



# CITY OF MORRO BAY PUBLIC WORKS ADVISORY BOARD AGENDA

*The City of Morro Bay provides essential public services and infrastructure to maintain a safe, clean and healthy place for residents and visitors to live, work and play.*

## REGULAR MEETING Wednesday, August 21, 2024 – 5:30 PM Veterans Memorial Hall 209 Surf Street, Morro Bay, CA

*Pursuant to Assembly Bill 361 (2021-22) and Government Code section 54953 this Meeting will be conducted in a hybrid format with both in-person and virtual public participation. Ways to watch this meeting and submit public comment are provided below.*

### **Public Participation:**

*Public participation is allowed in the following ways:*

- *Community members may attend the meeting in person at the Morro Bay Veterans Hall.*
- *Alternatively, members of the public may watch the meeting and speak during general Public Comment or on a specific agenda item by logging in to the Zoom webinar using the information provided below. Please use the “raise hand” feature to indicate your desire to provide public comment.*

*Please click the link below to join the webinar:*

- <https://us02web.zoom.us/j/82722747698?pwd=aWZpTzcwTHlRTk9xaTlmVVNWRWFUQT09>

*Password: 135692*

- *Or Telephone Attendee: 1 (408) 638-0968 or 1 (669) 900-6833 or 1 (346) 248-7799; Webinar ID: 827 2274 7698; Password: 135692; Press \*9 to “Raise Hand” for Public Comment*
- *Members of the public may watch the meeting either on cable Channel 20 or as streamed on the City [website](#).*
- *Community members are encouraged to submit agenda correspondence in advance of the meeting via email to the Public Works Advisory Board at [pwab@morrobayca.gov](mailto:pwab@morrobayca.gov) prior to the meeting. Agenda Correspondence received at [pwab@morrobayca.gov](mailto:pwab@morrobayca.gov) by 10 a.m. on the meeting day will be posted on the City website.*

ESTABLISH QUORUM AND CALL TO ORDER  
MOMENT OF SILENCE  
PLEDGE OF ALLEGIANCE  
ANNOUNCEMENTS  
PUBLIC WORKS DIRECTOR ANNOUNCEMENTS

## PUBLIC COMMENT

Members of the audience wishing to address the Board on City business matters not on the agenda may do so at this time. For those desiring to speak on items on the agenda, but unable to stay for the item, may also address the Board at this time.

### A. CONSENT CALENDAR

Unless an item is pulled for separate action by the Public Works Advisory Board, the following actions are approved without discussion. The public will also be provided with an opportunity to comment on consent agenda items.

#### A-1 APPROVAL OF MINUTES FOR THE MAY 15, 2024, PUBLIC WORKS ADVISORY BOARD REGULAR MEETING

**Recommendation: Approve as submitted.**

#### A-2 APPROVAL OF EXCUSED ABSENCE REQUEST FOR BOARD MEMBER NAVA

**Recommendation: Approve requested absence for the August 21, 2024 Regular Public Works Advisory Board meeting.**

### B. BUSINESS ITEMS

#### B-1 CONSIDERATION OF INSTALLATION OF RED CURBS TO CREATE “NO PARKING” ZONES ON SUNSET AVENUE AND ROCKVIEW STREET ADJACENT TO THE HASLO HOUSING COMPLEX

**Recommendation: Approve the proposed installation of the “No Parking” zones adjacent to the HASLO housing complex.**

#### B-2 INTERSECTION CONTROL EVALUATION AT ATASCADERO ROAD AND MORRO BAY HIGH SCHOOL EAST DRIVEWAY

**Recommendation:**

- Review the Intersection Control Evaluation memo for the intersection of Atascadero Road and the Morro Bay High School Eastern Driveway;
- Provide input on staff’s plan to not install a stop sign; and
- Provide additional feedback as needed.

#### B-3 INTERSECTION CONTROL EVALUATION AT MAIN STREET AND DUNES STREET

**Recommendation:**

- Review the Intersection Control Evaluation memo for the intersection of Main Street and Dunes Street;
- Provide input on staff’s plan to not install stop signs; and
- Provide additional feedback as needed.

#### B-4 INTERSECTION CONTROL EVALUATION AT KINGS AVENUE AND ALLESANDRO STREET

**Recommendation:**

- Review the Intersection Control Evaluation memo for the intersection of Kings Avenue and Allesandro Street;
- Provide input on staff’s plan to not install stop signs; and
- Provide additional feedback as needed.

B-5 CONSIDERATION OF ANGLED PARKING ALONG PACIFIC STREET BETWEEN EMBARCADERO ROAD AND MORRO AVENUE

**Recommendation: Review the parking recommendations memo for Pacific Street between Embarcadero Road and Morro Avenue and provide input and feedback to Public Works staff regarding the findings and recommendations of the memo. The memo does not recommend the implementation of angled parking.**

B-6 DISCUSSION REGARDING CONSOLIDATING ADMINISTRATION, OPERATIONS, AND MAINTENANCE OF MORRO BAY TRANSIT INTO THE SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY

**Recommendation: Provide comments regarding the concept of consolidating Morro Bay Transit administration, operations, and maintenance into the San Luis Obispo Regional Transit Authority.**

C. FUTURE AGENDA ITEMS  
Pavement Management Program Update

D. ADJOURNMENT  
The next Regular Meeting will be held on **Wednesday, September 18, 2024, at 5:30 PM.**

---

THIS AGENDA IS SUBJECT TO AMENDMENT UP TO 72 HOURS PRIOR TO THE DATE AND TIME SET FOR THE MEETING. PLEASE REFER TO THE AGENDA POSTED AT THE PUBLIC WORKS DEPARTMENT, 955 SHASTA AVENUE, FOR ANY REVISIONS OR CALL THE DEPARTMENT AT 805-772-6263 FOR FURTHER INFORMATION.

MATERIALS RELATED TO AN ITEM ON THIS AGENDA SUBMITTED TO THE PUBLIC WORKS ADVISORY BOARD AFTER DISTRIBUTION OF THE AGENDA PACKET ARE AVAILABLE FOR PUBLIC INSPECTION UPON REQUEST BY CALLING THE DEPARTMENT AT 805-772-6263.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN A CITY MEETING, PLEASE CONTACT THE PUBLIC WORKS DEPARTMENT AT LEAST 24 HOURS PRIOR TO THE MEETING TO ENSURE REASONABLE ARRANGEMENTS CAN BE MADE TO PROVIDE ACCESSIBILITY TO THE MEETING.

*Pursuant to Assembly Bill 361 (2021-22) and Government Code section 54953 this Meeting will be conducted in a hybrid format with both in-person and virtual public participation.*

- |          |                |                       |
|----------|----------------|-----------------------|
| PRESENT: | Laurie Beale   | Chair                 |
|          | John Erwin     | Vice Chair            |
|          | Robert Nava    | Board Member          |
|          | Jan Goldman    | Board Member          |
|          | Ian Gaffney    | Board Member          |
|          | Doug Hill      | Board Member          |
|          | Derek Dahlgren | Board Member          |
| STAFF:   | Greg Kwolek    | Public Works Director |
|          | Cindy Cecil    | City Engineer         |

**ESTABLISH QUORUM, CALL TO ORDER**

The meeting was called to order at 5:32 PM with all Board members in attendance.

**MOMENT OF SILENCE AND PLEDGE OF ALLEGIANCE**

**ANNOUNCEMENTS - NONE**

**PUBLIC COMMENT**

<https://youtu.be/GIrm4ZQjRL4?si=znbVFQrM0nmi15O9&t=131>

Walter Heath, Morro Bay, announced there was a first time “I Love Morro Bay” event with America in Bloom on April 27<sup>th</sup>. The event consisted of gardening projects in public spaces. Walter thanked Public Works Director Greg Kwolek and Public Works Maintenance Manager Carlos Mendoza and his staff. He noted City Manager Yvonne Kimball, City Engineer Cindy Cecil, and Police Chief Amy Watkins were in attendance, along with 156 volunteers who completed the projects in just two hours.

Linda Merrill, Morro Bay, welcomed City Engineer Cindy Cecil, and thanked Greg Kwolek for the creek clean up on Quintana Road.

Greg Kwolek acknowledged both the Morro Bay Fire and Public Works Departments who worked together in the creek cleanup on Quintana Road.

**A. CONSENT CALENDAR**

<https://youtu.be/GIrm4ZQjRL4?si=CmmwIRz2Y316j6IW&t=485>

The public comment period was opened and seeing none, the public comment period was closed.

**A-1 APPROVAL OF MINUTES FOR THE FEBRUARY 21, 2024, PUBLIC WORKS ADVISORY BOARD REGULAR MEETING**

**A-2 APPROVAL OF MINUTES FOR THE APRIL 17, 2024, PUBLIC WORKS ADVISORY BOARD AND CITIZENS OVERSIGHT/FINANCE ADVISORY COMMITTEE SPECIAL JOINT MEETING**

**MOTION:** Jan Goldman moved to approve items A-1 and A-2. The motion was seconded by John Erwin and passed unanimously 7-0.

**B. BUSINESS ITEMS**

[https://youtu.be/GIrm4ZQjRL4?si=T52Xw\\_Ke2NzJale8&t=604](https://youtu.be/GIrm4ZQjRL4?si=T52Xw_Ke2NzJale8&t=604)

Greg Kwolek notified the Board members there will only be one item discussed today. Initially there were two items, but the second had to be pulled because the neighborhood wasn't notified. The item will be brought back for discussion in the next PWAB meeting.

**B-1 ALLOCATION OF WATER EQUIVALENCY UNITS (WEU) FOR FISCAL YEAR 2024/25**

<https://youtu.be/GIrm4ZQjRL4?si=lqgA-o0gDX93kQs9&t=669>

Greg Kwolek presented the report.

Discussion, comments, and questions amongst the Board and Committee members and staff.

The public comment period was opened and seeing none, the public comment period was closed.

MOTION: John Erwin moved to approve the staff recommendations. The motion was seconded by Robert Nava and passed unanimously 7-0.

**C. FUTURE AGENDA ITEMS**

<https://youtu.be/GIrm4ZQjRL4?si=ZeqUX1IXuoXGxOgh&t=3092>

Greg Kwolek spoke briefly about traffic requests and introduced City Engineer Cindy Cecil to the Board members again since some members were not present the first time she was introduced.

**ADJOURNMENT**

The meeting adjourned at 6:25 PM. The next Regular Meeting will be held on **Wednesday, June 19, 2024, at 5:30 PM.**

Recorded by:

Gina Arias  
Administrative Technician



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 15, 2024  
**FROM:** Greg Kwolek, Public Works Director  
**SUBJECT:** Approval of Excused Absence Request for Board Member Nava

## RECOMMENDATION

Staff recommends the Public Works Advisory Board (PWAB) approve the request submitted by PWAB Member, Robert Nava, to excuse his absence from the August 21, 2024, Regular Public Works Advisory Board meeting.

## ALTERNATIVES

The Board may choose not to excuse Mr. Nava's absence from the August 21, 2024, meeting.

## BACKGROUND/DISCUSSION

In April 2022, the Council adopted Resolution No. 39-22 amending the By-Laws for all standing advisory bodies to establish a policy regarding absences. That policy, which is included in the current Advisory Bodies Handbook and By-Laws, states:

*“Because of quorum requirements, when an absence is anticipated, the individual advisory body member is responsible for notifying the Chair and the staff responsible a minimum of seven days in advance and the absence shall be counted in that member’s attendance record. An advisory body member may include a written request that the absence be excused; said request must be submitted in advance and formally approved at a regular meeting of the advisory body. The unexcused absence from two consecutive regular meetings or twenty-five (25) percent of the regular meetings during any calendar year period shall constitute the resignation of such absent member. An advisory body member determined to have not met the attendance requirements herein may submit a written request to the City Council to have the previous absences excused.”*

Staff received a request from PWAB member, Robert Nava, for Board consideration to excuse his absence from the August 21, 2024 regular meeting. Mr. Nava's attached email details his reason for the absence which staff accepts as reasonable and warrants Board consideration. Mr. Nava has no excused or unexcused absences in the 2024 calendar year period. Should the Board approve Mr. Nava's request, his term on the PWAB will continue through January 31, 2027.

## CONCLUSION

Staff recommends the Board approve Mr. Nava's request for an excused absence from the August 21, 2024 Regular Public Works Advisory Board meeting.

## ATTACHMENTS

1. Request for Excused Absence submitted by Mr, Nava
2. Link to [Advisory Bodies Handbook and By-Laws](#)

<sup>4</sup>  
**Janeen Burlingame**

---

**From:** Greg Kwolek  
**Sent:** Tuesday, August 13, 2024 9:34 AM  
**To:** Robert Nava  
**Cc:** Janeen Burlingame  
**Subject:** RE: PWAB this month?

Thank you, Robert. Yes, there is a meeting and we will prepare the excused absence report. Enjoy your travels.

-Greg

---

**From:** Robert Nava <rnav@morrobayca.gov>  
**Sent:** Monday, August 12, 2024 8:17 PM  
**To:** Greg Kwolek <gkwolek@morrobayca.gov>  
**Subject:** PWAB this month?

Hi Greg,

I will be out of town next week, starting Wednesday morning, august 21st.

If there is a scheduled PWAB meeting, I need to request an absence.

Sorry, my plans could not be rescheduled.  
Robert Nava

Get [Outlook for iOS](#)



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 16, 2024

**FROM:** Cindy Cecil, City Engineer

**SUBJECT:** Consideration of Installation of Red Curbs to Create “No Parking” Zones on Sunset Avenue and Rockview Street Adjacent to the HASLO Housing Complex

## **RECOMMENDATION**

Staff recommends the Public Works Advisory Board provide feedback on the plan to install “No Parking” zones adjacent to the HASLO housing complex.

## **DISCUSSION**

HASLO Housing complex management requested the curb adjacent to the Sunset Avenue driveway entrance, which only provides access to garbage container, be painted red to allow for the garbage & recycling trucks to pick up the containers. During a site visit, staff observed that street parking along parts of Sunset Avenue and Rockview Street reduces road widths to less than two lanes required for two-way traffic. City staff investigated this further and determined that was an issue based on Caltrans Standards. Minimum road width for collector streets is twenty feet (two – ten-foot travel lanes). Minimum width for parallel parking is eight feet.

On Sunset Avenue, when vehicles are parked on both sides of the street, the road width is not adequate for two-way traffic. A portion of Sunset Street does have adequate width (thirty-two feet) for parking on one side of the street, between the HASLO parking lot driveway and the sidewalk ramp. The portion of the street where the sidewalk on the west side of the street extends beyond the adjacent sidewalk narrows the street width to twenty-seven feet, which is not adequate for parking on either side of the street. Staff recommends red curbs be painted to create “No Parking” zones as indicated on Figure 1 attached.

On Rockview Street, the road width of twenty-four feet is not adequate for two-way traffic with parking on either side of the street. Staff recommends “No Parking” signs be installed on both sides of Rockview Street. See Figure 1 attached.

## **CONCLUSION**

The proposed “No Parking” zones will increase traffic safety on Sunset Avenue where road width is not adequate for two-way traffic with parking on both side of the street, and on Rockview Street where road width is not adequate for two-way of traffic with parking on either side of the street.

## **ATTACHMENT:**

1. Figure 1 - Plan of proposed “No Parking” zones

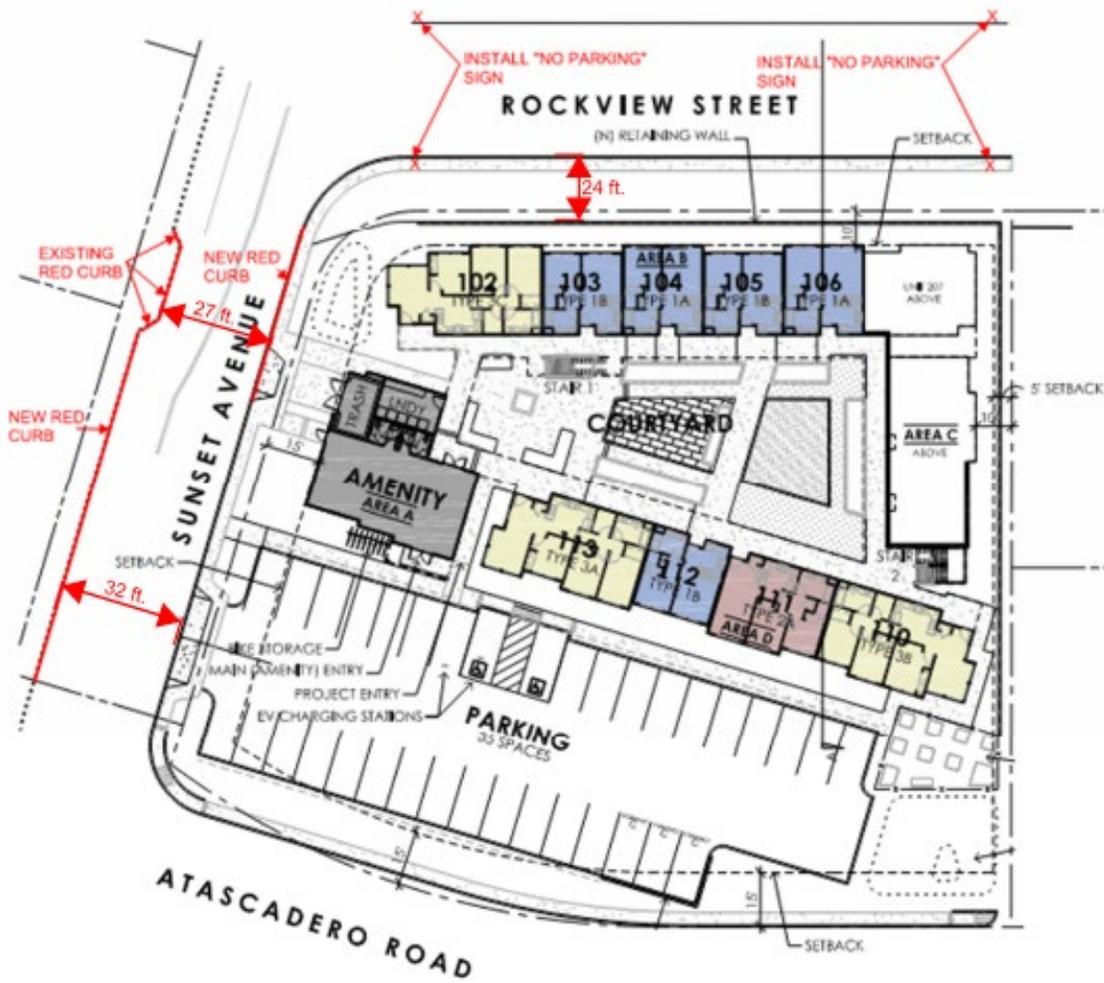


FIGURE 1 - PROPOSED RED CURB AND NO PARKING SIGNAGE ADJACENT TO HASLO HOUSING COMPLEX



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 15, 2024  
**FROM:** Austin Della, PE – Senior Civil Engineer  
**SUBJECT:** Intersection Control Evaluation at Atascadero Road and Morro Bay High School East Driveway

## RECOMMENDATION

Staff recommends the Public Works Advisory Board

- Review the Intersection Control Evaluation (ICE) memo for the intersection of Atascadero Road and the Morro Bay High School (MBHS) eastern driveway;
- Provide input on staff’s plan to not install a stop sign; and
- Provide additional feedback as needed.

## BACKGROUND

Earlier this year, Morro Bay High School staff contacted the Public Works Department to request the City to investigate installing a stop sign on eastbound Atascadero Road at the eastern MBHS driveway to improve traffic flow during School drop-off and pick-up. Eastbound traffic on Atascadero Road inhibits left hand turns out of the eastern MBHS driveway. This makes it difficult for vehicles, including school buses, to exit MBHS campus from the eastern MBHS driveway, which leads to traffic backups during pick-up and drop-off times, as well as during larger events at the school such as football games.

In response to this request, the intersection of Atascadero Road and the MBHS eastern driveway was evaluated for potential intersection control measures in compliance with City resolution No. 67-15, which states that “No unwarranted traffic control devices shall be allowed within the rights-of-ways within the jurisdictions boundaries of the City”. Upon receipt of a stop sign installation request, City practice is to perform a warrant analysis, at the discretion of the Public Works Department, to determine whether the stop sign can be installed or not. This practice follows best risk management practices that protect the City against lawsuits and the public.

