AGENDA

Tuesday, July 1, 2025

5:00 P.M. Closed Session
6:30 P.M. Open Session

REGULAR MEETING

CITY COUNCIL, AIRPORT COMMISSION, MARINA ABRAMS B NON-PROFIT CORPORATION, PRESTON PARK SUSTAINABLE COMMUNITY NON-PROFIT CORPORATION, SUCCESSOR AGENCY OF THE FORMER MARINA REDEVELOPMENT AGENCY AND MARINA

THIS MEETING WILL BE HELD IN PERSON AND VIRTUALLY (HYBRID).

Council Chambers
211 Hillcrest Avenue
Marina, California

AND

Zoom Meeting URL: https://zoom.us/j/730251556
Zoom Meeting Telephone Only Participation: 1-669-900-9128 - Webinar ID: 730 251 556

PARTICIPATION

You may participate in the City Council meeting in person or in real-time by calling Zoom Meeting via the weblink and phone number provided at the top of this agenda. Instructions on how to access, view and participate in remote meetings are provided by visiting the City's home page at https://cityofmarina.org/. Attendees can make oral comments during the meeting by using the "Raise Your Hand" feature in the webinar or by pressing *9 on your telephone keypad if joining by phone only.

The most effective method of communication with the City Council is by sending an email to marina@cityofmarina.org Comments will be reviewed and distributed before the meeting if received by 5:00 p.m. on the day of the meeting. All comments received will become part of the record. Council will have the option to modify their action on items based on comments received.

AGENDA MATERIALS

Agenda materials, staff reports and background information related to regular agenda items are available on the City of Marina's website www.cityofmarina.org. Materials related to an item on this agenda submitted to the Council after distribution of the agenda packet will be made available on the City of Marina website www.cityofmarina.org subject to City staff's ability to post the documents before the meeting.

VISION STATEMENT

Marina will grow and mature from a small town bedroom community to a small city which is diversified, vibrant and through positive relationships with regional agencies, self-sufficient. The City will develop in a way that insulates it from the negative impacts of urban sprawl to become a desirable residential and business community in a natural setting. **(Resolution No. 2006-112 - May 2, 2006)**

MISSION STATEMENT

The City Council will provide the leadership in protecting Marina's natural setting while developing the City in a way that provides a balance of housing, jobs and business opportunities that will result in a community characterized by a desirable quality of life, including recreation and cultural opportunities, a safe environment and an economic viability that supports a high level of municipal services and infrastructure. **(Resolution No. 2006-112 - May 2, 2006)**

LAND ACKNOWLEDGEMENT

The City recognizes that it was founded and is built upon the traditional homelands and villages first inhabited by the Indigenous Peoples of this region - the Esselen and their ancestors and allies - and honors these members of the community, both past and present.

1. CALL TO ORDER

2. ROLL CALL & ESTABLISHMENT OF QUORUM: (City Council, Airport Commissioners, Marina Abrams B Non-Profit Corporation, Preston Park Sustainable Communities Nonprofit Corporation, Successor Agency of the Former Redevelopment Agency Members and Marina Groundwater Sustainability Agency)

   Jenny McAdams, Brian McCarthy, Kathy Biala, Mayor Pro-Tem/Vice Chair Liesbeth Visscher, Mayor/Chair Bruce C. Delgado

3. PUBLIC COMMENT ON CLOSED SESSION ITEMS: None

4. CLOSED SESSION:

   a. Conference with Legal Counsel, Existing Litigation (§ 54956.9(d)) (2 case(s))
      i. *Sierra Club., Inc. v. City of Marina, et al.*, Civil No. 82333, Monterey County Superior Court
      ii. *City of Marina, et. al. v. California Coastal Commission, et al.*, 22-CV-004063, Monterey County Superior Court

   b. Real Property Negotiation (Govt. Code Section 54956.8)
      i. Property: Locke-Paddon Park, various parcels, APN Nos.: 033-121-004, 033-121-005-006, 033-132-003, 033-132-003, 033-121-101, 033-121-009, 033-121-002
      Negotiating Party: Monterey Peninsula Regional Park District
      Negotiator(s): City Manager
      Terms: Price and Terms

