10) calendar days from the date of written notice from Lessor of such disrepair or lack of maintenance, to make the necessary repairs and to clean the Premises to the satisfaction of Lessor; provided however, Lessee will take immediate action with respect to any condition that threatens the public's safety. If such repairs and cleaning are not completed within said ten (10) day period (or immediately if there is a threat to public safety), Lessor may, but shall not be required to, enter the Premises and complete all necessary repairs and/or cleaning. In such case, Lessee shall reimburse Lessor for all costs and expenses incurred by Lessor immediately upon presentation by Lessor to Lessee of a bill for the costs and expenses of such repairs and cleaning.

F. Lessee shall either clean or caused to be cleaned the restrooms located in the Concession Building **each day** that the Premises are used for the conduct of Lessee's activities identified in Section 4 of this Lease.

G. Failure by Lessee to satisfy the requirements of this Section 5 shall constitute a material default of this Lease.

6. **ALTERATIONS**

A. Lessee shall not make any alterations to the Premises, or allow any alterations to the Premises or Concession Building without Lessor's express prior written consent, which consent may be withheld in the sole and absolute discretion of Lessor.

B. Lessee may, however, at its own cost and expense, furnish all equipment and make all improvements, including without limitation, for the creation of earthen jumps, ramps and other features required for the conduct of Lessee's activities identified in Section 4 of this Lease ("BMX Improvements"). Prior to commencement of construction of the BMX Improvements, Lessee shall submit plans to Lessor identifying the location and size of all BMX Improvements and whether soil or fill material will be imported and the amount to be imported. Upon Lessor providing its consent to

the construction of the BMX Improvements, Lessee may commence construction of the BMX Improvements.

C. All of Lessee's equipment, improvements, and alterations shall be removed from the Premises upon termination of this Lease and all earthen features removed and the Premises returned to a level condition unless otherwise instructed by Lessor. Provided however, Lessee will not remove any soil or fill material from the premises when returning the premises to level condition unless Lessee imports such soil or fill material from an offsite source.

D. In the event Lessee Imports soil or fill material to construct the BMX improvements, Lessee will remove such soil or fill material when returning the premises to level condition unless Lessor instructs Lessee to leave such material onsite.

E. All soil and fill material imported by Lessee shall be clean and free of material that may be subject to federal or state regulation. The condition of the soil or fill material to be imported will be evidenced by a soils study/report prepared by a licensed engineer approved by Lessor.

7. MECHANIC'S LIENS

Lessee shall, at all times indemnify, defend, and hold Lessor harmless against all claims for labor and materials in connection with the construction, repair, maintenance, improvement, and operation of the premises and the costs of defending against such claims including without limitation, reasonable attorney fees. If any lien or notice of lien is filed or recorded against any of Lessor's real property, including, without limitation, the Premises, Lessee shall within ten (10) days of such filing or recording either: (a) take all actions necessary to have a valid release of lien recorded or filed, or (2) provide Lessor with a bond, cash, or other security acceptable to the Lessor sufficient to pay in full all claims of persons seeking relief under the lien.

8. PERSONAL PROPERTY TAX

A. Personal Property Taxes: If, during the Term or any extension thereof, Lessee is required to pay taxes, as defined below, Lessee, shall be liable for and shall pay at least ten (10) days before delinquent all taxes, assessments, license fees, and other charges (collectively "Taxes") that are levied and assessed against Lessee's personal property or trade fixtures Installed or located In or about the Premises and Lessee's possessory interest in the Premises, and that become payable during the Term. On written demand by Lessor, Lessee shall furnish Lessor with satisfactory evidence of these payments.

B. Lessee Acknowledgment of Possessory Interest Taxes: Lessee acknowledges, understands and agrees that pursuant to California Revenue and Taxation Code Section 107.6 that (1) this Lease may create a possessory interest which may be subject to property taxes payable by Lessee; (2) the property interest of Lessee created by this Lease may be subject to property taxes payable by Lessee; and (3) this Lease may be subject to property taxes payable by Lessee. Lessee agrees to pay all such taxes, if any, before the same become delinquent.

9. INSURANCE REQUIREMENTS

A. Lessee, at Lessee's own cost and expense, shall procure and maintain, for the duration of this

Lease, the following insurance policies.

- (1) Workers' Compensation Coverage: Lessee shall maintain workers' compensation insurance and employer's liability insurance for its employees in accordance with the laws of the State of California, The Insurer shall agree to waive all rights of subrogation against Lessor.
 - (2) General Liability Coverage: Lessee shall maintain commercial general liability Insurance in an amount not less than Five Million Dollars (\$5,000,000.00) per occurrence and not less than Ten Million Dollars (\$10,000,000.00) aggregate coverage for bodily injury personal injury and property damage. Lessee's commercial general liability policy shall be endorsed (or Lessee shall obtain separate coverage) to cover any and all damage to the Premises that may be caused by Lessee.
 - (3) Automobile Liability Coverage: Lessee shall maintain automobile liability insurance covering bodily injury and property damage in an amount not less than the One Million Dollars (\$1,000,000.00) combined single limit for each occurrence.
 - (4) Personal Property Coverage: Lessee will maintain Insurance coverage for the loss of and damage to the product and other personal property that Lessee may store or place on or within the Premises during the term of this Lease. Such coverage shall be no less than the full replacement value of all such product and personal property located at the Premises.
- B. Endorsements: Insurance policies required hereunder shall be with insurers possessing a Best's rating of no less than A: VII and which are licensed to conduct business in California, and shall be endorsed as follows:
- (1) With the exception of Lessee's workers' compensation and personal property coverage, Lessor shall be named as additional insureds on all such policies of insurance. Lessee shall cause its Insurers to issue endorsements identifying Lessor as additional insureds.
 - (2) Lessee's policies of insurance shall be considered primary Insurance with respect to any coverage maintained by Lessor. Any insurance maintained by Lessor shall be considered excess insurance only and shall not contribute with respect to the policies of insurance obtained by Lessee.
 - (3) These policies of insurance shall act for each insured and additional insured as though a separate policy had been written for each, except with respect to the limits of liability of the insuring company.
 - (4) Lessee's insurers waive all rights of subrogation with respect to Lessor.

- C. Lessee's Certificate of Insurance shall state that Lessor will be notified at least fifteen (15) calendar days prior to any cancellation, non-renewal, material change or coverage reduction with respect to any Lessee insurance required hereunder.
- D. Lessee's general liability insurance coverage shall be at least as broad as Insurance Services Office commercial general liability coverage (occurrence form CG0001). The automobile liability Insurance coverage shall be at least as broad as Insurance Services Office form number CA 0001 Code 1 (any auto).
- E. Certificates of Insurance and Endorsements Lessee shall, within five (5) business days of Lessee's execution of this Lease. provide to Lessor certificates of insurance with original endorsements as evidence of the insurance coverage required herein. Updated Certificates of Insurance and endorsements shall automatically be provided to Lessor within five (5) business days of Lessee's renewal or modification of its insurance coverage.

10. INDEMNITY

A. No Liability of Lessor

Lessor shall not be liable to Lessee for any injury or damage that may result to any person or property due to the condition of the Premises; provided however, such exemption from liability shall not apply to conditions caused by the gross negligence or willful misconduct of Lessor, its officers, officials, employees, representatives, agents, or volunteers (collectively "Lessor and Lessor Parties").

B. Indemnification of Lessor

Lessee shall indemnify, defend and hold Lessor and Lessor Parties harmless from and against any and all liability, claims, loss, costs, damages, attorney's fees and any other amounts in any way associated with, related to or arising from the condition, use, or occupancy of the Premises, or from any activity, or thing done, permitted or suffered to be done in, about, or around the Premises, and Lessee shall further indemnify, defend, and hold Lessor and Lessor Parties harmless, against and from any and all claims, loss, costs, damages, attorney's fees and any other amounts, arising from any breach or default in the performance of any obligation on Lessee's part to be performed under the terms and conditions of this Lease, or arising from any act, negligence, fault, or omission of Lessee or of Lessee's members, directors, officers, agents, representatives, employees, volunteers, inviteesc participants, or contractors for any injury or damage to any person or property whatsoever and from any and all costs, attorneys' fees, expenses and liabilities incurred as a result of any such claim or action or prosecution brought upon such claims. and in case any action or proceeding be brought against Lessor, or Its officers, officials, employees, representatives. agents. contractors or volunteers, by reason of such claims, Lessee, upon demand from Lessor, shall defend the same at Lessee's sole cost by counsel satisfactory to Lessor.