A warrant analysis involves the preparation of an Intersection Control Evaluation (ICE) prepared by a professional traffic engineer. This evaluation reviews an intersection’s collision history, sight distances, and traffic volume to determine whether objective minimum criteria are met that would “warrant” installation of traffic devices such as a stop sign.

## DISCUSSION

Central Coast Transportation Consulting prepared an ICE for the City, which is attached. The intersection did not meet the criteria for the installation of stop signs based on traffic volume, sight distance, and collision history. A summary analysis of the relevant criteria contained in the attached ICE is as follows:

- Five or more crashes in 12-month period correctible by multi-way stop installation. CRITERIA NOT MET.
- Intersection minimum volumes must be demonstrated. CRITERIA NOT MET.

Prepared By: AD Dept Review: GK

- Need to control left-hand conflicts. CRITERIA NOT MET.
- Need to control pedestrian conflicts with high pedestrian volumes. CRITERIA NOT MET.
- Need for line of sight of conflicting traffic. CRITERIA NOT MET.

While the ICE did not establish a warrant a stop sign at this location, it generated other recommendations to be implemented at this intersection.

- Replace and install additional school pedestrian warning signs.
- Install a rectangular rapid flashing beacon (RRFB) at the west leg crosswalk.
- Restripe 20 feet of red curb for the eastbound approach prior to the west leg crosswalk.
- Restripe 15 feet of red curb for the eastbound approach following the west leg crosswalk.
- Install ladder crosswalk markings the next time the roadway is resurfaced.
- Reconstruct the northwest corner and curb ramp and consider a bulb-out on the south side of the road to shorten the pedestrian crossing distance.
- Southwest curb ramp to shorten pedestrian crossing distance the next time roadway is resurfaced.
- Evaluate MBHS pick-up and drop-off circulation with a one-way loop with inbound traffic on the easterly driveway and outbound traffic on the westerly driveway to reduce delay and conflict points.

Staff will separately evaluate the need to implement the above added recommendations based on need and available budget and staff capacity.

#### **NOTIFICATION**

On August 9, 2024, City staff sent out notices by USPS to the neighborhood potentially impacted by consideration of this item.

#### **ATTACHMENTS**

1. Atascadero Road and MBHS Eastern Driveway - Intersection Control Evaluation



## MEMORANDUM

Date: August 13, 2024  
 To: Austin Della, City of Morro Bay  
 From: Michelle Matson and Joe Fernandez, CCTC  
 Subject: **Atascadero Rd/Morro Bay High School East Driveway – Intersection Control Evaluation**

This memorandum summarizes the intersection control evaluation at the intersection of Atascadero Road and the Morro Bay High School (MBHS) eastern driveway. The following sections summarize:

- Existing Conditions
- Intersection Control Evaluation
- Recommendations

### EXISTING CONDITIONS

The following sections summarize the existing setting, traffic volumes, collision history, and intersection operation.

#### *Existing Setting*

Atascadero Road has a posted speed limit of 25 miles per hour, intermittent Class II bike lanes, and sidewalks at the MBHS eastern driveway. The MBHS eastern driveway is stop-controlled at Atascadero Road. There are existing curb ramps at the northwest, southwest, and northeast corners of the intersection, with crosswalks on the north and west leg.

During the morning, MBHS begins at 8:25 AM. Prior to school starting, ten or fewer vehicles were queued on the southbound approach. Between 8:25 AM and 8:35 AM, the southbound queue reached the parking lot, then cleared at 8:35 AM. During the afternoon, school ended at 3:30 PM. Eastbound queues from the Main Street intersection extended to west of the study intersection and blocked operations. By 3:45 PM, the eastbound queue cleared and by 3:50 the southbound driveway queue cleared.

The roundabout in design at the Main Street intersections with State Route 1 and 41 will reduce queue spill back to the MBHS driveways.

We recommend evaluating MBHS pick-up and drop-off circulation with a one-way loop with inbound traffic on the easterly driveway and outbound traffic on the westerly driveway. This would reduce delay and conflict points.

#### *Traffic Volumes*

Turning movement counts were also collected at the intersection in March 2024 when school was in session. The hourly intersection approach volumes are shown in **Table 1**. The hourly turning movement count is included as **Attachment B**.

**Table 1: Hourly Vehicle Approach Volumes**

Hourly Vehicle Approach Volumes								
Time	Atascadero Avenue			MBHS	Bikes	Pedestrians		
	Eastbound	Westbound	Total	Southbound	All	North Leg	East Leg	West Leg
7:00 AM	45	158	203	37	4	5	0	5
8:00 AM	126	444	570	178	3	8	0	16
9:00 AM	61	104	165	20	12	8	0	0
10:00 AM	106	132	238	32	11	2	0	4
11:00 AM	91	113	204	39	23	2	0	4
12:00 PM	162	154	316	67	16	4	1	43
1:00 PM	121	202	323	45	11	9	7	131
2:00 PM	100	169	269	48	10	3	2	2
3:00 PM	216	309	525	118	10	8	0	58
4:00 PM	124	191	315	66	33	7	0	1
5:00 PM	148	258	406	157	17	8	0	2
6:00 PM	170	230	400	65	2	16	0	0
<i>AM Peak Hour<sup>1</sup></i>	<i>121</i>	<i>465</i>	<i>586</i>	<i>178</i>	<i>3</i>	<i>7</i>	<i>0</i>	<i>20</i>
<i>PM Peak Hour<sup>1</sup></i>	<i>234</i>	<i>287</i>	<i>521</i>	<i>130</i>	<i>18</i>	<i>9</i>	<i>0</i>	<i>56</i>

1. AM peak hour began at 7:45 AM and the PM peak hour began at 3:15 PM.  
Source: Metro Traffic Data, March 20, 2024.

The following summarizes the maximum pedestrians per hour on each leg:

- MBHS eastern driveway (crosswalk): 20 pedestrians.
- Atascadero Road east leg (no crosswalk): Seven pedestrians.
- Atascadero Road west leg (crosswalk): 174 pedestrians.

A maximum of 33 bicycles per hour were observed at the intersection. During the 12-hour count there were a total of 152 bicycles and 356 pedestrians at the intersection.

### ***Collision History***

Five years of traffic collision data was obtained from the Statewide Integrated Traffic Records System (SWITRS) for the study intersection. No collisions were reported.

### ***Intersection Operations***

The intersection was analyzed using Synchro 11 and the Highway Capacity Manual (HCM) 6th edition methodology. The intersection currently operates at level of service (LOS) F and E during the AM and PM peak hours for the southbound MBHS approach, respectively. However, the methodology does not account for the intersection queuing at the Atascadero Road and Main Street intersection. The level of service worksheets are included as **Attachment C**.

## **INTERSECTION CONTROL EVALUATION**

The following sections summarize the intersection sight distance and intersection control warrants consistent with City Standards and the California Manual on Uniform Traffic Control Devices (CAMUTCD).

### *Sight Distance*

The City of Morro Bay Standards specify a minimum sight distance of 200 feet unless approved by the Engineer. Street features including landscaping, utility poles, street furniture, signs, and parked vehicles can inhibit sight distance in urban areas. Per California Manual on Uniform Traffic Control Devices (CAMUTCD) guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of six feet measured from the curb return should be provided at alleys and driveways.” Assembly Bill 413, which will become active in 2025 reinforces this concept by prohibiting drivers from parking within 20 feet of the vehicle approach side of any unmarked or marked crosswalk or 15 feet of any crosswalk where a curb extension is present.

The stopping sight distance is met at the intersection for all approaches. We recommend restriping the existing red curb adjacent to the west leg crosswalk. The sign and striping recommendations are included as **Attachment A**.

### *Intersection Control Warrants*

The latest version of the CAMUTCD was used to evaluate intersection control. CAMUTCD Section 2B.07 provides guidance for the installation of multi-way stop control according to the following criteria:

- Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal. (CRITERIA NOT MET – see **Attachment D**)
- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions. (CRITERIA NOT MET)
- Minimum volumes (CRITERIA NOT MET):
  1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for 8 hours of an average day; and
  2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
  3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
- Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. (CRITERIA NOT MET)

The following other criteria that may also be considered in an engineering study include:

- The need to control left-turn conflicts. (CRITERIA NOT MET)
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes. (CRITERIA NOT MET)
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop. (CRITERIA NOT MET)
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection. (CRITERIA NOT MET)

The intersection does not meet the CAMUTCD guidance for traffic signal or multi-way stop installation.

During the lunch peak hour, there were 174 pedestrian crossings of the west leg crosswalk and 649 conflicting vehicles on Atascadero Road, meeting the pedestrian hybrid beacon (PHB) warrant. The PHB warrant is not met during the drop-off or pick-up peak periods. Consistent with the Atascadero Road and the State Route 1 Southbound ramp intersection, we recommend the installation of a rectangular rapid flashing beacon (RRFB).

### ***School Crosswalk Evaluations***

CAMUTCD Section 7B requires the following at school crosswalks:

- The School Advance Warning Assembly D(CA) shall be used in advance of any School Crosswalk Warning Assembly B(CA), School Crosswalk Warning Assembly E(CA) or the School Speed Limit Assembly C(CA).
- The School Crosswalk Warning Assembly B(CA) or E(CA) shall be posted at all yellow school crosswalks that are not controlled by a STOP (R1-1) sign, a YIELD (R1-2) sign or a traffic signal.

We recommend the replacement and installation of school pedestrian warning signage consistent with the CAMUTCD. We also recommend the following the next time the roadway is resurfaced:

- Reconstruct the northwest curb ramp and consider a bulb out on the south side of the road to shorten the pedestrian crossing distance.
- Install ladder crosswalk markings.

The sign and striping recommendations are included as **Attachment A**.

### **RECOMMENDATIONS**

No additional intersection control is recommended. We recommend the following:

- Replace and install additional school pedestrian warning signs.
- Install rectangular rapid flashing beacon (RRFB) at the west leg crosswalk.
- Restripe 20 feet of red curb for the eastbound approach prior to the west leg crosswalk.
- Restripe 15 feet of red curb for the eastbound approach following the west leg crosswalk.
- Install ladder crosswalk markings the next time the roadway is resurfaced.
- Reconstruct northwest corner and curb ramp and consider a bulb out on the south side of the road to shorten the pedestrian crossing distance.
- southwest curb ramp to shorten pedestrian crossing distance the next time the roadway is resurfaced.
- Evaluate MBHS pick-up and drop-off circulation with a one-way loop with inbound traffic on the easterly driveway and outbound traffic on the westerly driveway. This would reduce delay and conflict points.

The sign and striping recommendations are included as **Attachment A**.

Please let us know if you have any questions.

**ATTACHMENTS**

Attachment A: Vicinity Map and Recommendations

Attachment B: Turning Movement Count

Attachment C: Synchro Worksheets

Attachment D: Traffic Signal and Multi-Way Stop Control Warrants

**REFERENCES**

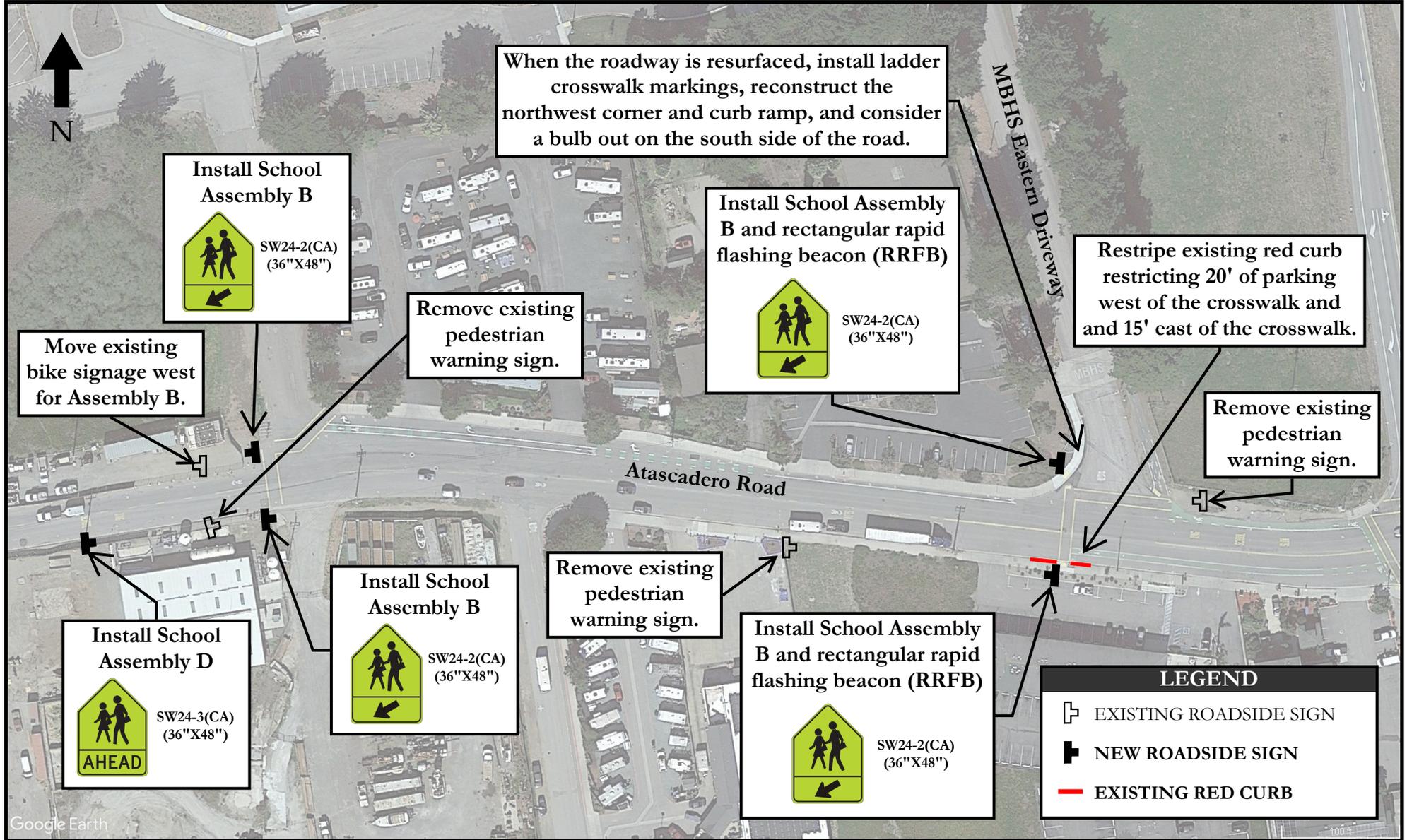
California Department of Transportation (Caltrans). 2020. Highway Design Manual.

\_\_\_\_\_. 2021, Revision 6. California Manual on Uniform Traffic Control Devices, 2014 Edition.

City of Morro Bay Department of Public Works. October 1987. Standard Drawings and Specifications.

Transportation Research Board (TRB). 2017. Highway Capacity Manual, 6th Edition.

# Attachment A: Sign and Striping Recommendations



## Atascadero Rd/Morro Bay High School East Driveway Intersection Control Evaluation



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

# Turning Movement Report (Vehicles)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Atascadero Ave & East HS Drive LATITUDE 35.3799995  
 COUNTY San Luis Obispo LONGITUDE 120.8568041  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound				TOTALS Vehicles	TRUCK %
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks		
7:00 AM to 7:15 AM	0	0	0	0	6	0	1	0	0	7	0	1	0	17	12	1	43	5%
7:15 AM to 7:30 AM	0	0	0	0	11	0	0	0	1	11	0	2	0	21	18	0	62	3%
7:30 AM to 7:45 AM	0	0	0	0	6	0	0	0	0	12	0	1	0	17	16	1	51	4%
7:45 AM to 8:00 AM	0	0	0	0	12	0	1	1	1	13	0	2	0	23	34	0	84	4%
8:00 AM to 8:15 AM	0	0	0	0	51	0	2	1	0	21	0	1	0	52	96	3	222	2%
8:15 AM to 8:30 AM	0	0	0	0	72	0	4	0	0	54	0	0	0	84	119	1	333	0%
8:30 AM to 8:45 AM	0	0	0	0	35	0	1	2	1	31	0	1	0	31	26	2	125	4%
8:45 AM to 9:00 AM	0	0	0	0	12	0	1	1	0	19	0	1	0	27	9	1	68	4%
9:00 AM to 9:15 AM	0	0	0	0	3	0	0	0	0	14	0	1	0	24	7	0	48	2%
9:15 AM to 9:30 AM	0	0	0	0	3	0	0	0	0	11	0	1	0	19	4	2	37	8%
9:30 AM to 9:45 AM	0	0	0	0	4	0	3	0	2	16	0	2	0	21	3	1	49	6%
9:45 AM to 10:00 AM	0	0	0	0	7	0	0	0	0	18	0	0	0	12	14	1	51	2%
10:00 AM to 10:15 AM	0	0	0	0	4	0	0	0	0	17	0	2	0	23	2	3	46	11%
10:15 AM to 10:30 AM	0	0	0	0	4	0	0	0	1	17	0	3	0	26	9	2	57	9%
10:30 AM to 10:45 AM	0	0	0	0	14	0	6	0	2	35	0	1	0	29	21	1	107	2%
10:45 AM to 11:00 AM	0	0	0	0	4	0	0	0	0	34	0	3	0	17	5	1	60	7%
11:00 AM to 11:15 AM	0	0	0	0	3	0	0	0	0	27	0	2	0	17	2	2	49	8%
11:15 AM to 11:30 AM	0	0	0	0	15	0	1	1	1	23	0	1	0	22	7	2	69	6%
11:30 AM to 11:45 AM	0	0	0	0	11	0	0	1	1	14	0	1	0	24	8	3	58	9%
11:45 AM to 12:00 PM	0	0	0	0	8	0	1	1	0	25	0	3	0	31	2	1	67	7%
12:00 PM to 12:15 PM	0	0	0	0	4	0	0	0	0	31	0	2	0	41	6	3	82	6%
12:15 PM to 12:30 PM	0	0	0	0	10	0	0	0	0	21	0	1	0	23	7	0	61	2%
12:30 PM to 12:45 PM	0	0	0	0	6	0	2	0	0	24	0	1	0	30	11	1	73	3%
12:45 PM to 1:00 PM	0	0	0	0	39	0	6	1	4	82	0	2	0	26	10	1	167	2%
1:00 PM to 1:15 PM	0	0	0	0	13	0	2	0	3	32	0	0	0	40	16	2	106	2%
1:15 PM to 1:30 PM	0	0	0	0	5	0	5	0	14	17	0	0	0	53	20	0	114	0%
1:30 PM to 1:45 PM	0	0	0	0	10	0	1	0	1	28	0	2	0	21	10	3	71	7%
1:45 PM to 2:00 PM	0	0	0	0	6	0	3	0	4	22	0	1	0	22	20	1	77	3%
2:00 PM to 2:15 PM	0	0	0	0	13	0	0	1	3	25	0	1	0	19	13	1	73	4%
2:15 PM to 2:30 PM	0	0	0	0	12	0	2	1	0	21	0	0	0	27	12	2	74	4%
2:30 PM to 2:45 PM	0	0	0	0	10	0	2	0	3	19	0	1	0	30	19	1	83	2%
2:45 PM to 3:00 PM	0	0	0	0	7	0	2	0	1	28	0	1	0	29	20	0	87	1%
3:00 PM to 3:15 PM	0	0	0	0	9	0	3	1	1	18	0	0	0	47	21	2	99	3%
3:15 PM to 3:30 PM	0	0	0	0	14	0	0	1	3	29	0	0	0	64	25	2	135	2%
3:30 PM to 3:45 PM	0	0	0	0	59	0	8	1	3	124	0	1	0	61	31	3	286	2%
3:45 PM to 4:00 PM	0	0	0	0	22	0	3	2	1	37	0	0	0	41	19	0	123	2%
4:00 PM to 4:15 PM	0	0	0	0	19	0	5	0	1	36	0	0	0	28	18	0	107	0%
4:15 PM to 4:30 PM	0	0	0	0	10	0	3	0	0	32	0	0	0	30	12	1	87	1%
4:30 PM to 4:45 PM	0	0	0	0	13	0	2	0	0	23	0	2	0	37	12	4	87	7%
4:45 PM to 5:00 PM	0	0	0	0	11	0	3	0	1	31	0	0	0	39	15	0	100	0%
5:00 PM to 5:15 PM	0	0	0	0	27	0	2	1	4	33	0	0	0	33	25	0	124	1%
5:15 PM to 5:30 PM	0	0	0	0	45	0	5	1	1	25	0	0	0	33	39	1	148	1%
5:30 PM to 5:45 PM	0	0	0	0	31	0	0	0	0	33	0	1	0	43	25	1	132	2%
5:45 PM to 6:00 PM	0	0	0	0	45	0	2	0	0	52	0	1	0	47	13	0	159	1%
6:00 PM to 6:15 PM	0	0	0	0	20	0	1	0	1	53	0	0	0	37	5	0	117	0%
6:15 PM to 6:30 PM	0	0	0	0	19	0	1	0	2	32	0	0	0	23	23	0	100	0%
6:30 PM to 6:45 PM	0	0	0	0	10	0	3	0	2	41	0	0	0	20	62	1	138	1%
6:45 PM to 7:00 PM	0	0	0	0	11	0	0	0	2	37	0	0	0	22	38	0	110	0%
<b>DAILY TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>785</b>	<b>0</b>	<b>87</b>	<b>18</b>	<b>65</b>	<b>1405</b>	<b>0</b>	<b>46</b>	<b>0</b>	<b>1503</b>	<b>961</b>	<b>58</b>	<b>4806</b>	<b>3%</b>