   c. Labor Negotiations
      i. UWUA-MEA
      ii. Marina Professional Fire Fighters Association
      iii. Marina Public Safety Managers Association
      iv. Marina Middle Manager Association
      v. Marina Police Officers Association
      vi. Directors
         a. Assistant City Manager
         b. Community Development Director
         c. Finance Director
         d. Fire Chief v. Police Chief
         e. Public Works Director
         f. Recreation & Cultural Services Director

   City Negotiators: Layne P. Long and Employee Relations Officer

6:30 PM - RECONVENE OPEN SESSION AND REPORT ON ANY ACTIONS TAKEN IN CLOSED SESSION

5. MOMENT OF SILENCE & PLEDGE OF ALLEGIANCE (Please stand)

6. SPECIAL PRESENTATIONS:

   a. Marina Falcons Chess Club Proclamation

   b. Dean Xu Jing Atherton

   c. National Parks and Recreation Month Proclamation

   d. FORTAG California Ave Project Update – TAMC

   e. Dunes/8th Street roundabout Presentation

   f. Central Coast Community Energy (3CE) 2025 Annual Update

7. COUNCIL AND STAFF ANNOUNCEMENTS:

8. PUBLIC COMMENT**:** *Any member of the public may comment on any matter within the City Council's jurisdiction that is not on the agenda. This is the appropriate place to comment on items on the Consent Agenda. Action will not be taken on items not on the agenda. Comments are limited to a maximum of three (3) minutes. General public comment may be limited to thirty (30) minutes and/or continued to the end of the agenda. Any member of the public may comment on any matter listed on this agenda at the time the matter is being considered by the City Council. Whenever possible, written correspondence should be submitted to the Council in advance of the meeting, to provide adequate time for its consideration.*

9. CONSENT AGENDA FOR THE SUCCESSOR AGENCY TO THE FORMER MARINA REDEVELOPMENT AGENCY: *Background information has been provided to the Successor Agency of the former Redevelopment Agency on all matters listed under the Consent Agenda, and these items are considered to be routine and non-controversial. All items under the Consent Agenda are normally approved by one motion. Prior to such a motion being made, any member of the public or City Council may ask a question or make a comment about an agenda item and staff may provide a response. If discussion or a lengthy explanation is required, the Council may remove an item from the Consent Agenda for individual consideration. If an item is pulled for discussion, it will be placed at the end of Other Action Items Successor Agency to the former Marina Redevelopment Agency.*

10. CONSENT AGENDA: *These items are considered to be routine and non-controversial. All items under the Consent Agenda may be approved by one motion. Prior to such a motion being made, any member of City Council may ask a question or make a comment about an agenda item and staff may provide a response. If discussion or a lengthy explanation is required, Council may remove the item from the Consent Agenda and it will be placed at the end of Other Action Items.*

    a. ACCOUNTS PAYABLE: *(Not a Project under CEQA per Article 20, Section 15378)*

        (1) Accounts Payable Check Numbers 107178-107208, totaling $430,697.85

    b. MINUTES: None

    c. CLAIMS AGAINST THE CITY: None

    d. AWARD OF BID: None

e. CALL FOR BIDS: None

f. ADOPTION OF RESOLUTIONS: *(Not a Project under CEQA per Article 20, Section 15378)*

(1) Adopting Resolution No. 2025-, confirming levy of the special tax for the City of Marina Community Facilities District No. 2015-1 (The Dunes) for Fiscal Year 2025-26 as authorized by Ordinance No. 2015-03, and; adopting Resolution No. 2025-, certifying City of Marina compliance with State law (Proposition 218) with respect to a special tax for the City of Marina Community Facilities District No. 2015-1 as authorized by Ordinance No. 2015-03 for Fiscal Year 2025-26.