C. Duty to Report Fires and Accidents.

Lessee shall give prompt notice to Lessor In case of fire or accidents at the Premises.

D. Survival of Obligations

The provisions of subsections A and B, above shall survive the termination of this Lease.

11. ASSIGNMENT

Lessee shall not, voluntarily or involuntarily, assign, mortgage, hypothecate or encumber its interest in this Lease or in the Premises, or sublease all or any part of the Premises or allow any other person or entity to occupy or use all or any part of the Premises without the prior written consent of Lessor, which consent will not be unreasonably withheld. Any such assignment, encumbrance or sublease without Lessor's prior written consent shall be voidable and at Lessor's election and shall constitute a material default by Lessee under this Lease. Consent to any assignment, encumbrance or sublease shall not operate as a waiver of the necessity for prior written consent of Lessor to any subsequent assignment or sublease and the terms of such consent shall be binding upon any person holding by. Under, or through Lessee but shall not release Lessee from any of its obligations under this Lease

12. ENTRY BY LESSOR

Lessor and its authorized representatives shall have the right to enter the Premises and inspect the same at any time, as determined in the sole discretion of Lessor. Lessor and its authorized representatives shall have the right to enter and show the Premises to prospective tenants, to post notices of non-responsibility and for-rent or for-lease signs at any time during the Term of this Lease with twenty-four (24) hours prior oral notice to Lessee. Lessee hereby waives any claim for damage for any injury or inconvenience to or interference with Lessee's use of the Premises, any loss of occupancy or quiet enjoyment of the Premises, or any other loss occasioned by Lessor's entry.

13. DESTRUCTION OF PREMISES

Should the Premises or any part of the Premises be destroyed by a cause other than Lessee's negligence or intentional misconduct, Lessor may elect to repair and/or rebuild the Premises or terminate this Lease. If Lessor elects to repair and/or rebuild the Premises, this Lease shall remain in full force. The Rental shall, however, be temporarily adjusted to reflect the portion of the Premises that are unusable, with such temporary adjustment ceasing once use of the Premises has been restored. There shall be no adjustment to the Rental should the Premises or a portion of the Premises be destroyed as a result of the negligence or intentional misconduct of Lessee or Lessee's members, directors, officers, agents, representatives, employees, volunteers, invitees, participants or contractors, and it shall be Lessee's responsibility to restore the Premises at Lessee's sole cost.

14. DEFAULT AND REMEDIES

A. Acts Constituting a Default

Any and all of the following actions shall constitute default of this Lease:

- (1) Use or the Premises for any purpose other than as authorized in this Lease
- (2) The failure by Lessee to make any payment of Rental or any other amount to be made by Lessee hereunder, as and when due, where such failure shall continue for a period of three (3) days after written notice thereof from Lessor to Lessee; provided, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure, Section 1161; and
- (3) The failure by Lessee to observe or perform any of the express or implied covenants or provisions of this Lease to be observed or performed by Lessee, other than as specified in Section 3 above, where such failure shall continue for a period of ten (10) days after written notice thereof from Lessor to Lessee; provided, however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure, Section 1161, provided further, that if the nature of Lessee's default is such that more than ten (10) days are reasonably required for its cure, then Lessee shall not be deemed to be in default if Lessee shall commence such cure within said ten (10) day period and thereafter diligently prosecute such cure to completion; provided further, Lessee will be deemed to be in default if Lessee fails to repair or address any condition, as required by Section 5 above, that threatens the public's safety

B. Remedies

Lessor shall have the following remedies if Lessee commits a default. These remedies are not exclusive but are cumulative and in addition to any remedies now or hereafter allowed by law or elsewhere provided.

(1) Lessee's Right to possession Not Terminated

Lessor can continue this Lease in full force and effect, and the Lease will continue in effect as long as Lessor does not terminate Lessee's right to possession or the Premises, and Lessor shall have the right to collect rent when due. During the period Lessee is in default, Lessor can enter the Premises and relet them, or any part of them, including the Concession Building, to third parties for Lessee's account. Lessee shall be liable immediately to Lessor for all costs Lessor incurs in reletting the Premises. Reletting can be for a period shorter or longer than the remaining term of this Lease. Lessee shall pay to Lessor the rent due under this Lease on the date the rent is due less the rent Lessor received from any reletting. No act by Lessor allowed by this Section shall terminate or cause a forfeiture of this Lease unless Lessor notifies Lessee that Lessor elects to terminate and forfeit this Lease.

(2) Termination of Lessee's Right to Possession

Upon Lessee's default, Lessor can terminate Lessee's right to possession of the Premises. No act by Lessor other than giving notice to Lessee shall terminate or cause a forfeiture of this Lease. Acts of maintenance, efforts to relet the Premises or the appointment of a receiver on Lessor's initiative to protect Lessor's interest under this

Lease shall not constitute a termination of Lessee's right to possession. On termination, Lessor has the right to recover from Lessee:

- a. The worth, at the time of the award of the unpaid rent that had been earned at the time of termination of this Lease;
- b. The worth, at the time of the award of the amount by which the unpaid rent that would have been earned after the date of termination of this Lease until the time or award exceeds that amount of the loss or rent that Lessee proves could have been reasonably avoided;
- c. The worth, at the time of the award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds that amount of the loss of rent Lessee proves could have been reasonably avoided; and
- d. Any other amount, and court costs, necessary to compensate Lessor for all detriment proximately caused by Lessee's default of this lease or which in the ordinary course of things, would be likely to result therefrom.

"The worth, at the time or the award" as used in (a), (b) and (c) of this subsection, is to be computed by allowing interest at the rate of ten percent (10%) per annum or the maximum amount allowed by law, whichever is greater. "The worth, at the time of the award," as referred to in (d) of this subsection, is to be computed by discounting the amount at the discount of the Federal Reserve Bank of San Francisco at the time of award, plus one percent (1%).

C. Interest on Unpaid Rent rental and other amounts not paid when due shall bear interest at the rate of ten percent (10%) per annum or the maximum amount allowed by law, whichever is less, from the date due until paid.

D. Administrative Fee should Lessee breach any term or condition of this Lease including but not limited to, failure to pay rent as required hereunder, Lessee shall pay Lessor an administrative fee of One Hundred Dollars (\$100.00) for each such breach.

15. CITY MUNICIPAL CODE

Lessee hereby acknowledges and agrees that this Lease is subject to and Lessee shall abide by the applicable chapters of the Hanford Municipal Code and any and all ordinances related thereto, including without limitation the requirement that Lessee obtain a City of Hanford business license.

16. TIME OF THE ESSENCE

Time is of the essence in the performance of each provision of this Lease.

17. SUCCESSORS AND ASSIGNS

Subject to the provisions of Section 11 of this Lease the covenants and agreements contained in this Lease shall be binding upon and shall inure to the benefit of the successors and assigns of the

Parties.

18. ATTORNEY'S FEES

If an action at law or in equity is necessary to enforce or interpret the terms of this Lease, the prevailing party shall be entitled to reasonable attorney's 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 Lease, or the documentation related hereto, the parties hereby submit to the jurisdiction and venue of the Superior Court for the County of Kings, State of California for any proceeding arising hereunder.

19. SOLE AND ONLY AGREEMENT

This Lease supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to matters set forth herein, and contains all of the covenants and agreements between the parties related thereto. Each party to this Lease 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 Lease and no other agreement, statement or promises shall be valid or binding.