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound				Peak Hour Summary		
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Vehicles	Trucks	PHF
7:45 AM to 8:45 AM	0	0	0	0	170	0	8	4	2	119	0	4	0	190	275	6	764	2%	0.57
3:15 PM to 4:15 PM	0	0	0	0	114	0	16	4	8	226	0	1	0	194	93	5	651	2%	0.57



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

# Turning Movement Report

## (Bicycles & Pedestrians)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Atascadero Ave & East HS Drive LATITUDE 35.379995  
 COUNTY San Luis Obispo LONGITUDE -120.8568041  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds	TOTALS	
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Bicycles	Peds
7:00 AM to 7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1
7:15 AM to 7:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:30 AM to 7:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM to 8:00 AM	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	2	5
8:00 AM to 8:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8:15 AM to 8:30 AM	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	11
8:30 AM to 8:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM to 9:00 AM	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	2	2
9:00 AM to 9:15 AM	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	4	0
9:15 AM to 9:30 AM	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	2
9:30 AM to 9:45 AM	0	0	0	1	0	0	3	0	0	2	0	0	0	0	0	0	5	1
9:45 AM to 10:00 AM	0	0	0	5	0	0	2	0	0	0	0	0	0	0	0	0	2	5
10:00 AM to 10:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10:15 AM to 10:30 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	0
10:30 AM to 10:45 AM	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4	3
10:45 AM to 11:00 AM	0	0	0	0	0	0	2	0	1	0	0	0	0	1	0	0	4	0
11:00 AM to 11:15 AM	0	0	0	0	1	0	15	0	0	2	0	0	0	0	0	1	19	0
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
11:30 AM to 11:45 AM	0	0	0	2	0	0	1	0	0	0	0	0	0	1	0	0	2	2
11:45 AM to 12:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
12:00 PM to 12:15 PM	0	0	0	3	1	0	2	0	0	1	0	0	0	0	0	0	4	3
12:15 PM to 12:30 PM	0	0	0	1	0	0	1	0	5	0	0	0	0	2	0	0	8	1
12:30 PM to 12:45 PM	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	3	1
12:45 PM to 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	43
1:00 PM to 1:15 PM	0	0	0	5	0	0	0	0	1	0	0	2	0	0	1	0	2	81
1:15 PM to 1:30 PM	0	0	0	0	0	0	1	0	0	1	0	4	0	1	0	0	3	61
1:30 PM to 1:45 PM	0	0	0	2	2	0	2	0	1	0	0	0	0	0	0	0	5	2
1:45 PM to 2:00 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	1	3
2:00 PM to 2:15 PM	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	1	3
2:15 PM to 2:30 PM	0	0	0	2	0	0	0	0	0	2	0	0	0	2	0	0	4	2
2:30 PM to 2:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3	0
2:45 PM to 3:00 PM	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	2	2
3:00 PM to 3:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
3:15 PM to 3:30 PM	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1
3:30 PM to 3:45 PM	0	0	0	7	1	0	0	0	0	1	0	0	0	0	0	0	2	62
3:45 PM to 4:00 PM	0	0	0	0	0	0	2	0	2	1	0	0	0	0	0	0	5	1
4:00 PM to 4:15 PM	0	0	0	1	0	0	6	0	3	0	0	0	0	1	0	0	10	1
4:15 PM to 4:30 PM	0	0	0	2	1	0	4	0	4	0	0	0	0	3	0	0	12	3
4:30 PM to 4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	4	0
4:45 PM to 5:00 PM	0	0	0	4	0	0	1	0	6	0	0	0	0	0	0	0	7	4
5:00 PM to 5:15 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
5:15 PM to 5:30 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1
5:30 PM to 5:45 PM	0	0	0	1	1	0	1	0	5	3	0	0	0	0	0	0	10	3
5:45 PM to 6:00 PM	0	0	0	5	0	0	3	0	0	0	0	0	0	2	0	0	5	5
6:00 PM to 6:15 PM	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	2
6:15 PM to 6:30 PM	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	2
6:30 PM to 6:45 PM	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
6:45 PM to 7:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>DAILY TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>10</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>41</b>	<b>24</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>18</b>	<b>4</b>	<b>266</b>	<b>152</b>	<b>356</b>

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds	Peak Hour Summary	
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Bikes	Peds
7:45 AM to 8:45 AM	0	0	0	7	0	0	0	0	3	0	0	0	0	0	0	20	3	27
3:15 PM to 4:15 PM	0	0	0	9	1	0	8	0	6	2	0	0	0	1	0	56	18	65

## Intersection Control Evaluation 2: Atascadero Ave & MBHS East

AM Peak Hour  
HCM 6th TWSC

Intersection						
Int Delay, s/veh	14.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	2	119	190	275	170	8
Future Vol, veh/h	2	119	190	275	170	8
Conflicting Peds, #/hr	7	0	0	7	20	0
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	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	209	333	482	298	14

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	822	0	-	0	818 581
Stage 1	-	-	-	-	581 -
Stage 2	-	-	-	-	237 -
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	807	-	-	-	346 514
Stage 1	-	-	-	-	559 -
Stage 2	-	-	-	-	802 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	802	-	-	-	339 511
Mov Cap-2 Maneuver	-	-	-	-	339 -
Stage 1	-	-	-	-	552 -
Stage 2	-	-	-	-	796 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	63.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	802	-	-	-	344
HCM Lane V/C Ratio	0.004	-	-	-	0.908
HCM Control Delay (s)	9.5	0	-	-	63.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	9

## Intersection Control Evaluation 2: Atascadero Ave & MBHS East

PM Peak Hour  
HCM 6th TWSC

Intersection						
Int Delay, s/veh	8.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	8	226	194	93	114	16
Future Vol, veh/h	8	226	194	93	114	16
Conflicting Peds, #/hr	9	0	0	9	56	0
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	57	57	57	57	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	396	340	163	200	28

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	512	0	-	0	911
Stage 1	-	-	-	-	431
Stage 2	-	-	-	-	480
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1053	-	-	-	304
Stage 1	-	-	-	-	655
Stage 2	-	-	-	-	622
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1044	-	-	-	293
Mov Cap-2 Maneuver	-	-	-	-	293
Stage 1	-	-	-	-	638
Stage 2	-	-	-	-	616

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	42
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	-	313
HCM Lane V/C Ratio	0.013	-	-	-	0.729
HCM Control Delay (s)	8.5	0	-	-	42
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	5.4

# Traffic Signal Warrant Analysis

## Warrants 1 - 3 (Volume Warrants)

<b>Project Name</b>	Atascadero Rd/MBHS East
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (E/W Road)	Atascadero Road	Minor Street (N/S Road)	MBHS East
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Vehicle/Bike Volume	4021 vehicles	Total Vehicle/Bike Volume	937 vehicles
Total Pedestrian Volume	80 crossings	Total Pedestrian Volume	276 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

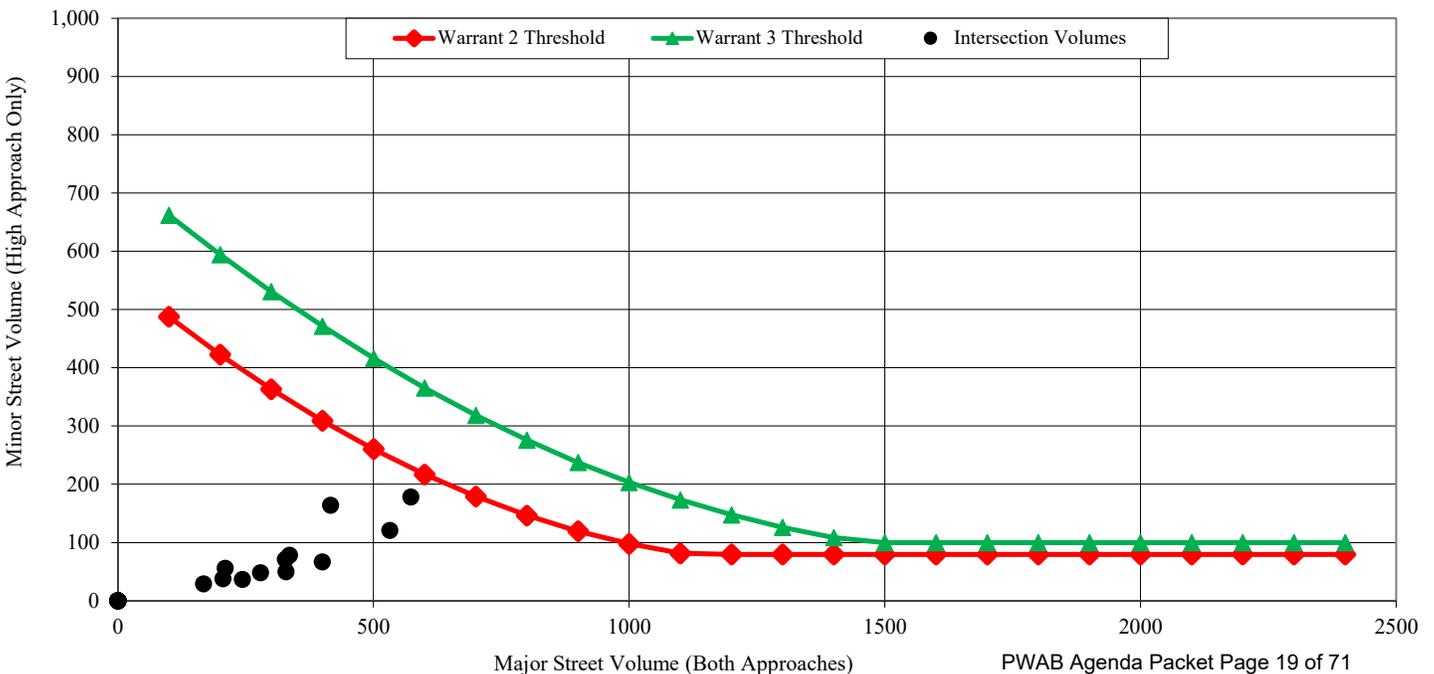
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	Condition B	Condition A+B*
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	1 hour	0 hours	3 (Cond. A) & 0 (Cond. B)
Criteria - Major Street (veh/hr)	500	750	400 (Cond. A) & 600 (Cond. B)
Criteria - Minor Street (veh/hr)	150	75	120 (Cond. A) & 60 (Cond. B)

\* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	Condition B
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	653 total, 121 minor, 2.1 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	650	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	100	
Criteria - Minor Street High Side Delay (veh-hrs)	4	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)





# Traffic Signal Warrant Analysis

## Multi-Way Stop Warrants

<b>Project Name</b>	Atascadero Rd/MBHS East
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (E/W Road)	Atascadero Road	Minor Street (N/S Road)	MBHS East
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Vehicle/Bike Volume	4021 vehicles	Total Vehicle/Bike Volume	937 vehicles
Total Pedestrian Volume	80 crossings	Total Pedestrian Volume	276 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	<b>Not Satisfied</b>
Criteria*	Traffic Signal Warranted & Justified

\* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	<b>Not satisfied</b>
Required values reached for	less than 4 correctable crashes
Criteria - Crash Experience	5 or more correctable crashes in 12-month period

Condition C - Intersection Volume & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours & 63 sec. average delay/veh
Criteria - Major Street (veh/hr)	300 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	200 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	4 hours, less than 4 crashes, & 63 sec. average delay/veh
Criteria - Major Street (veh/hr)	240 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	160 for the same 8 hours of an average day
Criteria - Crash Experience	4 or more correctable crashes in 12-month period
Criteria - Delay (average sec/veh)	24 during the highest hour



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 15, 2024  
**FROM:** Austin Della, PE – Senior Civil Engineer  
**SUBJECT:** Intersection Control Evaluation at Main Street and Dunes Street

## **RECOMMENDATION**

Staff recommends the Public Works Advisory Board

- Review the Intersection Control Evaluation (ICE) memo for the intersection of Main Street and Dunes Street;
- Provide input on staff's plan to not install stop signs; and
- Provide additional feedback as needed.

## **BACKGROUND**

Earlier this year, Public Works staff received a request to investigate the intersection of Main Street and Dunes Street for potential intersection control measures. The request noted that some drivers travelling along Main Street in both directions may be confused about whether they must stop because the other intersections along the downtown corridor include four way stop control.

In response to this request, the intersection of Main Street and Dunes Street was evaluated for potential intersection control measures in compliance with City resolution No. 67-15, which states that "No unwarranted traffic control devices shall be allowed within the rights-of-ways within the jurisdictions boundaries of the City". Upon receipt of a stop sign installation request, City practice is to perform a warrant analysis, at the discretion of the Public Works Department, to determine whether the stop sign can be installed or not. This practice follows best risk management practices that protect the City against lawsuits and the public.

A warrant analysis involves the preparation of an Intersection Control Evaluation (ICE) prepared by a professional traffic engineer. This evaluation reviews an intersection's collision history, sight distances, and traffic volume to determine whether objective minimum criteria are met that would "warrant" installation of traffic devices such as a stop sign.

## **DISCUSSION**

Central Coast Transportation Consulting prepared an ICE for the City, which is attached. The intersection did not meet the criteria for the installation of stop signs based on traffic volume, sight distance, and collision history. A summary analysis of the relevant criteria contained in the attached ICE is as follows:

- Five or more crashes in 12-month period correctible by multi-way stop installation. CRITERIA NOT MET.
- Intersection minimum volumes must be demonstrated. CRITERIA NOT MET.
- Need to control left-hand conflicts. CRITERIA NOT MET.
- Need to control pedestrian conflicts with high pedestrian volumes. CRITERIA NOT MET.
- Need for line of sight of conflicting traffic. CRITERIA NOT MET.

Prepared By: AD

Dept Review: GK

While the ICE did not establish a warrant a stop sign at this location, it generated other recommendations to be implemented at this intersection.

- Add six feet of no parking adjacent to outbound driveways on Main Street north of Dunes Street.
- Extend the existing red curb on the southbound approach to 35 feet to provide the minimum 20 feet of no parking prior to the crosswalk. One parking space will remain between the crosswalk and driveway.
- Remove the northernmost parking space for the northbound approach to provide the minimum 20 feet of no parking prior to the crosswalk.
- Extend the existing red curb on the westbound approach to 20 feet.
- Install ladder crosswalks on Main Street as part of roadway resurfacing.

Staff will separately evaluate the need to implement the above added recommendations based on need and available budget and staff capacity.

### **NOTIFICATION**

On August 9, 2024, City staff sent out notices by USPS to the neighborhood potentially impacted by consideration of this item.

### **ATTACHMENTS**

1. Main Street and Dunes Street - Intersection Control Evaluation



## MEMORANDUM

Date: August 13, 2024  
 To: Austin Della, City of Morro Bay  
 From: Michelle Matson and Joe Fernandez, CCTC  
 Subject: **Main Street and Dunes Street, Morro Bay - Intersection Control Evaluation**

---

This memorandum summarizes the intersection control evaluation at the intersection of Main Street and Dunes Street in the City of Morro Bay. The following sections summarize:

- Existing Conditions
- Intersection Control Evaluation
- Recommendations

### **EXISTING CONDITIONS**

The following sections summarize the existing setting, traffic volumes, collision history, and intersection operations.

#### ***Existing Setting***

Main Street has a posted speed limit of 25 miles per hour, a center left turn lane, no bicycle facilities, and sidewalks on both sides of the road at the Dunes Street intersection.

Dunes Street has no posted speed limit or bike facilities. There are existing sidewalks on the north side of the road at the Main Street intersection and sidewalks on the south side east of Main Street.

The intersection of Main Street and Dunes Street is currently side-street stop controlled on the Dunes Street approaches. There are curb ramps and crosswalks on all intersection legs. There is an existing light on the southwest corner.

#### ***Traffic Volumes***

Turning movement counts were collected in April 2024 when school was in session. The hourly intersection vehicle approach volumes are shown in **Table 1**. The hourly turning movement count is included as **Attachment B**.

**Table 1: Hourly Vehicle Approach Volumes**

Hourly Vehicle Approach Volumes							
Time	Major Street (Main Street)			Minor Street (Dunes Street)			TEV <sup>2</sup>
	Northbound	Southbound	Total	Eastbound	Westbound	Total	
7:00 AM	77	98	175	13	14	27	202
8:00 AM	139	214	353	20	28	48	401
9:00 AM	190	231	421	21	38	59	480
10:00 AM	200	300	500	24	41	65	565
11:00 AM	219	345	564	23	57	80	644
12:00 PM	265	347	612	15	52	67	679
1:00 PM	280	330	610	17	55	72	682
2:00 PM	287	329	616	19	35	54	670
3:00 PM	288	355	643	23	39	62	705
4:00 PM	276	280	556	23	40	63	619
5:00 PM	255	237	492	17	21	38	530
6:00 PM	180	215	395	18	25	43	438
<i>AM Peak Hour<sup>1</sup></i>	<i>246</i>	<i>360</i>	<i>606</i>	<i>20</i>	<i>63</i>	<i>83</i>	<i>689</i>
<i>PM Peak Hour<sup>1</sup></i>	<i>308</i>	<i>342</i>	<i>650</i>	<i>23</i>	<i>42</i>	<i>65</i>	<i>715</i>

1. AM peak hour began at 11:30 AM and the PM peak hour began at 2:45 PM.  
2. TEV = Total Entering Vehicles. TEV was 6,615 between 7:00 AM and 7:00 PM  
Source: Metro Traffic Data, March 20, 2024.

The following summarizes the maximum pedestrians per hour on each leg of the intersection:

- Main Street north leg: 16 pedestrians.
- Main Street south leg: Nine pedestrians.
- Dunes Street east leg: 16 pedestrians.
- Dunes Street west leg: 16 pedestrians.

A maximum of nine bicycles per hour were observed at the intersection. During the 12-hour count there were a total of 43 bicycles and 349 pedestrians at the intersection.

### ***Collision History***

Five years of traffic collision data (2019-2023) was obtained from the Statewide Integrated Traffic Records System (SWITRS) for the study intersection. Four collisions were reported as summarized below:

- One hit object collision was reported north of the intersection due to a northbound driver driving under the influence (DUI).
- One hit object collision was reported at the intersection due to a southbound right turning driver.
- One rear end collision was reported at the intersection due to an eastbound driver.
- One broadside automobile right of way collision was reported at the intersection due to an eastbound driver.

There are no collision patterns or recommendations.

### *Intersection Operations*

The intersection was analyzed using Synchro 11 and the Highway Capacity Manual (HCM) 6th edition methodology. The eastbound approach of the intersection currently operates at level of service (LOS) C and the westbound approach operates at LOS B during the AM peak hour. Both the eastbound and westbound approaches operate at LOS B during the PM peak hour. The level of service worksheets are included as **Attachment C**.

## **INTERSECTION CONTROL EVALUATION**

The following sections summarize the intersection sight distance and intersection control warrants consistent with City Standards and the California Manual on Uniform Traffic Control Devices (CAMUTCD).