(2) Adopting Resolution No. 2025-, approving the creation of utility easement on City property (Gloria Jean Tate Park, 3254 Abdy Way); and authorizing all other actions necessary to accept and record said easements on behalf of the City of Marina.

(3) Adopting Resolution No. 2025-, approving Waiver of Potential Conflict and Consent to Concurrent Representation – Sierra Club, Inc.

(4) Adopting Resolution No. 2025-, confirming levy of the special tax for the City of Marina Community Facilities District No. 2024-1 (The Dunes) for Fiscal Year 2025-26 as authorized by Ordinance No. 2024-11, and; Resolution No. 2025-, certifying City of Marina compliance with State law (Proposition 218) with respect to a special tax for the City of Marina Community Facilities District No. 2024-1 as authorized by Ordinance No. 2024-11 for Fiscal Year 2025-26

g. APPROVAL OF AGREEMENTS: *(Not a Project under CEQA per Article 20, Section 15378)*

(1) Adopting Resolution No. 2025-, approving a Reimbursement Agreement with Marina Coast Water District to cover the costs for the preparation of a Water Supply Assessment (WSA) for the City's GP2045 EIR.

(2) Adopting Resolution No. 2025-, approving an Amendment to the Lease Agreement between the City of Marina (City) and New Cingular Wireless PCS, LLC for construction and operation of a telecommunications facility on City-owned property at the northwest corner of California and 3rd avenue.

(3) Adopting Resolution No. 2025-, amending the Memorandum of Understanding (MOU) regarding cooperative assistance to comply with Senate Bill 1383, Food Waste Reduction and Organics Recycling Regulations, incorporating changes in the annual cost of program activities.

(4) Adopting Resolution No, 20250, approval of Architectural Services agreement with Wald Ruhnke & Dost Architects, LLP for the design of the Fire Station #2 Expansion Project.

h. ACCEPTANCE OF PUBLIC IMPROVEMENTS: None

i. MAPS: None

j. REPORTS: (RECEIVE AND FILE): None

k. FUNDING & BUDGET MATTERS: None

l. APPROVE ORDINANCES (WAIVE SECOND READING): None

m. APPROVE APPOINTMENTS: None

11. PUBLIC HEARINGS: *In the Council's discretion, the applicant/proponent of an item may be given up to ten (10) minutes to speak. All other persons may be given up to three (3) minutes to speak on the matter.*

a. City Council to consider opening public hearing, taking any testimony from public, and consider adopting Resolution No. 2025-__, forming the Cypress Cove II Landscape Maintenance Overlay Assessment District and levying the assessment for FY 2025-26 in connection with the overlay district and the existing Cypress Cove II Landscape Maintenance Assessment District, and certifying City of Marina compliance with State Law (Proposition 218) with respect to the assessment for the existing Cypress Cove II Landscape Maintenance Assessment District for fiscal year 2025-2026; **or, in the alternative**, adopting a resolution declaring its intention to dissolve the existing Cypress Cove II Landscape Maintenance District.

b. Open the public hearing and take any testimony from the public, and; Consider introducing Ordinance No. 2025-, amending chapter 3.26 of the Marina Municipal Code regarding mitigation fees for new development within the City of Marina.

c. Open public hearing and consider adopting Resolution No. 2025-, approving 2025 Schedule of Fees and Service Charges. ***This item continued to August 6, 2025.***

d. Open public hearing and introducing Ordinance No. 2025-, amending the Marina Municipal Code (MMC) Title 17 adding Section 17.04.305 (Garden Structures), Section 17.42.060 (Fences), and Chapter 17.55 (Staff Approvals and Procedures) and amending Sections 17.42.020 (Use Regulations), 17.42.055 (Height), and 17.42.070 (Yards) with corresponding updates to residential districts (17.06, 17.08, 17.10, and 17.12); and finding this action is exempt from environmental review per Section 15061(b)(3) of the CEQA Guidelines.

e. Open public hearing and introducing Ordinance No. 2025-, amending the Marina Municipal Code (MMC) Title 8, to add Chapter 8.80 relating to shopping cart regulations as directed; and find this action is exempt from environmental review pursuant to Section 15061(b)(3) of the CEQA Guidelines.