20. NOTICE

All notices and other communications hereunder shall be deemed to have been given when delivered personally, at the time confirmed for delivery if by telegram or telex, or if mailed by depositing the same in the United States mail, certified or registered mail, return receipt requested, postage prepaid and addressed as follows:

If to Lessor:

City of Hanford
Attn: Parks and Community Services Director
321 N. Douty Street, Ste. B
Hanford, CA 93230

If to Lessee:

The parties hereto may change their address as set forth in this Section by providing the other party with written notice thereof.

21. INVALIDITY

If any provision of this Lease 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.

22. AMENDMENT

No change, amendment or modification of this Lease shall be valid unless the same is in writing and signed by the parties hereto.

23. GOVERNING LAW

This Lease shall be construed and governed pursuant to the laws of the State of California.

24. WAIVER

No waiver or any breach of any term, condition or provision of this lease shall constitute a waiver of any other breach of any other term, condition or provision and no consent of one party to any departures by the other shall be effective unless such waiver shall be in writing and shall be signed by the non-waiving party or a duly authorized agent thereof and the same shall be effective only for a period, on the conditions and for the specific instances and purposes specified in such writing. No notice to or demand on the non-waiving party in any case shall entitle the non-waiving party to any other or further notice or demand in similar or other circumstances.

IN WITNESS WHEREOF, the parties have executed this Lease effective on the day and in the year first set forth above.

LESSOR:

CITY OF HANFORD, a Municipal Corporation

By: _____
Mario Cifuentez
City Manager

LESSEE:

Company: _____

By: _____

Print Name and Title: _____

EXHIBIT "A"
HANFORD, KINGS COUNTY, CALIFORNIA

Attachment: BMX Lease Agreement-TEMPLATE (Parks: Approval of Ground Lease Agreement with Framework Racing)

EXHIBIT "B"

Lessee shall perform the following grounds maintenance duties on the Premises in accordance with generally accepted landscaping practices:

1. Perform proper irrigation management of the facility.
2. Re-establish the lawn on the premises.
3. Establish a mowing schedule, both seasonally in the winter and weekly in the spring, summer and fall.
4. Keep trees and shrubs properly trimmed in accordance with the Hanford Municipal Code.
5. Clean and maintain restroom facilities.
6. Keep the premises free of graffiti
7. Keep the internal and external premises free of trash.



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: F
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SUBJECT:

Parks and Community Services: Adoption of Resolution No. 21-06-R, Authorizing the City Manager to submit an application for funding under the Proposition 68 Statewide Park and Development Community Revitalization Program

RECOMMENDATION:

That the City Council, by motion, approve the Adoption of Resolution No. 21-06-R, Authorizing the City Manager to submit an application for funding under the Proposition 68 Statewide Park and Development Community Revitalization Program.

BACKGROUND:

Over the past five months, staff has been preparing a grant application for the Statewide Park and Development Community Revitalization Program funded by Proposition 68. Extensive community outreach has been conducted, results tabulated and a concept drawing of the proposed new park has been completed, which incorporates the community's choices of recreation features to be included.

The authorizing resolution is required for the grant proposal submittal, which is due on March 12, 2021. The authorizing resolution serves two purposes:

1. It is the means by which the applicant's governing body shows it is aware of all of the terms of the contract and provides confirmation that the applicant has the funding to complete the proposed project if the grant is awarded.
2. Designates a position title to represent the Governing Body on all matters regarding the application and project. The incumbent in this position is referred to as the Authorized Representative.

During the Study Session at the February 2, 2021 Council meeting, the Council was presented the proposed park concept drawing. There was consensus and approval of the proposed concept drawing. Per Council's comments, an additional outdoor basketball court will be added and the number of parking spaces will be checked to ensure ample parking is available during large sporting or special events.

The Authorized Representative for this project is designated as the City Manager.

FISCAL IMPACT:

The fiscal impact of the proposed Proposition 68 grant application is unknown at this time. Staff and the consulting landscape architect are currently in the process of calculating projected cost estimates for the acquisition of land and development of the proposed new park. On November 4, 2019, the City received a letter from the property owner supporting his willingness to sell 40 acres subject to award of the grant. A price per acre has been negotiated. The phasing of the project will be determined once the total project costs are determined and the availability of other funding sources is identified.

ATTACHMENTS:

Prop 68 Application Resolution

RESOLUTION 21-06-R
A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HANFORD
APPROVING THE APPLICATION STATEWIDE PARK DEVELOPMENT
AND COMMUNITY REVITALIZATION PROGRAM GRANT FUNDS

WHEREAS, the State Department of Parks and Recreation has been delegated the responsibility by the Legislature of the State of California for the administration of the Statewide Park Development and Community Revitalization Grant Program, setting up necessary procedures governing the application; and

WHEREAS, said procedures established by the State Department of Park and Recreation require the applicant to certify by resolution the approval of the application before submission of said application to the State; and

WHEREAS, successful Applicants will enter into a contract with the State of California to complete the Grant Scope project;

NOW THEREFORE, BE IT RESOLVED that the City Council hereby: approves the filing of an application for the Hanford Memorial Park; and

1. Certifies that said Applicant has or will have available, prior to the commencement of any work on the project included in this application, the sufficient funds to complete the project; and
2. Certifies that if the project is awarded, the Applicant has or will have sufficient funds to operate and maintain the project; and
3. Certifies that the Applicant has reviewed, understands, and agrees to the General Provision contained in the contract shown in the Grant Administration Guide; and
4. Delegates the authority to the City Manager to conduct all negotiations, sign and submit documents, and payment requests, including, but not limited to applications, agreements, amendments and payment requests, which may be necessary for the completion of the Grant Scope, and
5. Agrees to comply with all applicable federal, state and local laws, ordinances, rules, regulation and guidelines.
6. Will consider promoting inclusion per Public Resources Code §80001 (b)(8 A-G).

ADOPTED ON February 16, 2021, by the City Council of the City or Hanford by the following vote:

AYES: _____

NOES: _____

ABSENT: _____

ABSTAIN: _____

 FRANCISCO RAMIREZ
 MAYOR of the City of Hanford

Attest:

 NATALIE CORRAL
 CITY CLERK

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

I, Natalie Corral, 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 16th day of February 16, 2021.

Date: _____

 City Clerk

Attachment: Prop 68 Application Resolution (Parks: Prop 68 Grant Application Resolution)



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: G
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SUBJECT:

Public Works: Authorization for Reimbursements to Presidio JJR Bella Vista 128, LLC., in the amount of \$35,702.33, for the construction of off-site street improvements along the development frontage of Tract No. 918, Unit No. 2 (Centennial Drive and Devon Street), \$4,960.24, for the oversizing of the sewer main within Centennial Drive from an 8 inch to a 12 inch, and \$6,839.34, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch. .

RECOMMENDATION:

That the City Council, by motion:

1. Authorize a Reimbursement to Presidio JJR Bella Vista 128, LLC., in the amount of \$35,702.33, for the construction of off-site street improvements along the development frontage of Tract No. 918, Unit No. 2;
2. Authorize a Reimbursement to Presidio JJR Bella Vista 128, LLC., in the amount of \$4,960.24, for the oversizing of the sewer main within Centennial Drive from an 8 inch to a 12 inch; and
3. Authorize a Reimbursement to Presidio JJR Bella Vista 128, LLC., in the amount of \$6,839.34, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch.

BACKGROUND:

On June 17, 20189 Council approved the Subdivision Agreement with Presidio JJR, which included Conditions of Approval, for the development of Tract No. 918, Unit No. 2 located at the northwest corner of Centennial Drive and Devon Street. As a condition of approval of the Final Map, the developer was required to widen and improve Centennial Drive along their development frontage. The street improvements consisted of roadway widening, per Council approved City Standards, including the installation of curbs, gutters, and sidewalk.

If approved by council, reimbursements to developers will be provided immediately, as all work has been accepted by the City.

FISCAL IMPACT:

The FY 20/21 Transportation CIP budget provides \$200,000.00 for unscheduled arterial upgrades and traffic signal installation projects, the FY20/21 Wastewater CIP provides \$50,000.00 for sanitary sewer oversizing improvements, and the FY20/21 Water CIP provides \$50,000.00 for water oversizing improvements.