### *Sight Distance*

The City of Morro Bay Standards specify a minimum sight distance of 200 feet unless approved by the Engineer. Street features including landscaping, utility poles, street furniture, signs, and parked vehicles can inhibit sight distance in urban areas. Per California Manual on Uniform Traffic Control Devices (CAMUTCD) guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of six feet measured from the curb return should be provided at alleys and driveways.” Assembly Bill 413, which will become active in 2025 reinforces this concept by prohibiting drivers from parking within 20 feet of the vehicle approach side of any unmarked or marked crosswalk or 15 feet of any crosswalk where a curb extension is present.

The stopping sight distance is met at the intersection for all approaches. We recommend installing additional parking restrictions consistent with the CAMUTCD and Assembly Bill 413.

The sign and striping recommendations are included as **Attachment A**.

### *Intersection Control Warrants*

The latest version of the CAMUTCD was used to evaluate intersection control. CAMUTCD Section 2B.07 provides guidance for the installation of multi-way stop control according to the following criteria:

- Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal. (CRITERIA NOT MET – see **Attachment D**)
- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions. (CRITERIA NOT MET)
- Minimum volumes (CRITERIA NOT MET):
  1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for 8 hours of an average day; and
  2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
  3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

- Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. (CRITERIA NOT MET)

The following other criteria that may also be considered in an engineering study include:

- The need to control left-turn conflicts. (CRITERIA NOT MET)
- The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes. (CRITERIA NOT MET)
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop. (CRITERIA NOT MET)
- An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection. (CRITERIA NOT MET)

The intersection does not meet the CAMUTCD guidance for traffic signal or multi-way stop installation and no additional intersection traffic control is recommended.

## RECOMMENDATIONS

No additional intersection control is recommended. We recommend the following:

- Add six feet of no parking adjacent to outbound driveways on Main Street north of Dunes Street.
- Extend the existing red curb on the southbound approach to 35 feet to provide the minimum 20 feet of no parking prior to the crosswalk. One parking space will remain between the crosswalk and driveway.
- Remove northernmost parking space for the northbound approach to provide the minimum 20 feet of no parking prior to the crosswalk.
- Extend the existing red curb on the westbound approach to 20 feet.
- Install ladder crosswalks on Main Street as part of roadway resurfacing.

The sign and striping recommendations are included as **Attachment A**.

Please let us know if you have any questions.

## ATTACHMENTS

Attachment A: Vicinity Map and Recommendations

Attachment B: Turning Movement Count

Attachment C: Synchro Worksheets

Attachment D: Traffic Signal and Multi-Way Stop Control Warrants

## REFERENCES

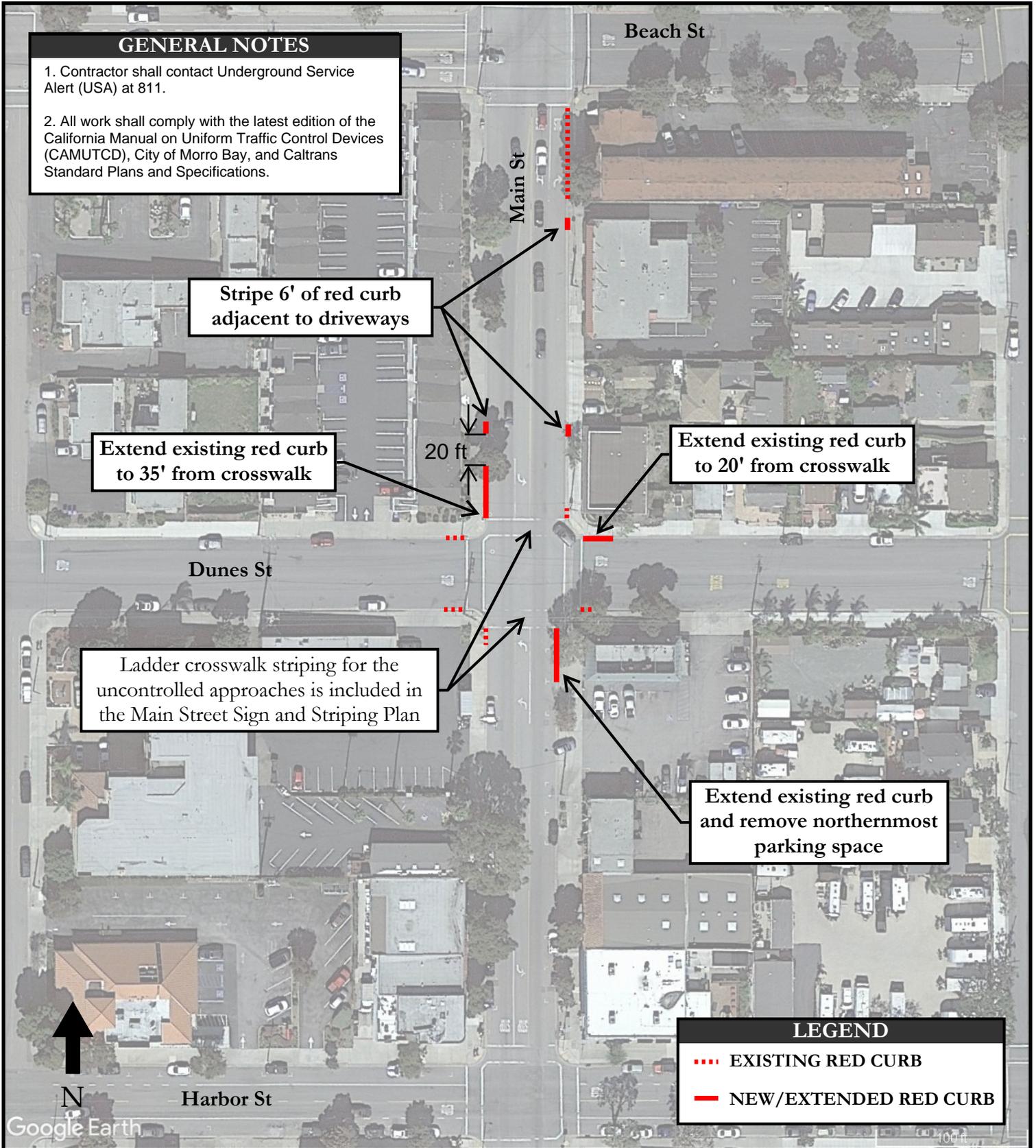
California Department of Transportation (Caltrans). 2020. Highway Design Manual.

\_\_\_\_\_. 2021, Revision 6. California Manual on Uniform Traffic Control Devices, 2014 Edition.

City of Morro Bay Department of Public Works. October 1987. Standard Drawings and Specifications.

Transportation Research Board (TRB). 2017. Highway Capacity Manual, 6th Edition.

# Attachment A: Vicinity Map and Recommendations



Main Street and Dunes Street, Morro Bay Intersection Control Evaluation





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

# Turning Movement Report (Vehicles)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Main Street & Dunes Street LATITUDE 35.3799995  
 COUNTY San Luis Obispo LONGITUDE -120.8568041  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound				TOTALS Vehicles	TRUCK %
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks		
7:00 AM to 7:15 AM	0	10	1	1	0	12	0	1	1	1	2	0	1	1	2	0	31	6%
7:15 AM to 7:30 AM	1	17	2	1	1	20	1	2	1	0	0	0	1	0	1	0	45	7%
7:30 AM to 7:45 AM	0	26	1	2	5	27	0	0	2	3	1	0	2	1	2	0	70	3%
7:45 AM to 8:00 AM	2	16	1	1	3	28	1	1	0	0	2	0	0	1	2	1	56	5%
8:00 AM to 8:15 AM	0	41	0	0	2	41	0	0	4	2	2	0	2	0	6	0	100	0%
8:15 AM to 8:30 AM	0	45	0	1	2	50	2	0	3	0	2	0	2	1	4	0	111	1%
8:30 AM to 8:45 AM	0	30	0	0	5	58	1	2	2	1	2	0	0	1	5	0	105	2%
8:45 AM to 9:00 AM	0	23	0	1	4	49	0	1	2	0	0	0	1	1	5	0	85	2%
9:00 AM to 9:15 AM	0	32	1	0	3	40	1	0	2	2	1	0	3	2	6	0	93	0%
9:15 AM to 9:30 AM	0	49	0	1	0	57	0	3	4	1	3	0	1	0	5	0	120	3%
9:30 AM to 9:45 AM	3	50	2	1	4	54	2	1	2	0	2	0	0	1	7	0	127	2%
9:45 AM to 10:00 AM	2	47	4	2	1	68	1	2	0	1	3	0	2	4	7	0	140	3%
10:00 AM to 10:15 AM	3	41	1	2	1	63	1	1	4	2	1	0	2	2	9	1	130	3%
10:15 AM to 10:30 AM	0	35	1	3	2	67	1	3	4	2	0	0	3	2	9	1	126	6%
10:30 AM to 10:45 AM	2	48	0	2	3	72	0	1	6	0	0	0	1	1	3	2	136	4%
10:45 AM to 11:00 AM	2	65	2	1	4	85	1	3	1	2	2	0	1	2	6	0	173	2%
11:00 AM to 11:15 AM	3	39	2	1	6	81	2	2	4	2	2	0	3	0	5	0	149	2%
11:15 AM to 11:30 AM	1	58	4	2	8	69	2	4	2	1	2	0	7	5	8	0	167	4%
11:30 AM to 11:45 AM	2	57	0	1	4	80	3	2	3	1	3	0	3	0	11	1	167	2%
11:45 AM to 12:00 PM	0	50	3	0	5	84	1	2	2	1	0	0	2	2	11	0	161	1%
12:00 PM to 12:15 PM	2	64	1	1	7	81	1	1	2	1	1	0	2	7	9	0	178	1%
12:15 PM to 12:30 PM	4	58	5	1	6	86	2	1	1	3	2	0	1	4	11	0	183	1%
12:30 PM to 12:45 PM	2	58	2	2	2	73	1	1	1	1	1	0	2	0	2	0	145	2%
12:45 PM to 1:00 PM	2	65	2	0	6	78	4	1	1	0	1	0	1	5	8	0	173	1%
1:00 PM to 1:15 PM	6	64	3	2	4	76	0	1	3	0	1	0	3	3	4	1	167	2%
1:15 PM to 1:30 PM	4	64	2	3	6	77	3	1	1	1	1	0	2	0	10	0	171	2%
1:30 PM to 1:45 PM	1	79	0	0	6	70	1	0	2	2	2	0	4	4	12	0	183	0%
1:45 PM to 2:00 PM	4	52	1	0	2	85	0	1	1	0	3	0	3	0	10	0	161	1%
2:00 PM to 2:15 PM	3	68	0	1	1	82	2	1	3	0	0	0	2	0	7	0	168	1%
2:15 PM to 2:30 PM	3	59	2	4	3	83	1	1	4	2	2	0	1	2	5	0	167	3%
2:30 PM to 2:45 PM	5	68	1	4	5	65	1	0	2	0	1	0	0	4	5	0	157	3%
2:45 PM to 3:00 PM	5	69	4	0	2	81	3	1	2	2	1	0	1	0	8	0	178	1%
3:00 PM to 3:15 PM	4	76	3	3	0	85	1	2	1	3	3	0	0	2	6	0	184	3%
3:15 PM to 3:30 PM	2	72	2	3	8	69	1	1	2	1	4	0	3	0	5	0	169	2%
3:30 PM to 3:45 PM	3	65	3	0	7	83	2	1	2	2	0	0	1	5	11	0	184	1%
3:45 PM to 4:00 PM	6	50	2	0	9	88	2	0	2	1	2	0	2	2	2	0	168	0%
4:00 PM to 4:15 PM	3	63	2	0	2	70	1	0	3	3	2	0	3	2	7	0	161	0%
4:15 PM to 4:30 PM	3	76	0	2	2	69	1	2	0	1	3	0	2	0	5	0	162	2%
4:30 PM to 4:45 PM	3	68	2	1	0	60	2	1	2	1	3	0	6	0	6	0	153	1%
4:45 PM to 5:00 PM	1	53	2	0	7	63	3	0	2	1	2	0	1	2	6	0	143	0%
5:00 PM to 5:15 PM	0	79	1	1	8	47	1	0	5	2	2	0	1	2	4	0	152	1%
5:15 PM to 5:30 PM	4	67	0	1	2	61	3	0	3	3	0	0	1	0	2	0	146	1%
5:30 PM to 5:45 PM	2	32	1	0	1	45	1	0	0	0	1	0	2	0	5	0	90	0%
5:45 PM to 6:00 PM	4	62	3	0	1	63	4	0	1	0	0	0	1	1	2	0	142	0%
6:00 PM to 6:15 PM	2	46	3	0	3	48	2	1	3	1	0	0	1	0	6	0	115	1%
6:15 PM to 6:30 PM	0	45	2	1	2	55	0	0	2	0	0	0	1	1	4	0	112	1%
6:30 PM to 6:45 PM	2	41	0	0	3	53	0	0	0	0	3	0	2	2	3	0	109	0%
6:45 PM to 7:00 PM	1	34	4	0	3	44	2	0	3	2	4	0	1	1	3	0	102	0%
<b>DAILY TOTALS</b>	<b>102</b>	<b>2476</b>	<b>78</b>	<b>53</b>	<b>171</b>	<b>3045</b>	<b>65</b>	<b>49</b>	<b>103</b>	<b>55</b>	<b>75</b>	<b>0</b>	<b>87</b>	<b>76</b>	<b>282</b>	<b>7</b>	<b>6615</b>	<b>2%</b>

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound				Peak Hour Summary		
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Vehicles	Trucks	PHF
11:30 AM to 12:30 PM	8	229	9	3	22	331	7	6	8	6	6	0	8	13	42	1	689	1%	0.94
2:45 PM to 3:45 PM	14	282	12	6	17	318	7	5	7	8	8	0	5	7	30	0	715	2%	0.97



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

# Turning Movement Report (Bicycles & Pedestrians)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Main Street & Dunes Street LATITUDE 35.3678182  
 COUNTY San Luis Obispo LONGITUDE -120.850029  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds	TOTALS	
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Bicycles	Peds
7:00 AM to 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	6
7:30 AM to 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
7:45 AM to 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	2
8:00 AM to 8:15 AM	0	0	0	2	0	2	0	0	0	0	0	3	0	0	0	3	2	8
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0	4	0	10
8:30 AM to 8:45 AM	0	0	0	2	0	1	0	1	0	1	0	3	0	0	0	3	2	9
8:45 AM to 9:00 AM	0	0	0	0	0	0	0	4	0	0	0	6	0	0	0	6	0	16
9:00 AM to 9:15 AM	0	2	0	2	0	1	0	1	0	0	0	2	0	0	0	2	3	7
9:15 AM to 9:30 AM	0	1	0	2	0	0	0	2	0	0	0	4	0	0	0	4	1	12
9:30 AM to 9:45 AM	0	1	0	0	0	0	0	1	0	0	0	2	0	0	0	2	1	5
9:45 AM to 10:00 AM	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0	4	0	11
10:00 AM to 10:15 AM	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	2	0	8
10:15 AM to 10:30 AM	0	2	0	2	0	0	0	2	0	0	0	0	0	0	0	0	2	4
10:30 AM to 10:45 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
10:45 AM to 11:00 AM	0	1	0	2	0	0	0	1	0	0	0	3	0	0	0	3	1	9
11:00 AM to 11:15 AM	0	0	0	2	0	2	0	3	0	0	0	5	0	0	0	5	2	15
11:15 AM to 11:30 AM	0	0	0	2	0	3	0	0	0	0	0	2	0	0	0	2	3	6
11:30 AM to 11:45 AM	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	3
11:45 AM to 12:00 PM	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	2	5
12:00 PM to 12:15 PM	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	2	0	8
12:15 PM to 12:30 PM	0	0	0	1	0	0	0	1	0	0	0	5	0	0	0	5	0	12
12:30 PM to 12:45 PM	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0	3	0	10
12:45 PM to 1:00 PM	0	1	0	1	0	0	1	0	0	0	0	2	0	0	0	2	2	5
1:00 PM to 1:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:15 PM to 1:30 PM	0	2	0	6	0	0	0	0	0	1	0	0	0	0	0	0	3	6
1:30 PM to 1:45 PM	0	0	0	2	0	0	0	4	0	0	1	1	0	0	0	1	1	8
1:45 PM to 2:00 PM	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0	3	0	11
2:00 PM to 2:15 PM	0	0	0	0	0	1	0	2	0	0	0	7	0	0	1	7	2	16
2:15 PM to 2:30 PM	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
2:30 PM to 2:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2:45 PM to 3:00 PM	0	0	0	4	0	1	0	1	0	0	0	0	0	0	0	0	1	5
3:00 PM to 3:15 PM	0	0	0	5	0	1	0	1	0	0	0	1	0	0	1	1	2	8
3:15 PM to 3:30 PM	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7
3:30 PM to 3:45 PM	0	0	0	1	0	1	0	0	0	0	0	4	0	0	0	4	1	9
3:45 PM to 4:00 PM	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	4
4:00 PM to 4:15 PM	0	0	0	1	0	1	0	2	0	0	0	3	1	0	0	3	2	9
4:15 PM to 4:30 PM	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	1	3
4:30 PM to 4:45 PM	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
4:45 PM to 5:00 PM	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	7
5:00 PM to 5:15 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	1	3
5:15 PM to 5:30 PM	0	0	0	3	0	1	0	1	0	0	0	4	0	0	0	4	1	12
5:30 PM to 5:45 PM	0	1	0	1	0	0	0	1	0	0	0	4	0	1	0	4	2	10
5:45 PM to 6:00 PM	0	0	0	3	0	0	0	3	0	0	0	4	0	0	0	4	0	14
6:00 PM to 6:15 PM	0	0	0	2	0	0	0	4	0	0	0	1	0	0	0	1	0	8
6:15 PM to 6:30 PM	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	5
6:30 PM to 6:45 PM	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	6
6:45 PM to 7:00 PM	0	1	0	4	0	0	0	1	0	0	0	3	0	0	0	3	1	11
<b>DAILY TOTALS</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>95</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>56</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>99</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>99</b>	<b>43</b>	<b>349</b>

PEAK HOUR	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds	Peak Hour Summary	
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Bikes	Peds
11:30 AM to 12:30 PM	0	4	0	12	0	0	0	2	0	0	0	7	0	0	0	7	4	28
2:45 PM to 3:45 PM	0	0	0	13	0	3	0	6	0	0	0	5	0	0	1	5	4	29

Intersection Control Evaluation  
1: Main St & Dunes St

AM Peak Hour  
HCM 6th TWSC

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	8	6	6	8	13	42	8	229	9	22	331	7
Future Vol, veh/h	8	6	6	8	13	42	8	229	9	22	331	7
Conflicting Peds, #/hr	12	0	2	2	0	12	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	6	6	9	14	45	9	244	10	23	352	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	718	688	365	684	686	268	366	0	0	261	0	0
Stage 1	409	409	-	274	274	-	-	-	-	-	-	-
Stage 2	309	279	-	410	412	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	344	369	680	363	370	771	1193	-	-	1303	-	-
Stage 1	619	596	-	732	683	-	-	-	-	-	-	-
Stage 2	701	680	-	619	594	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	302	355	674	345	356	757	1185	-	-	1294	-	-
Mov Cap-2 Maneuver	302	355	-	345	356	-	-	-	-	-	-	-
Stage 1	610	581	-	722	673	-	-	-	-	-	-	-
Stage 2	634	670	-	594	579	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15		12.5		0.3		0.5	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1185	-	-	382	547	1294	-
HCM Lane V/C Ratio	0.007	-	-	0.056	0.123	0.018	-
HCM Control Delay (s)	8.1	-	-	15	12.5	7.8	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0.1	-