A copy of the Budget Pages for each account are attached for Council Review.

ATTACHMENTS:

Tract 918 Unit 2 Reimbursements

Transportation Budget Page

Wastewater Budget Page

Water Budget Page

Tract 918 Unit 2 Reimbursements

Street Improvements (Centennial Drive)

<u>Item</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total Reimbursement</u>
4" AC/7"AB	7350	sf	\$3.37	\$24,769.50
Fog Seal	7350	sf	\$0.07	\$514.50
Curb & Gutter	245	lf	\$11.95	\$2,927.75
Mobilization	1	ls	\$1,000.00	\$1,000.00
Rough Grading - Centennial Drive	500	cy	\$2.81	\$1,405.00
Final Grading - Curb & Gutter	245	1.78	\$1.75	\$428.75
SubTotal				\$31,045.50
Engineering (15%)				\$4,656.83
Grand Total				\$35,702.33

Tract 918 Reimbursements

Sanitary Sewer Oversizing (Centennial Drive)

<u>Item</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total Reimbursement</u>
Sewer Main (8" to 12")	243	lf	\$17.75	\$4,313.25
SubTotal				\$4,313.25
Engineering (15%)				\$646.99
Grand Total				\$4,960.24

Tract 918 Reimbursements

Water Oversizing (Centennial Drive)

<u>Item</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total Reimbursement</u>
Water main (8" to 18")	243	lf	\$18.75	\$4,556.25
Water Valves (8" to 18")	1	ea	\$541.00	\$541.00
Blowoff (8" to 18")	1	ea	\$850.00	\$850.00
SubTotal				\$5,947.25
Engineering (15%)				\$892.09
Grand Total				\$6,839.34

Unscheduled Arterial Upgrades & Traffic Signal Installation

Project Background:

This fund will be used to reimburse developers who are required to construct qualifying arterial street improvements that exceed their project's transportation mitigation impact fee share.

Existing Conditions:

Project Justification:

This fund will set aside funds to reimburse developers that are required to construct street improvements, as part of project conditions of approval, that are considered to be over sized.

Fiscal Implications:

Funding for this program will be allocated from transportation impact fee reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	200,000	200,000	200,000	200,000	200,000
	Department Overhead	18,019				
Total Expenditure		\$218,019	\$200,000	\$200,000	\$200,000	\$200,000
Revenue	Funding					
	181 Transportation Impact Fees	218,019	200,000	200,000	200,000	200,000
Total Funding		\$218,019	\$200,000	\$200,000	\$200,000	\$200,000

Sanitary Sewer Main Oversizing Requirements

Project Background:

The City reimburses developers that are required to upsize their main installation to provide additional capacity in compliance with the City's Sanitary Sewer Master Plan.

Existing Conditions:

Project Justification:

As provided by City Ordinance, these funds will reimburse developers for the costs attributed to oversized sewer mains to provide service for future growth demands.

Fiscal Implications:

Reimbursement funds for oversized improvements will be allocated from Wastewater Impact Fee reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	50,000	50,000	50,000	50,000	50,000
	Department Overhead	4,505				
Total Expenditure		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000
Revenue	Funding					
	186 Wastewater Impact Fees	54,505	50,000	50,000	50,000	50,000
Total Funding		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000

Unscheduled Main Extensions / Replacements

Project Background:

These funds are for unanticipated projects which occur when a developer is connecting to our water system and requires the main to be extended beyond the project boundaries. These funds could also be utilized for replacement of undersized or deteriorated water mains.

Existing Conditions:

Project Justification:

These funds will be used to reimburse developers for the costs attributed to extending water mains beyond their project frontage in order to provide service to their project. This account could also be utilized for unscheduled emergency repairs on deteriorated or undersized mains within the water system.

Fiscal Implications:

Funding for Unscheduled Main Extensions/Replacements will be allocated from water capital reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	50,000	50,000	50,000	50,000	50,000
	Department Overhead	4,505				
Total Expenditure		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000
Revenue	Funding					
	391 Water Capital	54,505	50,000	50,000	50,000	50,000
Total Funding		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021

AGENDA SECTION: H

SUBJECT:

Public Works: Authorization to reimburse Presidio JJR Bella Vista 128, LLC., \$159,517.84 for the construction of off-site street improvements, along the development frontage of Tract No. 919, authorize an additional appropriation of \$163,943.21 from the Transportation Impact Fee Reserves, and reimburse Presidio JJR Bella Vista 128, LLC., \$15,378.95, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch. (Centennial Drive and Fargo Avenue)

RECOMMENDATION:

That the City Council, by motion:

1. Authorize the Reimbursement to Presidio JJR Bella Vista 128, LLC., \$328,245.88 for the construction of off-site street improvements along the development frontage of Tract No. 919.
2. Authorize an additional appropriation of \$163,943.21 from the Transportation Impact Fee Reserves.
3. Authorize the Reimbursement to Presidio JJR Bella Vista 128, LLC., \$15,378.95, for the oversizing of the water main within Centennial Drive from an 8 inch to an 18 inch.

BACKGROUND:

On August 4, 2020, Council approved the Subdivision Agreement with Presidio JJR, which included Conditions of approval, for the development of Tract No. 919, Unit No. 2 located at the southwest corner of Centennial Drive and Fargo Avenue. As a condition of approval of the Final Map, the developer was required to widen and improve Centennial Drive along their development frontage. The street improvements consisted of roadway widening, per Council approved City Standards, including the installation of curbs, gutters, and sidewalk.

If approved by council, reimbursements to the developer will be provided immediately, as all work has been accepted by the City.

FISCAL IMPACT:

The FY 20/21 Transportation CIP budget provides \$200,000.00 for unscheduled arterial upgrades and traffic signal installation projects and the FY20/21 Water CIP provides \$50,000.00 for water oversizing improvements.

Council on this same agenda has approved a reimbursement for \$35,702.33 for a different project from the FY20/21 Transportation Capital Budget. An additional appropriation of \$163,948.21 from the Transportation Impact Fee Reserves is necessary to complete this reimbursement. There is approximately \$1,562,000 in unencumbered reserves in the Transportation Impact Fee Reserves.

Transportation Impact Fee Fund	
FY21 Starting Balance	\$1,599,000.00
FY21 Revenue to Date	\$289,903.37
Encumbered Projects in FY21	\$327,028.00
Unencumbered Balance	\$1,561,875.37

A copy of the Budget Pages for each account are attached for Council Review.

ATTACHMENTS:

Transportation Budget Page
 Wastewater Budget Page
 Water Budget Page
 Tract 919 Unit 2 Reimbursements

Unscheduled Arterial Upgrades & Traffic Signal Installation

Project Background:

This fund will be used to reimburse developers who are required to construct qualifying arterial street improvements that exceed their project's transportation mitigation impact fee share.

Existing Conditions:

Project Justification:

This fund will set aside funds to reimburse developers that are required to construct street improvements, as part of project conditions of approval, that are considered to be over sized.

Fiscal Implications:

Funding for this program will be allocated from transportation impact fee reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	200,000	200,000	200,000	200,000	200,000
	Department Overhead	18,019				
Total Expenditure		\$218,019	\$200,000	\$200,000	\$200,000	\$200,000
Revenue	Funding					
	181 Transportation Impact Fees	218,019	200,000	200,000	200,000	200,000
Total Funding		\$218,019	\$200,000	\$200,000	\$200,000	\$200,000

Sanitary Sewer Main Oversizing Requirements

Project Background:

The City reimburses developers that are required to upsize their main installation to provide additional capacity in compliance with the City's Sanitary Sewer Master Plan.

Existing Conditions:

Project Justification:

As provided by City Ordinance, these funds will reimburse developers for the costs attributed to oversized sewer mains to provide service for future growth demands.

Fiscal Implications:

Reimbursement funds for oversized improvements will be allocated from Wastewater Impact Fee reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	50,000	50,000	50,000	50,000	50,000
	Department Overhead	4,505				
Total Expenditure		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000
Revenue	Funding					
	186 Wastewater Impact Fees	54,505	50,000	50,000	50,000	50,000
Total Funding		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000

Unscheduled Main Extensions / Replacements

Project Background:

These funds are for unanticipated projects which occur when a developer is connecting to our water system and requires the main to be extended beyond the project boundaries. These funds could also be utilized for replacement of undersized or deteriorated water mains.

Existing Conditions:

Project Justification:

These funds will be used to reimburse developers for the costs attributed to extending water mains beyond their project frontage in order to provide service to their project. This account could also be utilized for unscheduled emergency repairs on deteriorated or undersized mains within the water system.

Fiscal Implications:

Funding for Unscheduled Main Extensions/Replacements will be allocated from water capital reserves.

Project Budget Summary:

		5-Year Funding Allocation				
		2021	2022	2023	2024	2025
Expenditure	Program or Project	Construction	Construction	Construction	Construction	Construction
	Construction	50,000	50,000	50,000	50,000	50,000
	Department Overhead	4,505				
Total Expenditure		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000
Revenue	Funding					
	391 Water Capital	54,505	50,000	50,000	50,000	50,000
Total Funding		\$54,505	\$50,000	\$50,000	\$50,000	\$50,000

Tract 919 Unit 2 Reimbursements

Street Improvements (Centennial Drive)

<u>Item</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total Reimbursement</u>
6" AC/10"AB	51575	sf	\$5.08	\$262,001.00
Fog Seal	51575	sf	\$0.05	\$2,578.75
Curb & Gutter	955	lf	\$11.00	\$10,505.00
Mobilization	1	ls	\$2,450.00	\$2,450.00
Rough Grading - Centennial Drive	4500	cy	\$1.29	\$5,805.00
Final Grading - Curb & Gutter	955	1.78	\$2.19	\$2,091.45
SubTotal				\$285,431.20
Engineering (15%)				\$42,814.68
Total				\$328,245.88

Attachment: Tract 919 Unit 2 Reimbursements (PW: Reimbursements for Tract 919)

Tract 919 Unit 2 Reimbursements**Water Oversizing**

<u>Item</u>	<u>Quantity</u>	<u>Units</u>	<u>Cost/Unit</u>	<u>Total Reimbursement</u>
Water main (8" to 12")	778	lf	\$13.50	\$10,503.00
Water Valves (8" to 12")	1	ea	\$1,672.00	\$1,672.00
Hydrant Connections (8" to 12")	2	ea	\$599.00	\$1,198.00
Blowoff (8" to 18")	1	ea	\$1,006.00	\$1,006.00
			SubTotal	\$13,373.00
			Engineering (15%)	\$2,005.95
			Grand Total	\$15,378.95



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: A
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SUBJECT:

Public Works: Conduct a public hearing for the formation of Landscape Assessment District No. 20-01 at NEC of 13th Avenue and Devon Street, and adopt Resolution 21-05-R establishing the formation of the district and confirming the levy and collection of annual assessment

RECOMMENDATION:

That the City Council, by motion:

- 1) Conduct a public hearing for the formation of Landscape Assessment District No. 20-01 in accordance with the Landscape and Lighting Act of 1972.
- 2) Adopt Resolution 21-05-R establishing the formation of Landscape Assessment District No. 20-01 and confirming levy and collection of annual assessments.

BACKGROUND:

The developer of Tract No. 929, Woodside Homes, has requested that the City form a Landscape Assessment District pursuant to the Landscape and Lighting Act of 1972, to fund the continued maintenance of the following: (Refer to map included in attached Engineer's Report.)

1. The maintenance of decorative block fencing, landscaping, and irrigation system improvements along 13th Avenue & Devon Street located adjacent to Tract No. 929.
2. The public park located at the north side of Muscat Court fronting lots 51 through 56 of Tract No. 929.
3. Interior street lighting within Tract No. 929.

Provisions in the Landscaping and Lighting Act stipulate that a public hearing must be held to allow for written and oral public comments prior to action being taken to create a new district. Also required is an election in which property owners may vote to support or oppose the formation of the district, and the levy and collection of annual assessments.

Attached are the resolutions to initiate proceedings to form a new district, and establish the date, time, and place for the required public hearing. A copy of the Engineer's Report is also attached for Council review.

The landscape district and subdivision are being developed by Woodside Homes.

FISCAL IMPACT:

Approval of the district will create a funding mechanism to maintain common area landscape and interior street lights located adjacent to and within the Tract No. 929, Woodside Homes Subdivision. The City of Hanford will be responsible for coordinating maintenance for the district and administering the district's funding account.

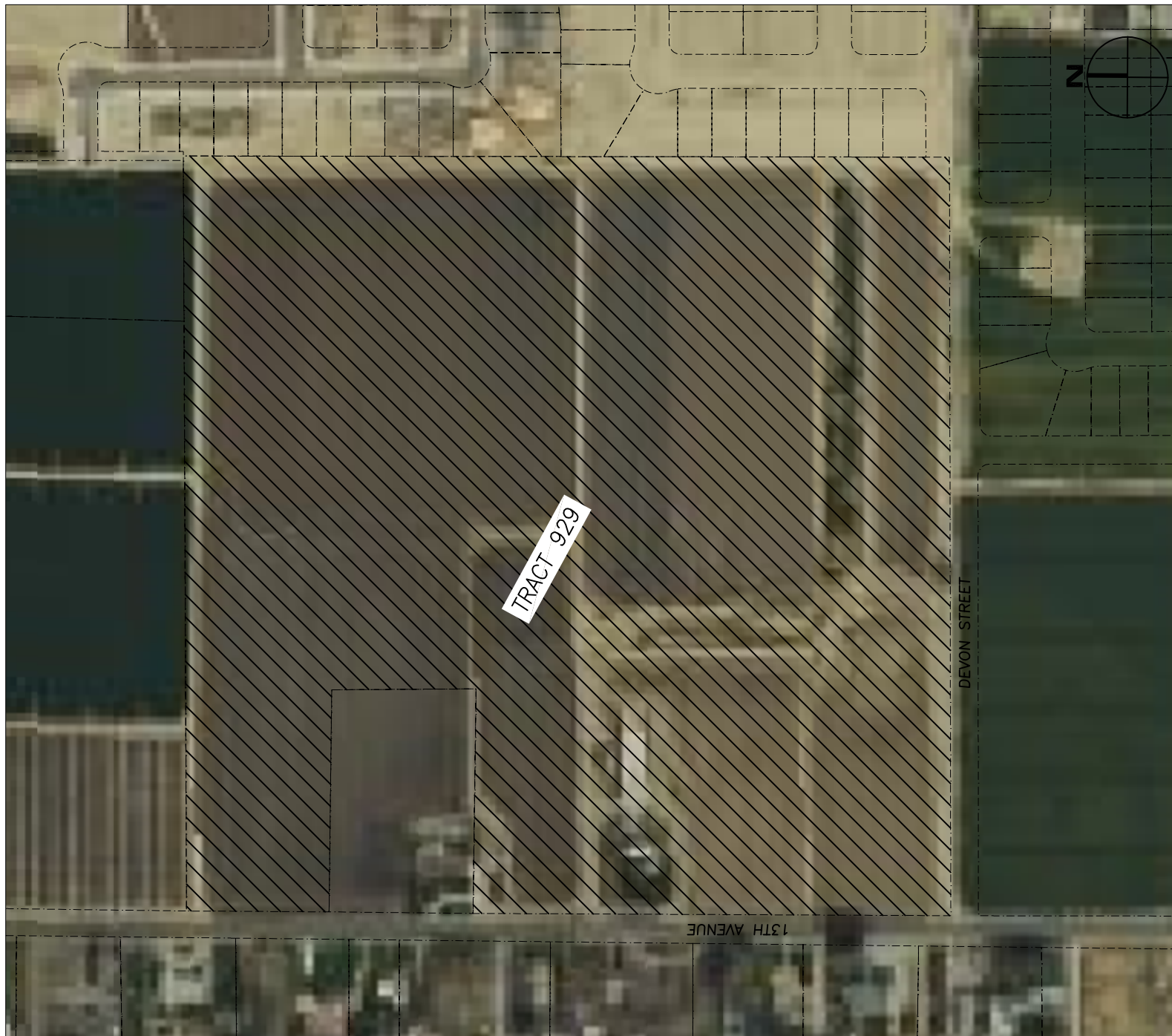
ATTACHMENTS:

Tract 929 - Location Map

Tract 929 LAD Waiver

Tract 929 LAD 20-01 - Establish Formation and Confirm Levy

Tract 929 LAD Ballot



TITLE: LOCATION MAP

APPROVED BY:

DRAWN BY: LV



WAIVER OF HEARING NOTICE

* * * * *

The undersigned is an authorized agent of Woodside Homes (Woodside), the developer of County Tract 929 (Tract 929) and the sole owner of the land that comprises Tract 929.