Intersection Control Evaluation  
1: Main St & Dunes St

PM Peak Hour  
HCM 6th TWSC

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	7	8	9	5	7	30	14	282	12	17	318	7
Future Vol, veh/h	7	8	9	5	7	30	14	282	12	17	318	7
Conflicting Peds, #/hr	13	0	6	6	0	13	5	0	5	5	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	50	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	8	9	5	7	31	14	291	12	18	328	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	730	709	343	712	706	315	340	0	0	308	0	0
Stage 1	373	373	-	330	330	-	-	-	-	-	-	-
Stage 2	357	336	-	382	376	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	338	359	700	347	361	725	1219	-	-	1253	-	-
Stage 1	648	618	-	683	646	-	-	-	-	-	-	-
Stage 2	661	642	-	640	616	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	307	346	693	326	348	713	1213	-	-	1247	-	-
Mov Cap-2 Maneuver	307	346	-	326	348	-	-	-	-	-	-	-
Stage 1	638	606	-	672	635	-	-	-	-	-	-	-
Stage 2	610	631	-	610	604	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.4		12.2		0.4		0.4	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1213	-	-	407	542	1247	-
HCM Lane V/C Ratio	0.012	-	-	0.061	0.08	0.014	-
HCM Control Delay (s)	8	-	-	14.4	12.2	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-

# Traffic Signal Warrant Analysis

## Warrants 1 - 3 (Volume Warrants)

<b>Project Name</b>	Main St/Dunes St
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (N/S Road)	Main St	Minor Street (E/W Road)	Dunes St
Analyzed with	1 approach lane	Analyzed with	1 approach Lane
Total Vehicle/Bike Volume	5970 vehicles	Total Vehicle/Bike Volume	688 vehicles
Total Pedestrian Volume	198 crossings	Total Pedestrian Volume	151 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

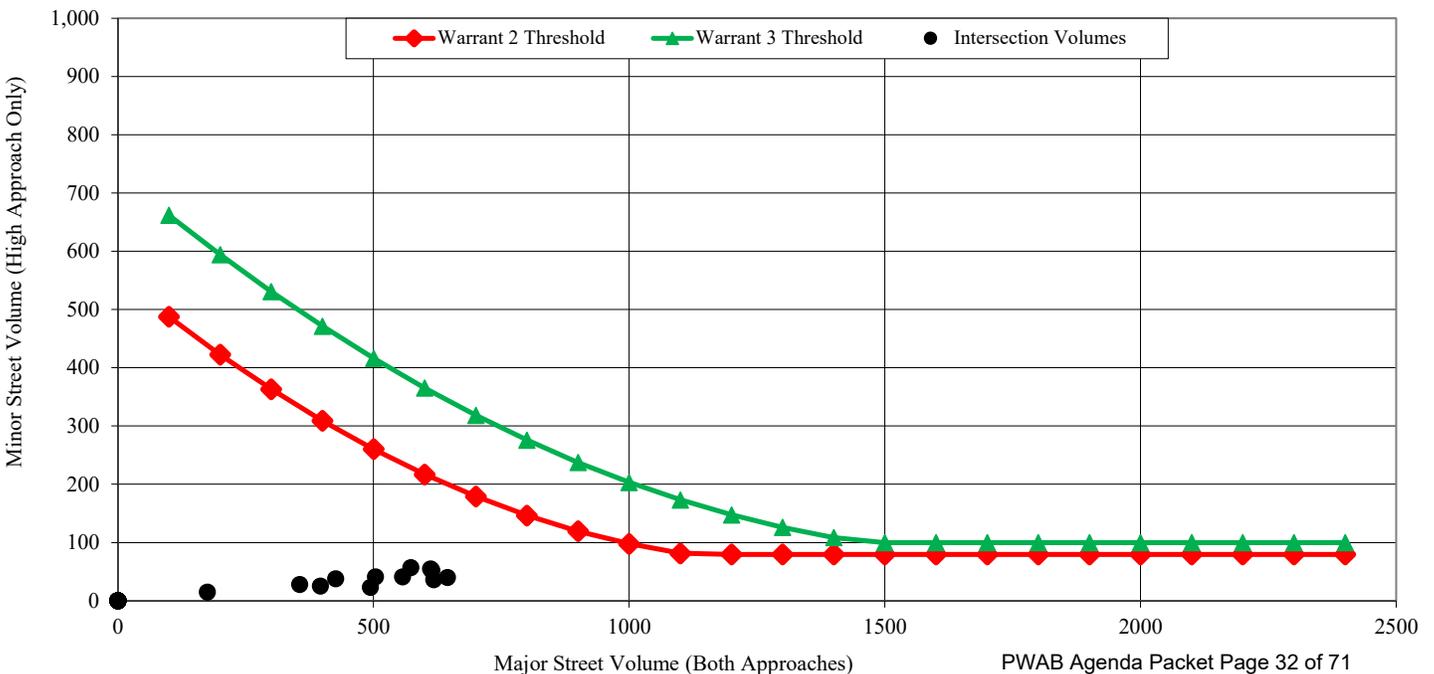
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	Condition B	Condition A+B*
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	0 hours	0 hours	0 (Cond. A) & 0 (Cond. B)
Criteria - Major Street (veh/hr)	500	750	400 (Cond. A) & 600 (Cond. B)
Criteria - Minor Street (veh/hr)	150	75	120 (Cond. A) & 60 (Cond. B)

\* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	Condition B
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	708 total, 40 minor, 0.2 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	100	
Criteria - Minor Street High Side Delay (veh-hrs)	4	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)





# Traffic Signal Warrant Analysis

## Multi-Way Stop Warrants

<b>Project Name</b>	Main St/Dunes St
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (N/S Road)	Main St	Minor Street (E/W Road)	Dunes St
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Vehicle/Bike Volume	5970 vehicles	Total Vehicle/Bike Volume	688 vehicles
Total Pedestrian Volume	198 crossings	Total Pedestrian Volume	151 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	<b>Not Satisfied</b>
Criteria*	Traffic Signal Warranted & Justified

\* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	<b>Not satisfied</b>
Required values reached for	less than 4 correctable crashes
Criteria - Crash Experience	5 or more correctable crashes in 12-month period

Condition C - Intersection Volume & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours & 14.5 sec. average delay/veh
Criteria - Major Street (veh/hr)	300 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	200 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours, less than 4 crashes, & 14.5 sec. average delay/veh
Criteria - Major Street (veh/hr)	240 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	160 for the same 8 hours of an average day
Criteria - Crash Experience	4 or more correctable crashes in 12-month period
Criteria - Delay (average sec/veh)	24 during the highest hour



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 16, 2024  
**FROM:** Austin Della, PE – Senior Civil Engineer  
**SUBJECT:** Intersection Control Evaluation at Kings Avenue and Allesandro Street

## RECOMMENDATION

Staff recommends the Public Works Advisory Board

- Review the Intersection Control Evaluation (ICE) memo for the intersection of Kings Avenue and Allesandro Street;
- Provide input on staff’s plan to not install stop signs; and
- Provide additional feedback as needed.

## BACKGROUND

On November 15, 2023, Public Works staff received a request for the City to investigate installing stop control at the intersection of Kings Avenue and Allesandro Street. The request described the issue as follows: "There are no stop signs in either direction where Allesandro Street crosses busy Kings. This is also adjacent to an elementary school bus drop-off/pick-up stop."

In response to this request, the intersection of Kings Avenue and Allesandro Street was evaluated for potential intersection control measures in compliance with City resolution No. 67-15, which states that “No unwarranted traffic control devices shall be allowed within the rights-of-ways within the jurisdictions boundaries of the City”. Upon receipt of a stop sign installation request, City practice is to perform a warrant analysis, at the discretion of the Public Works Department, to determine whether the stop sign can be installed or not. This practice follows best risk management practices that protect the City against lawsuits and the public.

A warrant analysis involves the preparation of an Intersection Control Evaluation (ICE) prepared by a professional traffic engineer. This evaluation reviews an intersection’s collision history, sight distances, and traffic volume to determine whether objective minimum criteria are met that would “warrant” installation of traffic devices such as a stop sign.

## DISCUSSION

Central Coast Transportation Consulting prepared an ICE for the City, which is attached. The intersection did not meet the criteria for the installation of stop signs based on traffic volume, sight distance, and collision history. A summary analysis of the relevant criteria contained in the attached ICE is as follows:

- Intersection minimum volumes must be demonstrated. CRITERIA NOT MET.
- Need for line of sight of conflicting traffic. CRITERIA NOT MET.
- Intersection minimum crashes within specified time periods must be demonstrated. CRITERIA NOT MET.

Prepared By: AD Dept Review: GK

While the ICE did not establish a warrant a stop sign at this location, it generated other recommendations to be implemented at this intersection.

- Restrict 20 feet of parking on intersection approaches with curb returns.
- Restrict 25 feet of parking on intersection corners without curb ramps.
- Install curb ramps on the northwest and northeast corners during the next roadway resurfacing.

Staff will separately evaluate the need to implement the above added recommendations based on need and available budget and staff capacity.

**NOTIFICATION**

On August 9, 2024, City staff sent out notices by USPS to the neighborhood potentially impacted by consideration of this item.

**ATTACHMENTS**

1. Kings Avenue and Allesandro Street, Morro Bay - Intersection Control Evaluation



## MEMORANDUM

Date: August 13, 2024  
To: Austin Della, City of Morro Bay  
From: Michelle Matson and Joe Fernandez, CCTC  
Subject: **Kings Avenue and Allesandro Street, Morro Bay - Intersection Control Evaluation**

---

This memorandum summarizes the intersection control evaluation at the intersection Kings Avenue and Allesandro Street in the City of Morro Bay. The following sections summarize:

- Existing Conditions
- Intersection Control Evaluation
- Recommendations

### **EXISTING CONDITIONS**

The following sections summarize the existing setting, traffic volumes, and collision history.

#### ***Existing Setting***

Kings Avenue has a posted speed limit of 25 miles per hour, no bicycle facilities, and sidewalks north of Allesandro Street.

Allesandro Street has no posted speed limit or bike facilities. There are existing sidewalks on the north side of the road at the Kings Avenue intersection.

The intersection of Kings Avenue and Allesandro Street is uncontrolled. There are no marked crosswalks, curb ramps, or lighting at the intersection.

#### ***Traffic Volumes***

Turning movement counts were collected in March 2024 when school was in session. The hourly intersection vehicle approach volumes are shown in **Table 1**. The hourly turning movement count is included as **Attachment B**.

**Table 1: Hourly Vehicle Approach Volumes**

Hourly Vehicle Approach Volumes							
Time	Major Street (Kings Avenue)			Minor Street (Allesandro Street)			TEV <sup>2</sup>
	Northbound	Southbound	Total	Eastbound	Westbound	Total	
7:00 AM	48	16	64	0	3	3	67
8:00 AM	52	35	87	7	3	10	97
9:00 AM	37	33	70	3	2	5	75
10:00 AM	26	46	72	4	11	15	87
11:00 AM	33	31	64	1	7	8	72
12:00 PM	39	34	73	4	9	13	86
1:00 PM	38	39	77	5	12	17	94
2:00 PM	40	44	84	2	6	8	92
3:00 PM	36	53	89	3	15	18	107
4:00 PM	38	41	79	0	2	2	81
5:00 PM	28	48	76	3	4	7	83
6:00 PM	18	36	54	5	3	8	62
<i>AM Peak Hour<sup>1</sup></i>	<i>52</i>	<i>35</i>	<i>87</i>	<i>7</i>	<i>3</i>	<i>10</i>	<i>97</i>
<i>PM Peak Hour<sup>1</sup></i>	<i>48</i>	<i>55</i>	<i>103</i>	<i>3</i>	<i>8</i>	<i>11</i>	<i>114</i>

1. AM peak hour began at 8:00 AM and the PM peak hour began at 2:30 PM.  
2. TEV = Total Entering Vehicles. TEV was 1,003 between 7:00 AM and 7:00 PM  
Source: Metro Traffic Data, March 20, 2024.

There were 1,003 total entering vehicles, ten bicycles, and 29 pedestrians in the 12-hour period from 7:00 AM and 7:00 PM. The 7:00 PM to 7:00 AM period is expected to carry substantially lower volumes. The following summarizes the maximum pedestrians per hour on each leg of the intersection:

- Kings Avenue north leg: Four pedestrians.
- Kings Avenue south leg: Two pedestrians.
- Allesandro Street east leg: One pedestrian.
- Allesandro Street west leg: Two pedestrians.

A maximum of three bicycles per hour were observed at the intersection.

### ***Collision History***

Five years of traffic collision data (2019-2023) was obtained from the Statewide Integrated Traffic Records System (SWITRS) for the study intersection. Two collisions were reported at the intersection as summarized below:

- One sideswipe collision was reported east of the intersection when a westbound driver hit a parked vehicle due to improper turning.
- One sideswipe collision was reported south of the intersection when a northbound vehicle hit a parked vehicle due to unsafe speed.

There are no collision patterns or recommendations.

## INTERSECTION CONTROL EVALUATION

The following sections summarize the intersection sight distance and intersection control warrants consistent with City Standards and the California Manual on Uniform Traffic Control Devices (CAMUTCD).

### *Sight Distance*

The City of Morro Bay Standards specify a minimum sight distance of 200 feet unless approved by the Engineer. Street features including landscaping, utility poles, street furniture, signs, and parked vehicles can inhibit sight distance in urban areas. Per California Manual on Uniform Traffic Control Devices (CAMUTCD) guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of six feet measured from the curb return should be provided at alleys and driveways.” Assembly Bill 413, which will become active in 2025 reinforces this concept by prohibiting drivers from parking within 20 feet of the vehicle approach side of any unmarked or marked crosswalk or 15 feet of any crosswalk where a curb extension is present.

The stopping sight distance is met at the intersection for all approaches. We recommend installing parking restrictions consistent with the CAMUTCD and Assembly Bill 413.

In addition, we recommend installing curb ramps on northwest and northeast corners the next time the roadway is resurfaced.

The sign and striping recommendations are included as **Attachment A**.

### *Intersection Control Warrants*

The latest version of the CAMUTCD was used to evaluate intersection control. CAMUTCD Section 2B.04 and 2B.06 contain the following guidance for the installation of side-street stop control:

- Section 2B.04: The use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:
  - A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day; (CRITERIA NOT MET)
  - B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or (CRITERIA NOT MET)
  - C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period. (CRITERIA NOT MET)
- Section 2B.07: The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:
  - A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day; (CRITERIA NOT MET)
  - B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or (CRITERIA NOT MET)

- C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway. (CRITERIA NOT MET)

The intersection does not meet the CAMUTCD guidance for the installation of side street stop control. In addition, the intersection does not meet the all-way stop control or traffic signal warrants as shown in **Attachment C**.

### **RECOMMENDATIONS**

No additional intersection control is recommended. We recommend the following:

- Restrict 20 feet of parking on intersection approaches with curb returns.
- Restrict 25 feet of parking on intersection corners without curb ramps.
- Install curb ramp on northwest and northeast corners the next time the roadway is resurfaced.

The sign and striping recommendations are included as **Attachment A**.

Please let us know if you have any questions.

### **ATTACHMENTS**

Attachment A: Vicinity Map and Recommendations

Attachment B: Turning Movement Count

Attachment C: Traffic Signal and All Way Stop Control Warrants

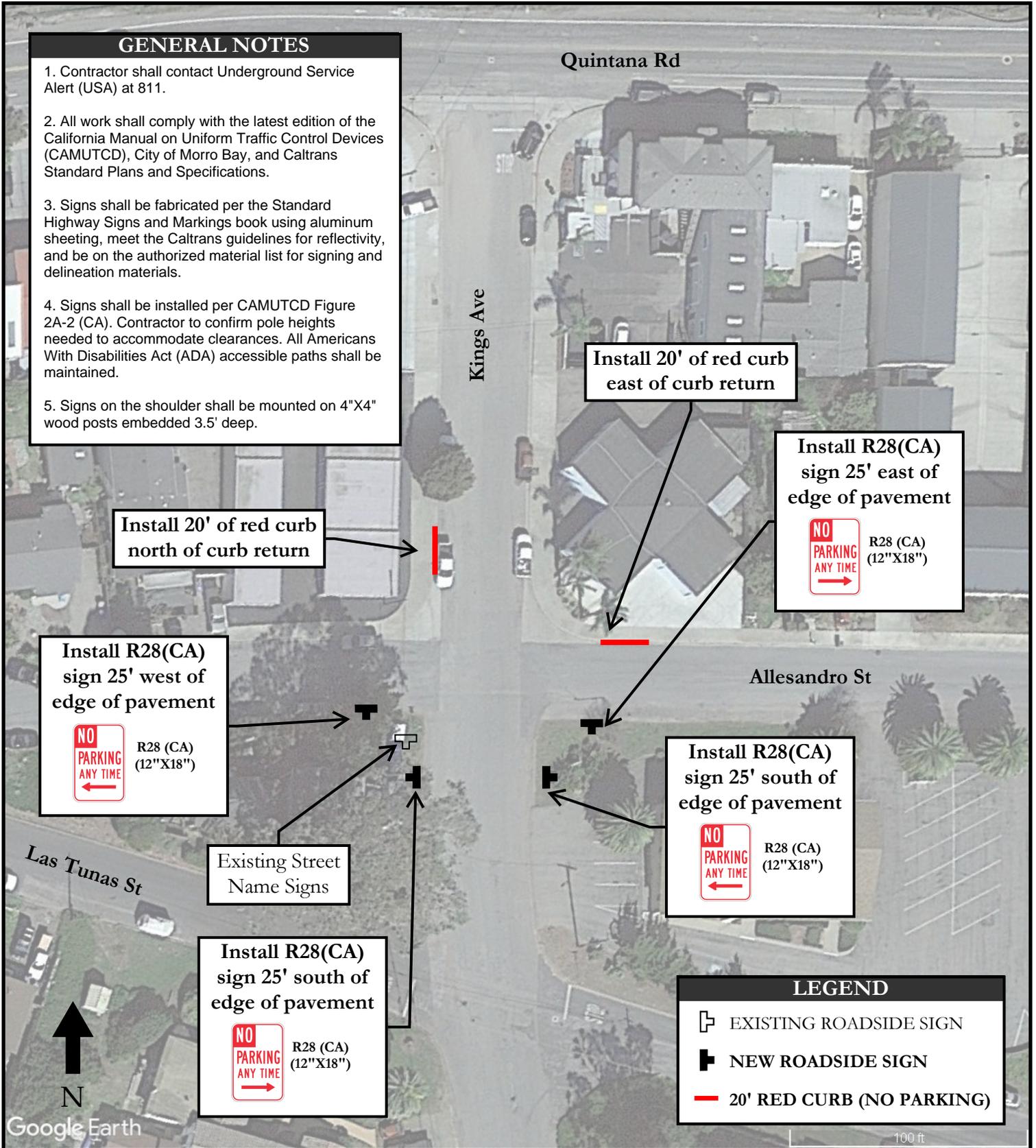
### **REFERENCES**

California Department of Transportation (Caltrans). 2020. Highway Design Manual.

\_\_\_\_\_. 2021, Revision 6. California Manual on Uniform Traffic Control Devices, 2014 Edition.

City of Morro Bay Department of Public Works. October 1987. Standard Drawings and Specifications.

# Attachment A: Sign and Striping Recommendations



## Kings Avenue and Allessandro Street, Morro Bay Intersection Control Evaluation



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

# Turning Movement Report (Vehicles)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Kings Avenue & Alessandro Street LATITUDE 35.3655328  
 COUNTY San Luis Obispo LONGITUDE -120.8373594  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound				Southbound				Eastbound				Westbound				TOTALS Vehicles	TRUCK %
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks		
7:00 AM to 7:15 AM	0	10	0	0	0	3	0	1	0	0	0	0	0	0	1	0	14	7%
7:15 AM to 7:30 AM	0	11	0	0	3	1	0	3	0	0	0	0	0	0	0	0	15	20%
7:30 AM to 7:45 AM	0	13	0	1	1	5	0	1	0	0	0	0	1	0	1	0	21	10%
7:45 AM to 8:00 AM	0	14	0	0	0	3	0	0	0	0	0	0	0	0	0	0	17	0%
8:00 AM to 8:15 AM	0	18	1	0	1	5	1	1	2	1	0	0	0	0	1	0	30	3%
8:15 AM to 8:30 AM	0	15	0	0	1	9	0	0	2	0	0	0	1	0	0	0	28	0%
8:30 AM to 8:45 AM	0	8	0	0	1	2	2	0	0	2	0	0	0	0	0	0	15	0%
8:45 AM to 9:00 AM	0	9	1	0	5	8	0	0	0	0	0	0	0	0	1	0	24	0%
9:00 AM to 9:15 AM	0	12	0	0	0	6	1	0	1	0	1	0	0	0	0	0	21	0%
9:15 AM to 9:30 AM	0	6	1	0	0	8	2	0	0	0	0	0	0	0	0	0	17	0%
9:30 AM to 9:45 AM	0	8	0	0	0	7	2	0	1	0	0	0	0	0	1	0	19	0%
9:45 AM to 10:00 AM	0	10	0	0	2	3	2	0	0	0	0	0	1	0	0	0	18	0%
10:00 AM to 10:15 AM	0	2	0	0	2	9	0	0	0	0	0	0	2	0	0	0	15	0%
10:15 AM to 10:30 AM	0	5	0	0	2	9	1	1	0	0	0	0	0	0	2	0	19	5%
10:30 AM to 10:45 AM	0	9	0	2	1	10	1	1	2	1	0	0	0	1	3	0	28	11%
10:45 AM to 11:00 AM	0	9	1	0	2	8	1	0	1	0	0	0	1	1	1	1	25	4%
11:00 AM to 11:15 AM	0	8	0	0	2	4	0	0	0	0	0	0	0	0	1	0	15	0%
11:15 AM to 11:30 AM	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	10	0%
11:30 AM to 11:45 AM	0	8	3	1	0	3	1	0	0	0	0	0	1	0	0	0	16	6%
11:45 AM to 12:00 PM	0	10	0	0	3	12	0	0	1	0	0	0	1	0	4	0	31	0%
12:00 PM to 12:15 PM	0	13	0	0	1	6	1	0	1	0	0	0	0	0	1	0	23	0%
12:15 PM to 12:30 PM	0	8	0	1	0	6	0	0	0	0	0	0	0	1	1	0	16	6%
12:30 PM to 12:45 PM	0	9	0	1	1	8	1	0	1	0	1	0	3	1	1	0	26	4%
12:45 PM to 1:00 PM	0	6	3	0	2	8	0	0	0	1	0	0	1	0	0	0	21	0%
1:00 PM to 1:15 PM	0	2	0	0	0	5	1	0	0	1	0	0	3	0	0	0	12	0%
1:15 PM to 1:30 PM	0	12	0	0	0	7	1	0	1	0	0	0	1	1	1	0	24	0%
1:30 PM to 1:45 PM	0	11	0	0	1	10	1	0	0	0	1	0	0	0	2	0	26	0%
1:45 PM to 2:00 PM	0	12	1	0	3	10	0	0	1	0	1	0	2	0	2	0	32	0%
2:00 PM to 2:15 PM	0	3	1	1	0	11	0	0	0	0	0	0	0	0	1	0	16	6%
2:15 PM to 2:30 PM	0	6	1	0	1	5	1	0	0	1	0	0	1	0	1	0	17	0%
2:30 PM to 2:45 PM	0	10	1	0	2	12	1	0	1	0	0	0	1	0	0	0	28	0%
2:45 PM to 3:00 PM	0	17	1	0	1	8	2	0	0	0	0	0	0	0	2	0	31	0%
3:00 PM to 3:15 PM	0	13	0	0	2	5	1	1	0	0	0	0	2	0	1	0	24	4%
3:15 PM to 3:30 PM	0	6	0	0	3	16	2	1	1	1	0	0	1	0	1	0	31	3%
3:30 PM to 3:45 PM	0	6	2	0	1	10	0	0	0	0	0	0	0	0	2	0	21	0%
3:45 PM to 4:00 PM	0	9	0	0	2	10	1	1	0	0	1	0	2	2	4	0	31	3%
4:00 PM to 4:15 PM	0	10	0	0	1	7	0	0	0	0	0	0	0	0	0	0	18	0%
4:15 PM to 4:30 PM	0	10	0	0	1	10	0	0	0	0	0	0	0	0	1	0	22	0%
4:30 PM to 4:45 PM	0	7	0	0	0	10	0	0	0	0	0	0	0	0	0	0	17	0%
4:45 PM to 5:00 PM	0	11	0	0	2	10	0	0	0	0	0	0	0	0	1	0	24	0%
5:00 PM to 5:15 PM	1	6	1	0	0	9	0	0	0	0	0	0	1	0	0	0	18	0%
5:15 PM to 5:30 PM	1	5	0	1	1	15	0	1	1	0	0	0	0	0	1	0	24	8%
5:30 PM to 5:45 PM	0	8	0	0	1	11	1	0	1	0	0	0	0	0	1	0	23	0%
5:45 PM to 6:00 PM	0	6	0	0	0	10	0	0	1	0	0	0	0	0	1	0	18	0%
6:00 PM to 6:15 PM	1	4	0	0	1	9	0	0	1	1	0	0	0	1	1	0	19	0%
6:15 PM to 6:30 PM	0	6	0	0	1	12	1	0	1	0	0	0	0	0	0	0	21	0%
6:30 PM to 6:45 PM	0	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	7	0%
6:45 PM to 7:00 PM	0	4	0	0	0	8	0	0	0	1	1	0	1	0	0	0	15	0%
<b>DAILY TOTALS</b>	<b>3</b>	<b>412</b>	<b>18</b>	<b>8</b>	<b>55</b>	<b>372</b>	<b>29</b>	<b>12</b>	<b>21</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>27</b>	<b>8</b>	<b>42</b>	<b>1</b>	<b>1003</b>	<b>2%</b>

PEAK HOUR	Northbound				Southbound				Eastbound				Westbound				Peak Hour Summary		
	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Left	Thru	Right	Trucks	Vehicles	Trucks	PHF
8:00 AM to 9:00 AM	0	50	2	0	8	24	3	1	4	3	0	0	1	0	2	0	97	1%	0.81
2:30 PM to 3:30 PM	0	46	2	0	8	41	6	2	2	1	0	0	4	0	4	0	114	2%	0.92



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

# Turning Movement Report (Bicycles & Pedestrians)

Prepared For:  
**Central Coast Transportation Consulting**  
 895 Napa Avenue, Suite A-6  
 Morro Bay, CA 93442

LOCATION Kings Avenue & Allesandro Street LATITUDE 35.3678182  
 COUNTY San Luis Obispo LONGITUDE -120.850029  
 COLLECTION DATE Wednesday, March 20, 2024 WEATHER Clear

Time	Northbound Bikes			N.Leg Peds	Southbound Bikes			S.Leg Peds	Eastbound Bikes			E.Leg Peds	Westbound Bikes			W.Leg Peds	TOTALS	
	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Left	Thru	Right		Bicycles	Peds
7:00 AM to 7:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM to 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM to 7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM to 8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM to 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM to 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM to 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM to 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM to 9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM to 9:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM to 9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM to 10:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00 AM to 10:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1
10:15 AM to 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
10:30 AM to 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45 AM to 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM to 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM to 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM to 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM to 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM to 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM to 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:30 PM to 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
12:45 PM to 1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1:00 PM to 1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM to 1:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
1:30 PM to 1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM to 2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM to 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM to 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM to 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM to 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:00 PM to 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM to 3:30 PM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	5
3:30 PM to 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM to 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM to 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM to 4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	3
4:30 PM to 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM to 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM to 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM to 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
5:30 PM to 5:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM to 6:00 PM	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
6:00 PM to 6:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6:15 PM to 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
6:30 PM to 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM to 7:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>DAILY TOTALS</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>29</b>

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

# Traffic Signal Warrant Analysis

## Warrants 1 - 3 (Volume Warrants)

<b>Project Name</b>	Kings Ave/Allesandro Street
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (N/S Road)	Kings Avenue	Minor Street (E/W Road)	Allesandro St
Analyzed with	1 approach lane	Analyzed with	1 approach Lane
Total Vehicle/Bike Volume	894 vehicles	Total Vehicle/Bike Volume	119 vehicles
Total Pedestrian Volume	13 crossings	Total Pedestrian Volume	16 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

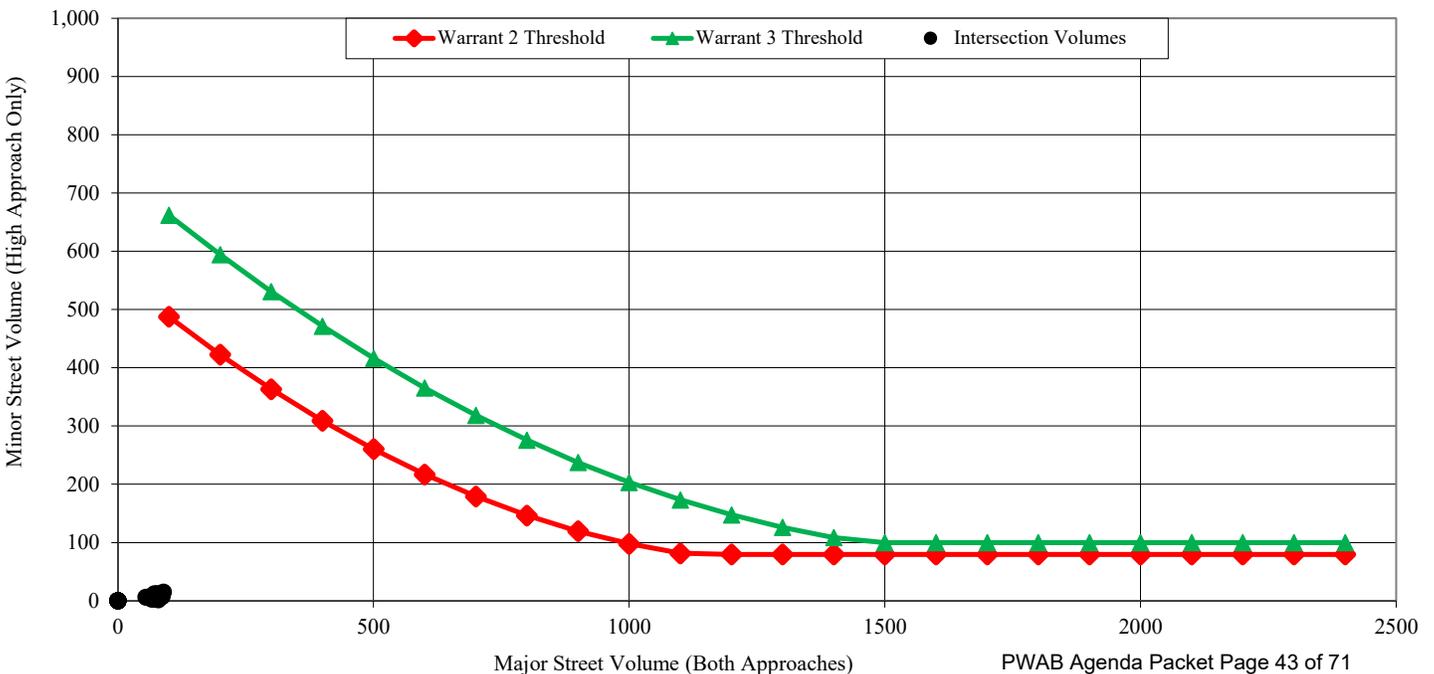
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	Condition B	Condition A+B*
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	0 hours	0 hours	0 (Cond. A) & 0 (Cond. B)
Criteria - Major Street (veh/hr)	500	750	400 (Cond. A) & 600 (Cond. B)
Criteria - Minor Street (veh/hr)	150	75	120 (Cond. A) & 60 (Cond. B)

\* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	Condition B
Condition Satisfied?	<b>Not Satisfied</b>	<b>Not Satisfied</b>
Required values reached for	107 total, 15 minor, 0 delay	0 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	100	
Criteria - Minor Street High Side Delay (veh-hrs)	4	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)





# Traffic Signal Warrant Analysis

## Multi-Way Stop Warrants

<b>Project Name</b>	Kings Ave/Allesandro Street
<b>Project/File #</b>	Morro Bay On Call
<b>Scenario</b>	Existing

Intersection Information			
Major Street (N/S Road)	Kings Avenue	Minor Street (E/W Road)	Allesandro St
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Vehicle/Bike Volume	894 vehicles	Total Vehicle/Bike Volume	119 vehicles
Total Pedestrian Volume	13 crossings	Total Pedestrian Volume	16 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	0 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	<b>Not Satisfied</b>
Criteria*	Traffic Signal Warranted & Justified

\* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	<b>Not satisfied</b>
Required values reached for	less than 4 correctable crashes
Criteria - Crash Experience	5 or more correctable crashes in 12-month period

Condition C - Intersection Volume & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours & 0 sec. average delay/veh
Criteria - Major Street (veh/hr)	300 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	200 for the same 8 hours of an average day
Criteria - Delay (average sec/veh)	30 during the highest hour

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	<b>Not Satisfied</b>
Required values reached for	0 hours, less than 4 crashes, & 0 sec. average delay/veh
Criteria - Major Street (veh/hr)	240 for any 8 hours of an average day
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	160 for the same 8 hours of an average day
Criteria - Crash Experience	4 or more correctable crashes in 12-month period
Criteria - Delay (average sec/veh)	24 during the highest hour



# Staff Report

**TO:** Public Works Advisory Board **DATE:** August 16, 2024  
**FROM:** Austin Della, PE – Senior Civil Engineer  
**SUBJECT:** Consideration of Angled Parking along Pacific Street between Embarcadero Road and Morro Avenue

## **RECOMMENDATION**

Staff recommends that the Public Works Advisory Board (PWAB) review the parking recommendations memo for Pacific Street between Embarcadero Road and Morro Avenue and provide input and feedback to Public Works staff regarding the findings and recommendations of the memo. The memo does not recommend the implementation of angled parking.

## **BACKGROUND/DISCUSSION**

City staff received a request to investigate increasing parking along Pacific Street between Embarcadero Road and Morro Avenue by installing angled parking. Central Coast Transportation Consulting performed an angled parking analysis of this corridor, which is summarized below.

### *Existing Conditions*

Pacific Street is a 25 mph roadway with varying widths between 44 and 48 feet. There are currently 29 parallel parking spaces available, and there are no marked bike lanes west of Morro Avenue.

### *Parking Analysis*

Angled parking was considered at both 30° and 45° configurations along Pacific Street between the Embarcadero and Morro Avenue. Due to roadway width constraints, angled parking can only be considered on one side of the road, and in some cases installation of angled parking precluded parallel parking on the other side of the road. As a result, both the 30° and 45° angled parking scenarios studied in the memo result in a net loss of parking. The results of the analysis are summarized below:

Configuration	Parallel Spaces	Angled Spaces	Total
Existing Parallel	29	0	29
30° Angled, Parallel	7	10	17
45° Angled	0	15	15

While the parking analysis does not recommend angled parking, it generated other recommendations to be implemented at this intersection and are listed below. The recommendations to re-stripe red curbs and to add additional red curbs are to comply with the California Manual on Uniform Traffic Control Devices and upcoming Assembly Bill 413.

Prepared By: AD Dept Review: GK

- Re-stripe existing red curbs.
- Extend the existing red curb for the eastbound approach to Morro Avenue to 20 feet.
- Install ten feet of red curb on the north side of Pacific Street west of Morro Avenue.
- Install six feet minimum of red curb adjacent to driveways where parking spaces are not marked.
- Install 20 feet of red curb for the westbound approach to Market Avenue.
- Install "NO PEDESTRIAN CROSSING" signs at Market Avenue.
- Consider adding Class II Bike Lanes on Pacific Street to address the bike network discontinuity.

Staff will separately evaluate the need to implement the above added recommendations based on need and available budget and staff capacity.

### **NOTIFICATION**

On August 9, 2024, City staff sent out notices by USPS to the neighborhood potentially impacted by consideration of this item.

### **ATTACHMENTS**

1. Pacific Street Parking Recommendations – Embarcadero Road to Morro Avenue



## MEMORANDUM

Date: August 13, 2024  
 To: Austin Della, City of Morro Bay  
 From: Michelle Matson and Joe Fernandez, CCTC  
 Subject: **Pacific Street Parking Recommendations – Embarcadero Road to Morro Avenue**

---

This memorandum summarizes the parking recommendations for Pacific Street between Embarcadero Road and Morro Avenue in the City of Morro Bay. The following sections summarize:

- Existing Setting
- Collision History
- Parking Analysis
- Recommendations

### EXISTING SETTING

Pacific Street has an adopted speed limit of 25 miles per hour and the speed will be posted during an upcoming maintenance contract. East of Morro Avenue, the roadway is approximately 48 feet wide with 11 foot travel lanes, five foot Class II bike lanes, and eight foot parking lanes on both sides of the road. West of Morro Avenue, there are no marked bike lanes and intermittent striped parallel parking. Between Embarcadero Road and Market Avenue, the roadway is approximately 44 feet wide and between Market Avenue and Morro Avenue the roadway is approximately 48 feet wide. There are curb ramps without tactile domes at corners and no marked crosswalks on the segment.

On Pacific Street between Embarcadero Road and Morro Avenue, there are currently 14 marked parallel parking spaces and up to 17 additional unmarked parallel parking spaces, totaling 29 parking spaces.

### COLLISION HISTORY

Five years of traffic collision data (2019-2023) was obtained from the Statewide Integrated Traffic Records System (SWITRS) for Pacific Street between Embarcadero Road and Morro Avenue. Two collisions were reported as summarized below:

- One collision with a parked vehicle was reported east of Embarcadero Road due to a westbound driver driving under the influence (DUI).
- One broadside automobile right of way collision was reported at the Pacific Street and Morro Avenue intersection due to a southbound through vehicle hitting a westbound through vehicle.

There are no collision patterns or recommendations.

### PARKING ANALYSIS

Per California Manual on Uniform Traffic Control Devices (CAMUTCD) guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of six feet measured from the curb return should be provided at alleys and driveways.” Assembly Bill 413, which will become active in 2025 reinforces this concept by prohibiting drivers from parking within 20

feet of the vehicle approach side of any unmarked or marked crosswalk or 15 feet of any crosswalk where a curb extension is present.

We recommend restriping the existing red curbs and installing additional red curb consistent with the CAMUTCD and Assembly Bill 413. With the recommended parking restrictions approximately 27 on-street parallel parking spaces will be available on Pacific Street between Embarcadero Road and Morro Avenue.

Per the California Vehicle Code (CVC) Section 275 a crosswalk can be defined as, “that portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles.”

The crossing of Pacific Street at Market Avenue is not recommended due to the existing striped parking areas and lack of curb ramps. We recommend installing NO PEDESTRIAN CROSSING signs on the east side of the road at Market Avenue

The road width on Pacific Street between Embarcadero Road and Morro Avenue is 44 to 48 feet wide and angled parking could only be accommodated on one side of the road (17 to 19 feet is needed for 30-degree and 45-degree angled parking spaces, respectively, and 22 to 24 feet is needed for the travel lanes based on 18-foot parking stall lengths). Although there are fewer driveways on the south side of the road, angled parking is not desirable for traveling uphill as vehicles cannot turn their tires toward the curb and let the vehicle roll back and gently touch the curb, which is a recommendation from the California Department of Motor Vehicles (DMV). Installing 45-degree angled parking on the north side of the road would result in approximately 15 angled parking spaces on the corridor. Installing 30-degree angled parking on the north side of the road and parallel parking on the south side of the road east of Market Avenue would result in approximately ten angled parking spaces and seven parallel parking spaces on the corridor. All angled parking scenarios would result in less total parking than parallel parking and are not recommended. In addition, angled parking restricts corner sight distance versus parallel parking and is not recommended.

Although not currently in the Morro Bay Bicycle and Pedestrian Master Plan, we also recommend the City consider installing Class II Bike Lanes on Pacific Street between Embarcadero Road and Morro Avenue. There is sufficient width between Market Avenue and Morro Avenue; however, the eastbound bike lane may need to be omitted and replaced with shared lane markings (sharrows) between Embarcadero Road and Market Avenue due to the available roadway width. Class II Bike Lanes are present on Pacific Street east of Morro Avenue, so this would eliminate a bike network discontinuity between Embarcadero Road and Pacific Street.

## RECOMMENDATIONS

The roadway segment currently has parallel parking on both sides and angled parking is not recommended. We recommend the following:

- Restripe existing red curb.
- Extend the existing red curb for the eastbound approach to Morro Avenue to 20 feet.
- Install ten feet of red curb on the north side of Pacific Street west of Morro Avenue.
- Install six feet minimum of red curb adjacent to driveways where parking spaces are not marked.
- Install 20 feet of red curb for the westbound approach to Market Avenue.
- Install two NO PEDESTRIAN CROSSING signs on the south side of the road at Market Avenue.