The City of Hanford (City) intends to form an assessment district (District) in accordance with the Landscape and Lighting Act of 1972 and to levy assessments for the future operation, maintenance, repair, replacement, and improvement of landscaping and lighting in and around the boundaries of Tract 929.

Streets & Highways Code Section 22587 requires the Hanford City Council (Council) to adopt a resolution that gives notice of the time and place at which the Council will hold a hearing (Hearing) on the formation of the District and levy of an assessment (Assessment) against each lot comprising Tract 929.

Pursuant to Government Code Section 53753, the City is to mail a Notice of Hearing to all record owners of lots comprising Tract 929 least forty-five (45) days prior to the Hearing.

WOODSIDE desires for the City to proceed with the formation of the District and levy of the Assessment. As a result, WOODSIDE hereby waives: (i) the Streets & Highways Code Section 22587 requirement that the Council establish a Hearing date and time by resolution; and (ii) the Government Code Section 53753 requirement that a Notice of Hearing be mailed to WOODSIDE at least forty-five (45) days prior to the Hearing.

DALEY understands the following:

1. The City will rely upon this Waiver of Hearing Notice (Waiver), and the Council will hold a Hearing on the formation of the District and levy of the Assessment at its February 2, 2021 meeting. The Council meeting will begin at 7:00 p.m. Pacific Time and will occur in the Council Chambers located at 400 N. Douty St., Hanford, CA.
2. WOODSIDE will receive a ballot, through which WOODSIDE will have an opportunity to vote for or against the formation of the District and the levy of the Assessment. By executing this Waiver, WOODSIDE is not obligated to vote in favor of the District's formation or levy of the Assessment.
3. WOODSIDE may submit its completed ballot to the City and change or withdraw its ballot at any time prior to the conclusion of the public testimony portion of the Hearing.
4. WOODSIDE may provide testimony to the Council during the Hearing. Such testimony may be consistent with or contrary to the ballot that WOODSIDE submits to the City.

5. WOODSIDE is not required by law to execute this Waiver, and, by signing this document, WOODSIDE voluntarily waives the rights identified above.

WOODSIDE HOMES 06N, LP

Dated: January 19, 2021

By: Jason Huckleberry [name]
Land Development Manager [title]



RECORDING REQUESTED BY:

CITY OF HANFORD

WHEN RECORDED RETURN TO:

Natalie Corral
 CITY OF HANFORD
 319 North Douty Street
 Hanford, California 93230

RESOLUTION NO. 21-05-R

**RESOLUTION OF THE CITY COUNCIL OF
 THE CITY OF HANFORD ESTABLISHING THE FORMATION
 OF ASSESSMENT DISTRICT NO. 20-01,
 TRACT NO. 929 – WOODSIDE HOMES SUBDIVISION
 AND CONFIRMING LEVY AND COLLECTION OF ANNUAL ASSESSMENTS**

At a regular meeting of the City Council of the City of Hanford, duly called and held on February 16, 2021, at 7:00 p.m., it was moved by Council Member _____, seconded by Council Member _____, and duly carried that the following resolutions be adopted:

WHEREAS, ON December 15, 2020, the City Council of the City of Hanford adopted a resolution initiating proceedings for the creation of Landscape Assessment District No. 20-01 pursuant to the Landscape and Lighting Act of 1972 (“District”) for Tract No. 929 – Woodside Homes Subdivision;

WHEREAS, on December 15, 2020, the City Council of the City of Hanford adopted a resolution of intention to create the District, levy and assessment and to confirm the Engineer’s Report, which is incorporated herein by reference, with regards to the District;

WHEREAS, at its regular meeting on December 15, 2020, the City Council for the City of Hanford did approve the Engineer’s Report which: (1) gave a full and detailed

1 description of the improvements and boundaries of the District and any zones therein; (2)
2 identified the proposed assessments upon assessed lots and parcels of land within the
3 District; (3) established that each lot or parcel of real property which is within the District
4 and which is subject to the levy of assessment is receiving a special benefit from the
5 public improvements and maintenance thereof identified in the Engineer's Report above
6 and beyond any general benefit to the general public; and (4) established that the special
7 benefit is proportionate to the amount of the assessment. At said meeting, the City
8 Council also adopted a resolution of intention scheduling a public hearing to be held on
9 February 16, 2017, at the hour of 7:00 p.m. and also stating its intention at said public
10 hearing to create the District and to levy the proposed assessment as set forth in the
11 Engineer's Report for the District;
12

13 WHEREAS, the City Council for the City of Hanford provided written notice of
14 the public hearing as required by Section 54954.6 of the California Government Code
15 and Article XIID, Section 4(e) of the California Constitution;
16

17 WHEREAS, a public hearing was held by the City Council for the City of Hanford
18 on February 16, 2021, at 7:00 p.m. in the City of Hanford Council Chambers at the Civic
19 Auditorium, 400 North Douty Street, Hanford, California at which time affected property
20 owners were afforded an opportunity to give oral testimony and submit written ballots
21 identifying the affected property owners' support or opposition to the creation of the
22 District and the levy of the proposed assessment;
23

24 WHEREAS, the written ballots were received and tabulated at the public hearing.
25 All affected property owners voted in support of the creation of the District and levy of
26 the assessment identified in the Engineer's Report.
27
28

1 NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of
 2 Hanford hereby confirms the Assessment Diagram as originally identified and proposed
 3 in the Engineer's Report and does hereby create Landscape and Lighting Assessment
 4 District 20-01 pursuant to the Landscape and Lighting Act of 1972 for Tract No. 929 –
 5 Woodside Homes Subdivision in accordance with the provisions of the Landscape and
 6 Lighting Act of 1972;

7
 8 RESOLVED FURTHER, that the City Council of the City of Hanford hereby
 9 confirms the Assessment Diagram and assessment contained in the Engineer's Report
 10 and levies the assessment for the fiscal year 2020-2021 as stated in the Engineer's Report
 11 in the amount of \$50,580.21.

12 RESOLVED FURTHER, commencing with the calendar year 2021-2022, and
 13 January 1 of each calendar year ("Adjustment Date") thereafter during the life of the
 14 District, the Total Annual Subdivision Assessment amount for the next calendar year shall
 15 be an amount equal to the greater of:
 16

17 (i) the Total Annual Subdivision Assessment amount in effect immediately
 18 prior to the Adjustment Date; or

19 (ii) the product obtained by multiplying the Total Annual Subdivision
 20 Assessment in effect immediately prior to the Adjustment Date by a
 21 fraction, the numerator of which is the Index published nearest but prior to
 22 the Adjustment Date and the denominator of which is the Index published
 23 nearest but prior to January 1 of the first year the Subdivision Assessment
 24 became effective.
 25

26 The term "Index" means the Consumer Price Index for Urban Wage Earners and
 27 Clerical Worker, San Francisco-Oakland-San Jose Consolidated Statistical Area, 1982-
 28

1 1984, equals 100, published by the Bureau of Labor Statistics of the United States
 2 Department of Labor. If the Bureau of Labor Statistics revises the Index, the Bureau of
 3 Labor Statistics will be the sole judge of the comparability of successive indexes, but if
 4 that agency fails to supply indexes that it deems comparable or if no succeeding index is
 5 published, the City shall determine an appropriate alternative published price index.