The sign and striping recommendations are included as **Attachment A**. We also recommend the City consider installing Class II bike lanes on Pacific Street between Embarcadero Road and Morro Avenue. There is

sufficient width between Market Avenue and Morro Avenue; however, the eastbound bike lane may need to be omitted and replaced with shared lane markings (sharrows) between Embarcadero Road and Market Avenue due to the available roadway width.

Please let us know if you have any questions.

### **ATTACHMENTS**

Attachment A: Vicinity Map and Recommendations

### **REFERENCES**

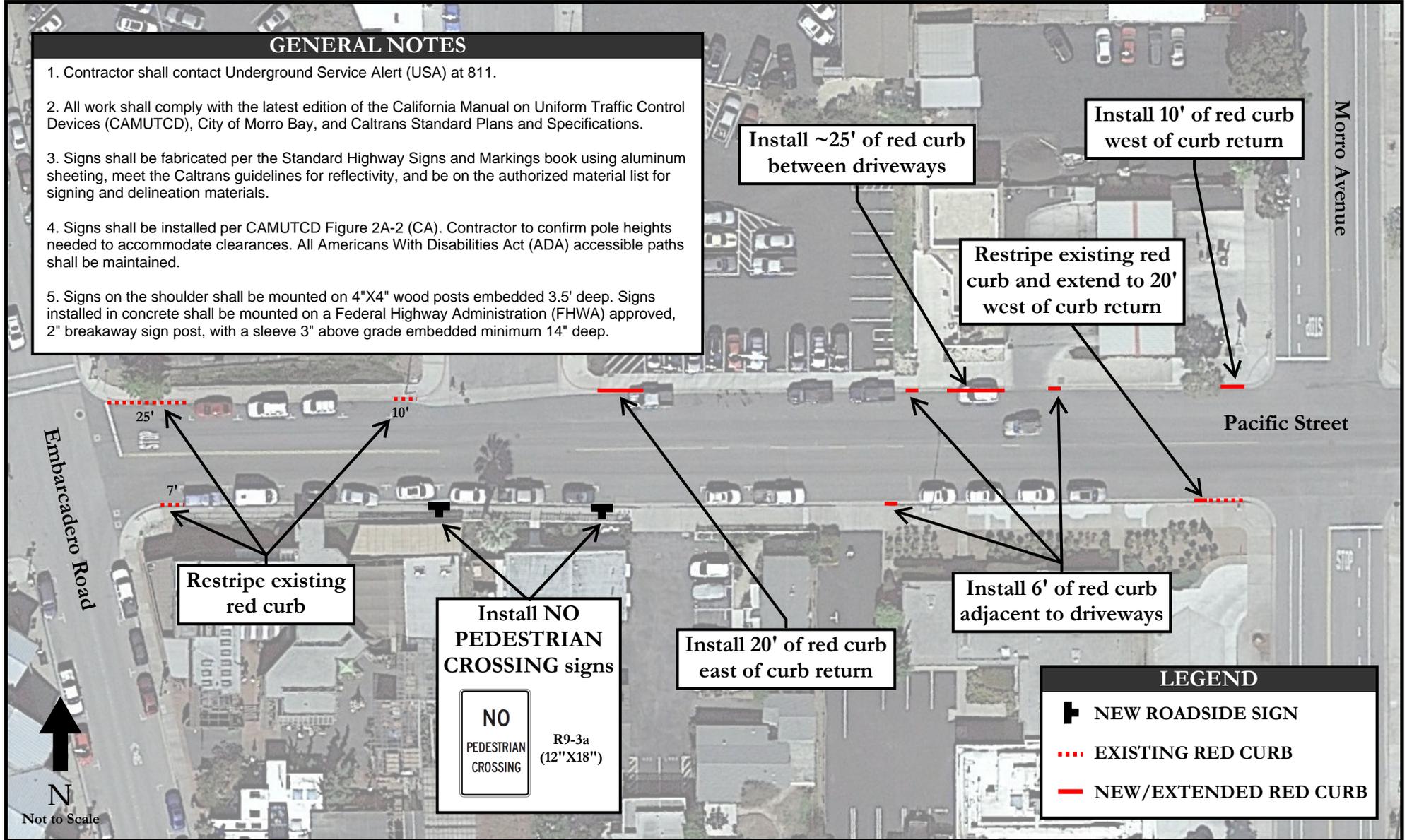
California Department of Transportation (Caltrans). 2020. Highway Design Manual.

\_\_\_\_\_. 2021, Revision 6. California Manual on Uniform Traffic Control Devices, 2014 Edition.

City of Morro Bay Department of Public Works. October 1987. Standard Drawings and Specifications.

\_\_\_\_\_. 2011. Morro Bay Bicycle & Pedestrian Master Plan

# Attachment A: Sign and Striping Recommendations



Pacific Street Parking Recommendations  
Embarcadero Road to Morro Avenue



# Staff Report

**TO: Public Works Advisory Board** **DATE: August 21, 2024**

**FROM: Greg Kwolek, Public Works Director  
Janeen Burlingame, Management Analyst**

**SUBJECT: Discussion Regarding Consolidating Administration, Operations, and Maintenance of Morro Bay Transit into the San Luis Obispo Regional Transit Authority**

## **RECOMMENDATION**

Staff recommends the Public Works Advisory Board provide comments regarding the concept of consolidating Morro Bay Transit (MBT) administration, operations, and maintenance into the San Luis Obispo Regional Transit Authority (RTA).

## **SUMMARY**

Staff had been directed to evaluate the concept of consolidating all aspects of administration, operation, and maintenance of MBT services into the RTA system. After a staff meeting between the City and RTA, RTA staff conducted an internal review of requested financial and operational data provided by the City for its local year-round and seasonal Transit and Trolley services. RTA staff then provided the City with a memorandum describing a potential operations and maintenance scenario, noting RTA could be capable of assuming operation and maintenance of MBT as early as June 2025 should both the Morro Bay City Council and RTA Board of Directors approve consolidation at a future agenda meeting.

If both agencies authorize moving forward with consolidation of MBT administration, operations, and maintenance into the RTA system, the next step would be execution of a transfer agreement and transition plan. If consolidation is not authorized and an agreement is not executed between the two agencies, the City will move forward with a Request for Proposals for the day-to-day management and operations and award of a new contract. The current contract the City holds with MV Transit for transit operations has been in place since 2015 with five one-year extensions.

## **DISCUSSION**

MBT consists of a year-round, deviated fixed route Transit service and a seasonal fixed route Trolley service within the city limits. All aspects of service administration from operations management, marketing, service planning, vehicle maintenance, grant acquisition, capital procurement, budget development, fiscal monitoring, and reporting to federal, state, and local agencies are provided by City employees while the day-to-day operation and provision of transit drivers are provided by a private contractor (currently contracted with MV Transportation, Inc.).

MBT services are funded primarily with Transportation Development Act (TDA) Local Transportation Fund (LTF) and State Transit Assistance (STA) funds with smaller offsets to expenditures coming from rider fares and advertising revenues. No City general funds are used to provide local transit services.

The concept being evaluated is to transfer all aspects of MBT administration, operations, and maintenance currently provided by City staff and a private contractor to the RTA system. Having RTA take over administration and operations of the City's local transit services could have a

positive impact for riders through improved service quality, coordination and customer experience, while leveraging additional staffing resources and economies of scale designed to enhance revenue opportunities that could potentially lead to some LTF funds available to the City for allocation, after all transit operating and capital expenses are provided for, to pedestrian, bicycle, or road projects. Other than the state required 2% LTF set aside, no LTF funds are allocated to these non-transit uses.

RTA has proposed to fund and operate MBT services in the same way that it has planned for and implemented Paso Robles local fixed route and dial-a-ride services over the past 10 years after its consolidation into the RTA system in 2014 (see Attachments 1 and 2 for original RTA agreement with Paso Robles and executed amendment to extend the term another 10 years).

Based on their review of current service levels for MBT Transit and Trolley services, the RTA has proposed a total administration, operations, and maintenance cost of \$459,015. This cost estimate was developed using RTA's adopted FY24/25 budget for Route 15 service delivery costs for labor, maintenance, fuel, and insurance because of the similarities between both services in terms of service structure (deviated fixed route) and type of vehicle used (small cutaway bus). RTA noted the gross figure would need to be adjusted by inflation for FY25/26.

The City's FY24/25 operating budget for MBT is \$339,245. Much of the cost difference being proposed is related to increased driver wages/benefits (46%) and administrative resources for staff training, operations management, mechanic, marketing, finance, grants, procurement, schedulers, and other office overhead (46%). Funding for the increased cost would come from existing TDA monies received annually from the State. No general funds would be needed.

### **Key Impacts**

#### *Riders*

- Improved customer experience
  - Single source for transit service information (route maps, website, fare passes, etc.)
  - Consistency of fare media/payment systems between local and interregional services
  - Consistency of rider policies between local and interregional services
- Improved service quality
  - Increased backup driver pool to handle sick/vacation/medical leave time
    - Reduces need for service cancellation due to lack of driver availability
    - Eliminates recruitment issues have been experiencing pre and post pandemic
    - Manger can manage and not drive in backup capacity
- Improved service coordination
  - Better integration of service schedules leading to enhanced connectivity and reduced wait times between local and regional services

#### *City*

- Retain LTF 2% Bikepath allocation (approx. \$10-12K/yr.)
- Increased STA funding due to consolidation of service with RTA (est. \$15K; would be eligible for 100% of discretionary consolidation category of STA where currently receive 41%)
- Cost Allocation Plan transfer to General Fund recalculation (FY25 \$27,797 for City Council, City Clerk, City Manager, City Attorney, various Finance staff, and Fleet staff)
- Increased operating costs (approx. \$119K)
  - 46% is related to drivers (increased driver wage scale)
  - 46% is related to staff training, operations management, mechanic, marketing, finance, grants, procurement, schedulers, and other office overhead (phones, building, insurance, etc.)

- 8% is related to increased maintenance parts/materials due to MBT vehicles being housed at RTA facility in San Luis Obispo
- Access to more staffing resources
  - Increased staffing resources for marketing, grants acquisition & management, federal, state & local reporting, service planning, system monitoring
  - Leverage existing programs that could lead to increased revenue to offset LTF needed
- Option to retain local oversight
  - Option to retain local decision making regarding service planning, routes, scheduling, fare structure
  - RTA submits proposed budget with service proposal each year for PWD approval
- Ability to terminate agreement without cause (give written 180 day notice)

#### *Staff*

- Reallocation of staff time to work on other projects/tasks/activities (Management Analyst, Mechanic, various Finance staff) as RTA takes over grants management, capital improvement projects, marketing, service planning, maintenance, operations monitoring, federal/state./local monthly, quarterly, annual reporting, budgeting, accounting, invoices, service plan development, annual/triennial audits, website updates, TDA claim, quarterly regional meetings, staff reports, etc.
- RTA would take over implementation of State mandated transition to zero-emission buses (including electrification, charging infrastructure, vehicle procurement, maintenance training)

#### *Facilities*

- Free up space at the corporation yard (no transit vehicles/future ZEB charging infrastructure) and the Morro Bay Community Center (office space)

#### *Drivers*

- Increased driver wage scale
  - Increased ability to recruit/retain drivers which currently has been an issue prior to and continuing since COVID
- Increased opportunity for drivers to have full time employment/benefits
  - Currently only have part time options available so limits applicant pool
  - Drivers would be able to add other RTA transit services shifts
- Increased backup driver pool
  - Currently no backup driver for various leave time situations
  - Manager drives in backup capacity
    - Less time to perform management duties
    - Manager not always available for backup
  - Reduced need for service cancellation when no backup driver available

#### **Implementation Timeline**

Sept. 2024 Council and RTA Board of Directors (at separate agency meetings):

1. Present framework to consolidate MBT into the RTA
2. Request direction on consolidation with RTA
3. If Council authorizes consolidation, approve amendment with MV extending current agreement term

#### *If Council directs staff to consolidate:*

Jan. 2025 Council and RTA Board of Directors (at separate agency meetings) – authorize execution of consolidation agreement between City and RTA

- March 2025 RTA to begin interviewing incumbent MV employees for possible hiring into RTA
- April 2025 RTA to finalize training modules and begin training staff for operations and maintenance of MBT services
- 6/1/25 RTA to start operating Morro Bay Transit services

Should the City Council or RTA Board of Directors not authorize moving forward with consolidation, the City would need to conduct a Request for Proposals the day-to-day management and operations and award of a new contract. To do that with enough time to complete the RFP process and bring an award of contract to the Council for approval, the City would need to extend the current agreement with MV that currently expires December 31, 2024.

#### **ATTACHMENTS**

1. Executed Agreement for Provision of Paso Robles Transit Services by San Luis Obispo Regional Transit Authority
2. Executed Amendment No. 1 to Agreement for Provision of Paso Robles Transit Services by San Luis Obispo Regional Transit Authority

**AGREEMENT FOR  
PROVISION OF PASO ROBLES TRANSIT SERVICES BY SAN LUIS OBISPO  
REGIONAL TRANSIT AUTHORITY**

**THIS AGREEMENT** is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2014 (the "Effective Date") OF PASO ROBLES, a municipal corporation (hereinafter referred to as "CITY") and the SAN LUIS OBISPO REGIONAL TRANSIT AUTHORITY, a joint powers authority (hereinafter referred to as "RTA").

**WITNESSETH:**

**WHEREAS**, CITY has been responsible for local transit and other local transportation services within and immediately adjacent to the incorporated areas of the City not considered part of the regional transportation system; and

**WHEREAS**, CITY is the direct recipient of Transportation Development Act (TDA) funds, which is comprised of Local Transportation Funds (LTF) and State Transit Assistance (STA) funds; and

**WHEREAS**, CITY is projected to receive a total of \$1,431,580 in TDA funds in fiscal year 2013-14; and

**WHEREAS**, in fiscal year 2013-14, CITY budgeted \$778,434 of its TDA allocation for local public transit services and \$349,842 of its TDA allocation for regional RTA transit services. The remaining TDA funds held by the City are needed to meet local bicycle, pedestrian and streets/roads needs; and

**WHEREAS**, CITY desires to have its local public transit services provided by RTA to take advantage of efficiencies and cost-savings that result from such consolidation; and

**WHEREAS**, RTA is responsible for regional transit and other regional transportation services, and is deemed trained, experienced, expert and competent to perform such services on behalf of CITY; and

**WHEREAS**, RTA is presently providing similar coordinated/consolidated services to South County Transit and to the County of San Luis Obispo; and

**WHEREAS**, said agreements have been beneficial to RTA, South County Transit, and the County of San Luis Obispo; and

**WHEREAS**, CITY desires to cease direct management of local public transit services within CITY limits.

**NOW THEREFORE**, the parties do mutually agree as follows:

1. Recitals. All recitals are true and correct and are hereby incorporated by reference.
2. Transfer of All Future Transit Obligations. CITY shall continue to provide all City Transit Services until the Closing Date (as defined in Section 8 below). As of the Closing Date and as set forth in this Agreement, CITY shall transfer to RTA all responsibilities and obligations for providing local public transit services ("City Transit Services"). RTA initially will operate all City Transit Services in accordance with the recommendations in the May 2012 North County Transit Plan.
3. Scope of Services. Pursuant to this Agreement, RTA shall provide to CITY the services identified in the "Scope of City Transit Services," attached hereto as Attachment "A" and incorporated herein by reference.
4. Compensation. Subject to the conditions set forth in this Section 4, beginning with the 2014-2015 fiscal year, CITY shall permit RTA to directly submit an annual TDA claim to the San Luis Obispo Council of Governments ("SLOCOG") for City Transit Services, which sum shall not exceed RTA's actual cost of operating said services and shall be calculated in the following manner: By March 1 of each year during the Term of this Agreement, RTA shall submit to the City Administrative Services Director a detailed proposal to provide the City Transit Services identified in Attachment "A" for the upcoming fiscal year and an anticipated amount of compensation for providing the City Transit Services for the subsequent fiscal year. The City Administrative Services Director shall review and either provide written consent to RTA's proposal for the upcoming fiscal year, including the service level and amount of compensation, by April 1 or determine that the proposal is unsatisfactory or economically infeasible, and state the reasons for such finding. If the Administrative Services Director does not approve RTA's proposal, the matter shall be placed the agenda of the next City Council and RTA Board of Directors meeting for their consideration and resolution. CITY shall annually authorize SLOCOG, in writing, to pay RTA the agreed-upon amount of compensation from the City's allocation of TDA monies. RTA will be responsible for annually submitting a claim for the agreed-upon amount of TDA monies to SLOCOG during the term of this Agreement for deposit of TDA monies directly into RTA's account. RTA shall account for the CITY's allocation of TDA monies and expenditures for City Transit Services separately from all other monies received and expended.
5. Transfer of Funds. Any fully-funded but not yet completed CITY transit projects that remain as of the Closing Date will be completed by CITY using transit funds in its possession. RTA will provide technical assistance as may be requested by CITY. CITY agrees to transfer to RTA all uncommitted TDA monies remaining in CITY's transit fund at the Closing Date of this Agreement. RTA will use these monies only to fund CITY Transit Services and will account for the use of these monies separately. This shall be a one-time transfer.

6. Transfer of Assets. Subject to the terms of this Agreement, prior to the Closing Date, CITY shall assign, convey and transfer to RTA, and RTA shall accept from CITY, the Assets to be Transferred to RTA, attached hereto as Attachment "B," and incorporated herein by reference. RTA agrees to assume and become responsible for, all of the Assets upon such transfer. CITY shall take all actions and execute all necessary documents to transfer all of CITY's right, title and interest in the Assets to RTA, including transfers of registrations and assignments of contracts, warranties, permits and licenses.
7. "As-Is" Transfer. Except as specifically stated in this Agreement or in any document of conveyance of any Asset, CITY is not making nor has made, nor shall CITY be deemed to make or have made, any express or implied representation or warranty of any kind or nature as to the Assets, including the physical condition or safety thereof. RTA hereby acknowledges that the Assets will be transferred to RTA, and RTA will acquire the same in an "AS-IS" "WHERE-IS" and "WITH ALL FAULTS" condition and that CITY has made no representations or warranties , express or implied, in connection with the transfer of the Assets.
8. Term of Agreement. This City Transit Services to be provided under this Agreement shall commence on the later to occur of (i) June 1, 2014 or (ii) the conveyance of all Assets to RTA (the "Closing Date"), and the Agreement shall continue for a period of ten (10) years, unless terminated earlier as provided herein, or extended by mutual agreement of the parties in writing.
9. Lease of City Property. RTA and CITY shall meet and confer to determine if the Paso Robles Train Station facilities and/or any other City property would be appropriate and adequate for RTA's administrative and parking needs. If the parties are able to reach mutually agreeable terms, a separate lease shall be executed by the parties for the use of such City property.
10. Default and Remedies.
  - A. Default Prior to Closing Date. A party shall be deemed to be in default under this Agreement if it fails to comply with or perform any covenant, agreement or obligation required on its part as required in this Agreement prior to the Closing Date, provided however that neither party shall be considered to be in default under this Agreement to the extent the applicable failure was caused by the other party. In the event of a default, the non-defaulting party shall notify the other party in writing of the default. If the party in default fails to cure its default within ten (10) business days after receipt of the default notice or to commence to cure to cure any default that is incapable of being cured within such ten (10) business day period and thereafter diligently prosecute such cure to completion, then the sole remedy for the non-defaulting party shall either be to (i) terminate this Agreement; or (ii) seek specific performance.