6 Passed and adopted at a regular meeting of the City Council of the City of
 7 Hanford on February 16, 2021, by the following vote:

8 AYES: _____

9 NOES: _____

10 ABSTAIN: _____

11 ABSENT: _____

12 APPROVED: _____

13 Francisco Ramirez
 14 MAYOR of City of Hanford

15 ATTEST: _____
 16 Natalie Corral, City Clerk

17 STATE OF CALIFORNIA)
 18 COUNTY OF KINGS)
 19 CITY OF HANFORD)

20 I, Natalie Corral, City Clerk of the City of Hanford, do hereby certify that the
 21 foregoing resolution was duly passed and adopted by the City Council of the City of
 22 Hanford at a regular meeting thereof held on the 16th day of February, 2021.

23 Dated: _____, 2021 _____
 24 City Clerk



CITY OF HANFORD

Department of Public Works

Focused On Our Community 24/7

900 South 10th Avenue • HANFORD, CA 93230-5234 • (559) 585-2550

BALLOT

OWNER: Woodside Homes

ADDRESS: 9 River Park Place East, Suite 430
Fresno, CA 93720

APN(s): 009-030-042 (Tract 929 – Woodside Homes Subdivision)

- () As owner(s) of the above referenced parcels, I / we support the formation of Assessment District No. 20-01 for Tract 929, Lots 1-80, Lot "A" Park, and Lot "B" Basin, and the levy and collection of annual assessments.
- () As owner(s) of the above referenced parcels, I / we oppose the formation of Assessment District No. 20-01 for Tract 929, Lots 1-80, Lot "A" Park, and Lot "B" Basin, and the levy and collection of annual assessments.

Woodside Homes.

BY: _____ Date: _____, 2021

Ballot Instructions: If you do not intend to be present at the public hearing set for 7:00 PM on February 16, 2021, your ballot must be received by the City Clerk at the address below prior to 5:00 PM on February 16, 2021. The ballot may be delivered or mailed, provided that it is received by the time stated. If you intend to appear at the public hearing, however, you may present your ballot to the City Clerk in person at the City Council meeting prior to close of the public hearing.

Natalie Corral
Clerk-City of Hanford
319 North Douty Street
Hanford, CA 93230
Tel. (559) 585-2515



AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: A
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SUBJECT:

Administration: Authorization to enter into a contract with Integrated Avian Solutions to provide Falconer services to reduce the Crow Population in Downtown Hanford for an amount not to exceed \$47,600 for Calendar Year 2021.

RECOMMENDATION:

That the City Council, by motion, authorize the City Manager to enter into a contract with Integrated Avian Solutions for an amount not to exceed \$47,600, and approve an appropriation of \$10,000.00 from the Central Parking and Improvement Fund and \$37,600 from the Accumulated Capital Outlay Fund to cover the expenditure.

BACKGROUND:

For the past several years, the approach to dealing with a growing Crow problem in the Downtown has been largely reactive. Through the efforts of the Main Street Hanford organization, they were able to work with the Falconer to dramatically reduce the crow population in downtown Hanford. Unfortunately, as a result of the Covid crisis, Main Street was unable to continue the program and the crows have returned to the Downtown area in even larger numbers. The current population is causing so much waste that it is impacting the ability of businesses downtown to continue to operate outdoors.

Past results have proven that a year-long program with the firm Integrated Avian Solutions would be advantageous in relocating the Crow population to a more appropriate roosting and nesting environment away from local businesses.

FISCAL IMPACT:

Appropriations of \$10,000 from Fund 025 Central Parking and Improvements and \$37,600 from ACO.

ATTACHMENTS:

Hanford Crow Proposal_2021

INTEGRATED AVIAN SOLUTIONS

Falconry-based Bird Abatement for Industry & Agriculture

California, Oregon, Washington

www.avian-solutions.com

845.532.5401



Bird Abatement Proposal

12 February 2021

PURCHASER

City of Hanford

PURCHASER'S REPRESENTATIVE

Mario Cifuentez (City Manager) – 559.585.2516

Integrated Avian Solutions (Vendor) successfully cleared roosting crows from an approximately 30-block area of downtown Hanford, CA in the winter of 2018-19. Due to the project's success we continued our program in 2020 and began providing year-round services over an expanded project area. Our work provided an effective solution to the long-standing crow problem in Hanford, and virtually eliminated unsightly crow droppings. However, the program was suspended in April 2020 due to budget cuts associated with Covid-19. The crows almost immediately returned to downtown Hanford and now, after 10 months with no services, are worse than ever. The need for a year-round crow abatement program in Hanford is evident and has been requested by several prominent businesses, including FAST Credit Union, Smart & Final, Aria Health Clinic, and Staples.

We propose reinstating the year-round program to start on 1 March 2021 and run through the end of the calendar year. The project area (Page 5) includes the core of Hanford's BID as well as Woodrow Wilson and the surrounding businesses along 11th Ave. This proposal offers considerable value, in that we can expand the project area and deliver the work year-round for less than a 25 % increase over the cost of our previous 6-month program.

Our proposed Schedule of Services is outlined on Page 2. The first 2 months of the program (March-April) will require a more intensive schedule to get the crows back under control. Once a strong foothold is made, we will reduce our services to a maintenance schedule of 2 shifts per week for the remainder of the summer, and then will ramp back up to 3 shifts per week in the fall. To ensure we can respond to any pulses or anomalies in crow behavior we have also included 5 contingency shifts to be used as needed. Services for year-round work will be billed at \$400 per day and total program costs will not exceed **\$47,600** for 2021.

Thank you for the opportunity to present our proposal. We look forward to helping you keep your community clean again this year.

Sincerely,

Adam Baz
Project Manager
845.532.5401

Kort Clayton
Principal
971.217.0080

SCHEDULE OF SERVICES

<u>Month</u>	<u>Shifts/week</u>	<u>Total shifts</u>	<u>Rate</u>	<u>Cost</u>
March	4	18	400	7,200
April	3	13	400	5,200
May	2	8	400	3,200
June	2	8	400	3,200
July	2	10	400	4,000
August	2	8	400	3,200
September	2	10	400	4,000
October	3	13	400	5,200
November	3	13	400	5,200
December	3	13	400	5,200
Contingency	--	5	400	2,000*

\$47,600*



SCOPE OF WORK

EXISTING SITUATION

Impressive numbers of American crows gather to roost in downtown Hanford year-round, reaching the highest numbers in the fall and winter. They come from the surrounding agricultural areas and residential neighborhoods to begin assembling just before sunset. The birds eventually settle in to roost in street trees and on power lines, and during the course of the night leave an unsightly and unhygienic mess on the sidewalks, benches, restaurant tables, lamp posts, parked vehicles, and everything else beneath them. Pressure washing can be cost-prohibitive and does not address the root of the problem.

Crows have roosted in downtown Hanford for decades. However, the population has escalated in recent years to levels that are now deemed problematic by much of the affected business community. Local businesses have filed complaints with the city and with Main Street Hanford. Past efforts made by City Council and the Hanford Police Department—including shooting crows and amplifying predator calls—have been unsuccessful and inhumane.

At the request of Main Street Hanford, we first initiated a falconry-based crow control program on 1 October 2018, covering 30 blocks in historic downtown Hanford. Upon arrival we found high numbers of crows roosting in street trees throughout the BID, with notable pockets around the McDonalds, Burger King, FAST Credit Union, train station, and car dealership on 11th Ave. Within weeks of initiating our services the crows were absent from the project area, and remained at bay for the duration of the program. Businesses were exceptionally pleased with the results. We are the only company to have successfully implemented a crow abatement project of this scale, and we look forward to bringing our experience and knowledge to further resolve your crow problem in Hanford.

BIRD CONTROL PROCESS

Bird abatement is accomplished through hazing, which is any number of methods used to intimidate and displace pest birds. Conventional hazing tools such as amplified predator calls, reflective mylar strips, raptor decoys, propane canons, and pyrotechnic noisemakers only yield temporary results because they quickly lose effectiveness as pest birds become acclimated.

We use a falconry-based hazing program. This method works, and because birds have an intrinsic fear of raptors, efficacy does not diminish. The sight of a hawk or falcon flying with purpose always compels birds to abandon what they are doing and flee the area. Birds never become habituated to the threat posed by a live, free-flying raptor.

Our abatement team will include two licensed falconers with Harris's hawks. The team will strategically clear the project area by "sweeping" crows from primary roosting corridors. Specifically, a falconer will walk along a street occupied by crows and their hawk will fly from perch to perch (including trees, signs, buildings, and the falconer's glove). This approach will elicit a strong antipredator response from the crows, which will retreat as the hawk approaches. The crows will quickly learn that the project area is no longer a comfortable or safe place for them to loiter or roost.

Falconers will work both independently and in coordination to efficiently clear the entire project area during each shift. Our team will adapt tactics to achieve maximum impact each night. For example, each falconer may work separate areas with their hawks, or we may work together by deploying



multiple hawks in the same area. We will coordinate between falconers and execute flanking maneuvers to steer retreating crows outside of the project area.

PROJECT DESCRIPTION

A. Vendor shall furnish the labor and falconry-trained raptors to assist in the abatement of roosting crows within the project area. Vendor is well experienced in bird abatement and possesses the relevant licenses and permit. All raptors used will be legally allowed for bird abatement.

B. Services will commence with written notice-to-proceed. Services may also be extended by mutual agreement.

C. Services will include mobilization/demobilization to and from the project area, assessment and observation of pest birds, free flying of raptors, raptor feeding and maintenance, equipment maintenance, and tracking of wayward or lost raptors if required. Raptors are the primary method of bird abatement, but our falconers may use other tools such as noisemakers and visual deterrents (e.g., tree tappers, laser pointers, whistles, etc.).

D. Abatement activities will begin around sunset when crows are staging to roost. Shifts will end once crows have retreated from the project area.

E. Vendor and Vendor's falconers are independent contractors and are not employees of Purchaser.

F. Purchaser shall assist Vendor in properly advertising the project and notifying relevant stakeholders (e.g., Police Department, City officials, local businesses, etc.) of the proposed activities.

G. Vendor shall submit monthly invoices to Purchaser. Payment terms are Net 15. Invoices remaining unpaid beyond thirty (30) days may be subject to service charge of 5% per annum.

H. This Proposal is confidential and contains proprietary information and intellectual property of Vendor. The rates, schedule, scope-of-work or other elements may not be disclosed to anyone outside this agreement without the express written permission of Vendor.

I. This agreement incorporates Vendor's standard Terms and Conditions (available upon request).



PROJECT AREA MAP



DEMONSTRATION OF RESULTS

The following images provide a before-and-after look at the crow situation during our work in Hanford. “Before” images are from October 2018, when the project began. “After” images are from December 2018, part way through our hazing efforts. The shaded green represents areas of crow activity, and the red line delineates the current project area.



ABOUT US

Integrated Avian Solutions is a network of talented falconers, experienced wildlife biologists, and passionate bird management professionals. We take a long and comprehensive view of every new opportunity and bring all our faculties and resources to bear with the singular goal of solving your bird problem. Our company is unique in that it is run and managed by falconers who also hold graduate degrees in wildlife biology. Thus, we offer a deep and unparalleled understanding of avian biology, which is invaluable for managing nuisance bird problems. Falconry is the foundation of our business and the most powerful bird management tool on the market. When everything else falls short, pest birds will not ignore the threat posed by a free-flying falcon or hawk. Our falconry programs are turn-key, natural, non-lethal, and sustainable.



Kort Clayton (Principal) is a Master Falconer with 25 years of experience. He has delivered and managed bird abatement services for a broad spectrum of clients, including vineyards, berry farms, solid waste, commercial real estate, and heavy industry. Kort holds an M.Sc. in Wildlife Biology and is well versed in both state and federal wildlife regulations from his 15 years of environmental consulting experience. He was a former Director and President of the Oregon Falconers Association.



Adam Baz (Project Manager) is a licensed falconer and holds an M.Sc. in Avian Biology from Portland State University. He has worked as a wildlife biologist for over 10 years throughout California and Oregon, focusing on birds and human-wildlife conflicts. He delivers abatement services and manages contracts throughout central and southern California.





AGENDA STAFF REPORT

MEETING DATE: 2/16/2021	AGENDA SECTION: B
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SUBJECT:

Council: Appointment of new members to fill vacancies and Reappointment of existing members to serve new terms on the various City Commissions.

RECOMMENDATION:

That the Mayor, with the approval of the full City Council:

1. Appoint the following individuals to fill the vacancies on the City's Planning Commission and the Parks and Recreation Commission:
 - Parmbir Johal - Planning Commission with a term expiring 12/31/2024.
 - Martin Devine - Planning Commission with a term expiring 12/31/2024.
 - Jim Castleman, Parks and Recreation Commission with a term expiring 12/31/2024.
 - Russ Hilyard, Parks and Recreation Commission with a term expiring 12/31/2024.
2. Reappoint the following eligible Commissioners for new terms to their respective commissions:
 - Cheyne Strawn, Parks and Recreation Commission with a term expiring 12/31/2024
 - Dennis Ham, Parking and Traffic Commission with a term expiring 12/31/2024.

BACKGROUND:

Section 2.20.030 of the City of Hanford Municipal Code states that:

"Members of all commissions shall be appointed by the mayor with the approval of a majority of the members of the city council."

In previous years, the liaison to each City Commission would make a recommendation for appointments to vacant seats but there was never a formal process. This year, at the direction of the Mayor, staff created a formal interview process and a detailed list of questions related to the

Commission that applicants had expressed as their primary choice to serve on.

The Mayor, along with Councilwoman Morrow and various staff, interviewed each applicant and ranked their interviews on the basis of a 5-point scale for each question. The panel interviewed six (6) applicants for the Planning Commission and five (5) applicants for the Parks and Recreation commission. After interviewing all prospective candidates, the interview panels recommended that the top scoring individuals be appointed to fill the vacancies on the respective commissions as outlined above.

FISCAL IMPACT:

There will be some cost to the General Fund for Commissioner training but it is budgeted annually and is less than \$10,000 for all commissions.

ATTACHMENTS:



**AGENDA
STAFF REPORT**

MEETING DATE: 2/16/2021	AGENDA SECTION: A
--------------------------------	--------------------------

SUBJECT:

Council Future Agenda Items

FISCAL IMPACT:

ATTACHMENTS:

Council Future Agenda Items

Council Future Agenda Items

Originated Date	Item	Originator	Staff Lead	Date Estimate
6/5/18	Comprehensive Study of downtown businesses, including crosswalks. Study to change 7 th Street one-way going WEST and 6 th Street going EAST to increase angled parking.	Council Consensus	John Doyel	2/16/2021
4/7/20	Discussion of Pay for Parking Options in the Downtown Area	Council Consensus	John Doyel	3/16/2021
9/3/20	Proposed Rates & Fees adjustments	City Manager	Various Staff	Mid-Year Budget review Feb 2021
9/3/20	Revised Business License Ordinance	Finance	Various Staff	3/16/2021
9/9/20	Revised Refuse Ordinance	Public Works	Jim Ross	4/20/2021
10/02/20	Introduction Hemp Ordinance	Council Consensus	Various Staff	3/16/2021
11/12/20	Discussion of Coe Park and changes to traffic and pedestrian to flow to enhance park usages	City Manager	Various Staff	5/4/2021
6/18/20	Discussion of Courthouse improvements and financing options	Council Consensus	Brad Albert	5/4/2021
1/11/21	FY 21-22 Goals & Objectives Planning Meeting	City Manager	Various Staff	2/19/21

Attachment: Council Future Agenda Items (Council: Future Agenda Items)