- B. Default After Closing Date. After the Closing Date, if a party fails to comply with or perform under this Agreement, the non-defaulting party shall notify the defaulting party in writing. Except to the extent that the breach was caused by the other party, if the defaulting party fails to cure such default within ten (10) business days after notice, or to commence to cure any default incapable of cure within such ten (10) business day period and thereafter diligently prosecute such cure to completion, as the non-defaulting party's sole and exclusive remedies (except for any right of the non-defaulting party to indemnification or defense provided in this Agreement, or the provisions providing for payment of attorneys' fees in the event of a dispute), City may seek specific performance and/or the recovery of direct actual damages incurred by City to the extent cause by the other party's post-closing default.
11. Modification. This Agreement, together with Attachment "A," ("Scope of City Transit Services") and Attachment "B" ("Assets to be Transferred to RTA") constitutes the entire understanding of the parties hereto and no changes, amendments, or alterations shall be effective unless in writing and signed by both parties.
12. Non-Assignment of Agreement. Inasmuch as this Agreement is intended to transfer all City Transit Services to RTA, RTA shall not assign, transfer, delegate, or sublet this Agreement or any interest herein without the prior written consent of the CITY Administrative Services Director, and any such assignment, transfer, delegation, or sublet without CITY's prior written consent shall be considered null and void.
13. Responsibility for Assets. Subject to the provisions of this Agreement, RTA shall assume financial responsibility for funding ongoing costs of maintaining, repairing, and replacing Assets, and shall secure and provide access to additional vehicles, equipment, machinery, spare parts and other items to support current and future City Transit Services.
14. Governing Law. The validity, enforceability and interpretation of any of the clauses of this Agreement shall be determined and governed by the laws of the State of California.
15. Enforceability. The invalidity and unenforceability of any terms or provisions hereof shall in no way affect the validity or enforceability of any other terms or provisions. In the event a dispute arises under this Agreement, the prevailing party in such dispute shall be awarded all costs and expenses, including court costs and reasonable attorneys' fees.
16. Additional Employees. RTA agrees that it will need two additional employees to provide City Transit Services pursuant to this Agreement: a Special Projects Coordinator and a Road Supervisor. RTA agrees that it will hire the City's

current Transit Services Coordinator to fill the position of an RTA Administrative Services Officer, at the substantially equivalent wage and benefits levels provided by CITY, and according to RTA human resource policies and procedures, since the roles and responsibilities of both positions are similar. RTA shall use its existing procedures to fill the Road Supervisor position.

17. Warranty of RTA. RTA warrants that it is properly certified and licensed under the laws and regulations of the State of California to provide the services herein agreed to and that it has or will have the necessary personnel to perform all of its obligations hereunder.
18. Conflicts of Interest. No officer, employee, director or agent of CITY shall participate in any decision relating to this Agreement which affects his personal interest or the interest of any corporation, partnership, or association in which he is directly or indirectly interested; nor shall any such person have any interest, direct or indirect, in this Agreement or the provisions thereof.

No officer, employee, director or agent of RTA shall participate in any decision relating to this Agreement which affects his personal interest or the interest of any corporation, partnership or association in which he is directly or indirectly interested, no shall any such person have any interest, direct or indirect, in this Agreement or the provisions thereof.

19. Indemnification. RTA shall defend, indemnify and hold harmless CITY, its officers and employees from all claims, demands, damages, costs, expenses, judgments, attorney fees, or other losses that may be asserted by any person or entity, including RTA, and that arise out of, or are related any act or omission of RTA relating to this Agreement. The obligation to indemnify shall be effective and shall extend to all such claims or losses in their entirety. However, this indemnity will not extend to any claims or losses arising out of the sole negligence or willful misconduct of the CITY, its officers and employees.
20. Insurance Requirements. RTA, at its sole cost, shall purchase and maintain the insurance policies set forth below on all of its operations under this Agreement. All of the insurance companies providing insurance for RTA shall have, and provide evidence of, an A.M. Best & Co. rating of A:VII or above, unless an exception is granted by CITY's Administrative Services Director. Further, all policies shall be maintained for the full Term of this Agreement and related warranty period if applicable.

A. Scope and Limits of Required Insurance Policies

1) Commercial General Liability

Policy shall include coverage at least as broad as set forth in Insurance Services Office Commercial General Liability Coverage

(CG 00 01) with policy limits of not less than \$5 (five) million dollars combined single limit per occurrence. Policy shall be endorsed with the following specific language or contain equivalent language in the policy:

- a) The CITY, its officers and employees, are named as additional insureds for all liability arising out of the operations by or on behalf of the named insured in the performance of this Agreement.
- b) The insurance provided herein shall be considered primary coverage to the CITY with respect to any insurance or self-insured retention maintained by the CITY. Further, the CITY's insurance shall be considered excess insurance only and shall not be called upon to contribute to this insurance.
- c) The policy shall not be cancelled or materially changed without first giving thirty days prior written notice to the CITY Administrative Services Director.

2) Business Automobile Policy

Policy shall include coverage at least as broad as set forth in the liability section of Insurance Services Office Business Auto Coverage (CA 00 010) with policy limits of no less than \$5 (five) million dollars combined single limit for each occurrence. Said insurance shall include coverage for owned, non-owned, and hired vehicles. Policy shall be endorsed with the following specific language or contain equivalent language in the policy:

- a) The CITY, its officers and employees, is named as an additional insured for all liability arising out of the operations by or on behalf of the named insured in the performance of this Agreement
- b) The policy shall not be cancelled or materially changed without first giving thirty days prior written notice to the CITY Administrative Services Director.

3) Worker's Compensation / Employer's Liability Insurance

- a) Worker's Compensation: policy shall provide statutory limits as required by State of California/ Policy shall be endorsed with the following specific language or contain equivalent language in the policy:

- i. RTA and its insurer shall waive all rights of subrogation against the CITY, its officers and employees for workers' compensation losses arising out of this Agreement.
  - ii. The policy shall not be cancelled or materially changed without first giving thirty days prior written notice to the CITY Administrative Services Director.
- b) Employer's Liability: policy shall provide \$1 million dollars per accident for bodily injury or disease.

B. Deductibles and Self-Insurance Retentions

All deductibles and/or self-insured retentions which apply to the insurance policies required herein will be declared in writing and approved by CITY prior to commencement of this Agreement.

C. Documentation

Prior to the Closing Date and annually thereafter for the term of this Agreement, RTA will provide the CITY Administrative Services Director properly executed certificates of insurance clearly evidencing the coverage, limits, and endorsements specified in this Agreement. Further, at the CITY's request, the RTA shall provide certified copies of the insurance policies within thirty days of request.

D. Absence of Insurance Coverage

CITY may direct RTA to immediately cease all activities with respect to this Agreement if it determines that RTA fails to carry, in full force and effect, all insurance policies with coverage levels at or above the limits specified in this Agreement. Any delays or expense caused due to stopping of work and change of insurance shall be considered RTA's delay and expense.

21. Notices. Any notice required to be given pursuant to the terms and provisions hereof shall be in writing, and shall be sent by certified or registered mail to:

CITY:

City of Paso Robles  
 Department of Administrative Services  
 1000 Spring Street  
 Paso Robles, California 93446

RTA:

SLO Regional Transit Authority  
179 Cross St, Suite A  
San Luis Obispo, California 93401

22. Progress Reports. Upon request of the City, RTA shall provide brief progress reports regarding its provision of City Transit Services, which may include information on ridership, any suggested future changes in service, expenditures, etc.

***Signatures on following page***

IN WITNESS WHEREOF, this AGREEMENT has been executed by the parties hereto, upon the date first above written.

**CITY**

---

ATTEST:




---

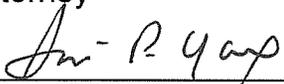
Dennis Fansler,  
City Clerk of The City of Paso Robles

[SEAL]

APPROVED AS TO FORM AND LEGAL EFFECT:

Iris P. Yang  
City Attorney

By:  \_\_\_\_\_  
Iris P. Yang

Date: Feb. 18, 2014

CITY:




---

Duane Picanco, Mayor  
City of Paso Robles

Date: 2-13-2014

**RTA and SLOCOG**

---

ATTEST:




---

Executive Director  
RTA



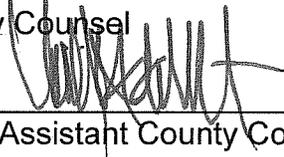

---

Executive Director  
SLOCOG

APPROVED AS TO FORM AND LEGAL EFFECT:

RITA NEAL  
County Counsel

By:  \_\_\_\_\_  
Assistant County Counsel

Date: 2.24.2014

RTA and SLOCOG:




---

President  
RTA & SLOCOG Boards of Directors

Date: 2/28/14

**ATTACHMENT "A"**  
**SCOPE OF CITY TRANSIT SERVICES**

City Transit Services to be administered and operated by RTA shall include local public transit services in the incorporated and adjacent areas of the City of Paso Robles and not considered part of the RTA regional transportation system.

The intent of the agreement is for RTA to operate the City of Paso Robles' local public transit services. In exchange, RTA will serve as the direct recipient of all transit-specific Transportation Development Act (TDA) funds allocated to CITY, and will seek available Federal Transit Administration (FTA) funds to partially fund local public transit services. The following list of services is not meant to be all inclusive:

**RTA-PROVIDED TRANSIT VEHICLE, MANAGEMENT, ADMINISTRATIVE, FINANCIAL SERVICES**

1. Initially operate local public transit services as recommended in the May 2012 North County Transit Plan. During the Term of the Agreement, services may be modified as may be agreed upon by the City of Paso Robles and RTA.
2. Provide data collection, reconciling and monitoring of local public transit services to appropriate transportation monitoring agencies including, but not limited to the San Luis Obispo Council of Governments (SLOCOG), the FTA, and the State of California.
3. Provide route analysis for effectiveness and efficiency and report to CITY on an as-needed basis.
4. Monitor system-wide on-time performance
5. Assist SLOCOG in the development and implementation of future Short Range Transit Plans.
6. Attend meetings with CITY as needed to address local public transit issues as they arise. Cooperate with and participate in regularly scheduled and/or focused planning sessions with CITY and other relevant transit agencies that may be scheduled to address and coordinate regional transit needs and services. RTA shall make available to City information reasonably requested regarding the City Transit Services from time to time, including information about ridership, funding and revenues, and proposed changes to schedules, destinations, routes, stops and/or fares, if any.
7. Prepare annual budget for local public transit services.
8. Prepare and administer annual TDA claim.

Attachment A

-2-

9. Prepare and submit annual State Controller's Report.
10. Coordinate and conduct all audits/reviews, including the annual TDA fiscal and compliance audit, the FTA Triennial Review, and the TDA Triennial Audit.
11. Develop and submit grant applications to fund local public transit services, including the purchase of vehicles and equipment that will be owned by RTA and used to provide local public transit services in the CITY.
12. All financial and budgetary reports outlined herein shall provide sufficient detail so as to report CITY transportation services separately from all other RTA regional transportation services.
13. Provide bus stop maintenance for local and regional transit bus stops in CITY, as shown on Attachment B, City Assets to be Transferred to RTA.

## ATTACHMENT "B" ASSETS TO BE TRANSFERRED TO RTA

The following list of CITY-owned vehicles and equipment will be transferred on an as-is, where-is basis on the Closing Date of this Agreement.

Attachment 1

### List of Paso Express bus stops and amenities

Bus Stop Location	Amenities at bus stop			
	Shelter	Bench	Trash Can	Signage
Spring @ 34th (westside)	x	x	x	x
Spring @ 34th (eastside)	x	x	x	x
Spring @ 32nd (westside)	x	x	x	x
Spring @ 32nd (eastside)	x	x	x	x
Spring @ 30th (westside)	x	x	x	x
Spring @ 30th (eastside)	x	x	x	x
Spring @ 28th (eastside)				x
Spring @ 28th (westside)	x	x	x	x
28th & Park (Chet Dotter housing)	x	x	x	x
Spring @ 26th (westside)				x
Spring @ 24th (eastside)				x
Spring @ 24th (westside)				x
Spring s/o 24th (westside)	x	x	x	x
Ysabel @ Adelaide Motel				x
Riverside north of 24th (Taco Bell)				x
Riverside @ Event Center				x
Riverside @ 20th @ crosswalk				x
Riverside @ 19th				x
Riverside @ 17th				x
Riverside @ 15th (eastside)				x
Creston @ Shannon Hill				x
Creston @ Capitol Hill				x
Creston @ Walnut	x	x	x	x
Creston @ Bolen		x	x	x
Creston @ Daniel Lewis (northside)				x
Creston @ Daniel Lewis School (southside)				x
Creston @ Vons Center	x	x	x	x
Creston @ Melody				x
Creston @ Oak Meadows				x
Creston @ Winifred Pifer School				x
Creston @ Food 4 Less	x	x	x	x
Creston @ Creston Village (westside)	x	x		x
Sherwood @ Creston		x		x
Sherwood @ Quail Run	x	x	x	x
Airport @ Scott (eastside)		x		x
Scott @ Airport (westside)				x
Scott @ Larkellen	x	x	x	x
Scott @ Westfield (northside)	x	x	x	x
Scott @ Westfield (southside)		x	x	x
Scott Street @ Senior Center	x	x	x	x
Scott Street @ Via Ramona				x
Creston @ Myrtlewood (One Stop Market)				x
Stoney Creek @ Apartments (northside)	x	x	x	x
Stoney Creek @ Apartments (southside)	x	x	x	x
Rambouillet @ Torrey Pines (eastside)				
Rambouillet @ Torrey Pines (westside)				x
Rambouillet @ Nicklaus (eastside)				x
Rambouillet @ Nicklaus (westside)				x
Rambouillet @ Wade (eastside)				x

Attachment B

-2-

## Attachment 1

## List of Paso Express bus stops and amenities

Bus Stop Location	Amenities at bus stop			
	Shelter	Bench	Trash Can	Signage
Rambouillet @ Wade (westside)				x
Niblick @ PR High School	x	x	x	x
Niblick @ Liberty High School(southside)	x	x	x	x
Niblick @ McDonald's	x	x	x	x
Niblick @ Albertson's Center	x	x	x	x
Wicklaus Drive and Oak Hill Road	x	x	x	x
1st and Oak		x		x
Oak & 2nd				x
Spring @ 2nd				x
Spring @ 4th	x	x	x	x
Spring @ 5th (eastside)		x	x	x
Park @ 6th (Robbins Field)				
8TH AND PINE Street	x	x	x	x
Spring @ 10th (Library)	x	x	x	x
Spring @ 10th (Paso Robles Inn)	x	x	x	x
Spring @ 12th (westside)		x	x	x
Spring @ 14th	x	x	x	x
Spring @ 15th (westside)	x	x	x	x
Spring @ 17th				x
Spring @ 20th	x	x	x	x
Spring @ 21st (eastside)	x	x	x	x
Spring @ 21st (westside)	x	x	x	x
Theater Drive @ Target shopping center (west)	x	x	x	x
Theatre Drive and Rancho Paso				x
Cuesta College North County campus	x	x	x	x
Dallons drive @ Golden Hill road	x	x	x	x

 = Inactive stop

 = Non-standard shelter

Attachment 2

## PASO EXPRESS TRANSIT VEHICLE ROSTER

City ID#	Type of Service:	Pass. Seats	Year	Make	Model	Fuel Type	Veh. Lic #	VIN	Mileage as of 7/1/13
14	Paso Express - Fixed Route/DAR	21	2002	Ford E-450	El Dorado	Diesel	909550	1FDWE45F82HA61290	222,318
21	Paso Express- Fixed Route	29	2007	Chevrolet	El Dorado	Diesel	1258079	1GBG5V19X7F421455	161,367
22	Paso Express- Fixed Route	29	2007	Chevrolet	El Dorado	Diesel	1258078	1GBG5V1997F421270	141,220
23	Paso Express- Fixed Route	29	2009	Chevrolet	El Dorado	Diesel	1322217	1GBG5V1939F406668	109,251
24	Paso Express- Fixed Route	29	2012	Ford SD	El Dorado	Diesel	1396051	1FDUF56T9CEA43719	8,392
25	Paso Express- Fixed Route	29	2013	Int'l	El Dorado	Diesel	1370733	5WEASAAM3DH361877	3,519
26	Paso Express- Fixed Route	29	2013	Int'l	El Dorado	Diesel	1370732	5WEASAAM5DH361878	3,181
27	Paso Express- Fixed Route	29	2013	Int'l	El Dorado	Diesel	1370734	5WEASAAM7DH361879	4,192
28	Paso Express- Fixed Route	29	2013	Int'l	El Dorado	Diesel	1370735	5WEASAAM3DH361880	2,573
29	Paso Express - Dial -A-Ride	4	2013	Dodge	Braun Entrevan	Gasoline	1409585	2C4RDGBG8DR787211	2,000
30	Paso Express - Dial-A-Ride	4	2013	Dodge	Braun Entrevan	Gasoline	1409326	2C4RDGBGXDR787212	2,000

Attachment B

-4-

## Attachment 3

	<u>Date</u>	<u>Asset</u>	<u>Life</u>	<u>Depr.</u>	<u>Depr.</u>	<u>Accum.</u>	<u>Accum.</u>
	<u>Acquired</u>	<u>Value</u>	<u>Yrs.</u>	<u>Amount</u>	<u>EXPENSE</u>	<u>ep.-Pr. Yr</u>	<u>Dep.-Cur. Yr.</u>
Bus Shelters (7)	6/29/1994	25,871.00	20	1,293.55	1,293.55	19,403.25	20,696.80
Bus Shelters (8)	3/29/1995	29,566.88	20	1,478.34	1,478.34	21,066.40	22,544.74
Bus Shelters ARRA Grant Funded	6/29/2008	21,142.48	20	1,057.12	1,057.12	1,057.12	2,114.24

## Attachment B

**AMENDMENT NO. 1 TO AGREEMENT FOR  
PROVISION OF PASO ROBLES TRANSIT SERVICES BY SAN LUIS OBISPO  
REGIONAL TRANSIT AUTHORITY**

This Amendment No. 1 to Agreement for Provision of Paso Robles Transit Services by San Luis Obispo Regional Transit Authority ("Amendment No. 1") is made this \_\_\_ day of \_\_\_\_\_, 2024 (the "Effective Date"), by and between the San Luis Obispo Regional Transit Authority ("RTA") and the City of Paso Robles, a municipal corporation ("City").

**WHEREAS**, on January 8, 2014, the RTA and City entered into an Agreement for Provision of Paso Robles Transit Services by San Luis Obispo Regional Transit Authority (the "Agreement") wherein RTA agreed to provide local public transit services within the boundaries of City subject to certain terms and conditions;

**WHEREAS**, the term of the Agreement was for ten (10) years; and

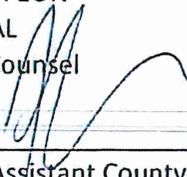
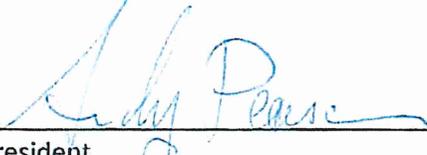
**WHEREAS**, by this Amendment No. 1, RTA and City desire to extend the term of the Agreement for an additional ten (10) years so that the RTA can continue to provide local public transit services within the City.

**NOW THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the RTA and City agree as follows:

1. Recitals. The above recitals are true and correct and incorporated herein by this reference.
2. Amendment to Agreement. The term of the Agreement is hereby extended for an additional ten (10) years terminating on June 1, 2034, unless terminated earlier as provided in the Agreement or further extended in writing by mutual agreement of the parties.
3. Original Agreement. Except as amended in this Amendment No. 1, all terms and conditions in the Agreement shall remain in full force and effect.

***Signatures on following page***

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 by their duly authorized officers as of the Effective Date.

CITY	RTA
<p>ATTEST:</p>  <p>_____  Melissa Boyer,  City Clerk of The City of Paso Robles</p> <p>[SEAL]</p>	<p>ATTEST:</p>  <p>  _____  Executive Director  San Luis Obispo Regional Transit Authority</p> <p>Date: <u>5-1-24</u></p>
<p>APPROVED AS TO FORM AND  LEGAL EFFECT:  Elizabeth Hull  City of Paso Robles Counsel</p> <p><u>Elizabeth Wagner Hull</u>  By: <small>Elizabeth Wagner Hull (May 21, 2024 20:26 PDT)</small></p> <p>Elizabeth Hull</p> <p>Date: <u>May 21, 2024</u></p>	<p>APPROVED AS TO FORM AND  LEGAL EFFECT:  RITA NEAL  County Counsel</p> <p>  By: _____  Assistant County Counsel</p> <p>Date: <u>5/1/24</u></p>
<p>CITY</p>  <p><u>John R Hamon Jr.</u>  <small>John R Hamon Jr. (May 22, 2024 11:59 PDT)</small></p> <p>John Hamon, Mayor  City of Paso Robles</p> <p>Date: <u>May 22, 2024</u></p>	<p>REGIONAL TRANSIT AUTHORITY</p>  <p>  _____  President  San Luis Obispo Regional Transit Authority Board  of Directors</p> <p>Date: <u>5/1/2024</u></p>