12. OTHER ACTIONS ITEMS OF THE SUCCESSOR AGENCY TO THE FORMER MARINA REDEVELOPMENT AGENCY: *Action listed for each Agenda item is that which is requested by staff. The Successor Agency may, at its discretion, take action on any items. Members of the public may be given up to three (3) minutes to speak.*

13. OTHER ACTION ITEMS: *Action listed for each Agenda item is that which is requested by staff. The City Council may, at its discretion, take action on any items. Members of the public may be given up to three (3) minutes to speak.*

Note: No additional major projects or programs should be undertaken without review of the impacts on existing priorities (Resolution No. 2006-79 – April 4, 2006).

a. Read by Title Only and adopting Ordinance No. 2025-11, amending Section 10.60.010 "Speed Limits Established" of Chapter 10.60 "Speed Limits" of Title 10 "Vehicles and Traffic" to adopt *prima facie* speed limits pursuant to an engineering and traffic survey and the California Vehicle Code (CVC). ***Continued from June 24, 2025***

b. City Council to receive a status update and provide additional directions to staff on activities relating to Locke-Paddon Park (LPP). This presentation is exempt from Environmental review per Sec. 15378 of the CEQA guidelines.

c. Consider adding "Call Up" measures to Section 17.70 (Appeals) of the Marina Municipal Code (MMC), the proposed ordinance is exempt from environmental review pursuant to Section 1506l (b)(3) of the CEQA guidelines.

14. COUNCIL & STAFF INFORMATIONAL REPORTS:

a. Monterey County Mayor's Association [Mayor Bruce Delgado]

b. Council reports on meetings and conferences attended (Gov't Code Section 53232).

15. ADJOURNMENT:

CERTIFICATION

I, Anita Sharp, Deputy City Clerk, of the City of Marina, do hereby certify that a copy of the foregoing agenda was posted at City Hall and Council Chambers Bulletin Board at 211 Hillcrest Avenue, Monterey County Library Marina Branch at 190 Seaside Circle, City Bulletin Board at the corner of Reservation Road and Del Monte Boulevard on or before 6:30 p.m., Friday, June 27, 2025.

_____

ANITA SHARP, DEPUTY CITY CLERK

City Council, Airport Commission and Redevelopment Agency meetings are recorded on tape and available for public review and listening at the Office of the City Clerk and kept for a period of 90 days after the formal approval of MINUTES.

City Council meetings may be viewed live on the meeting night and at 12:30 p.m. and 3:00 p.m. on Cable Channel 25 on the Sunday following the Regular City Council meeting date. In addition, Council meetings can be viewed at 6:30 p.m. every Monday, Tuesday and Wednesday. For more information about viewing the Council Meetings on Channel 25, you may contact Access Monterey Peninsula directly at 831-333-1267.

Agenda items and staff reports are public record and are available for public review on the City's website (www.ciytofmarina.org), at the Monterey County Marina Library Branch at 190 Seaside Circle and at the Office of the City Clerk at 211 Hillcrest Avenue, Marina between the hours of 10:00 a.m. 5:00 p.m., on the Monday preceding the meeting.

Supplemental materials received after the close of the final agenda and through noon on the day of the scheduled meeting will be available for public review at the City Clerk's Office during regular office hours and in a 'Supplemental Binder' at the meeting.

ALL MEETINGS ARE OPEN TO THE PUBLIC. THE CITY OF MARINA DOES NOT DISCRIMINATE AGAINST PERSONS WITH DISABILITIES. Council Chambers are wheelchair accessible. Meetings are broadcast on cable channel 25 and recordings of meetings can be provided upon request. To request assistive listening devices, sign language interpreters, readers, large print agendas or other accommodations, please call (831) 884-1278 or e-mail: marina@cityofmarina.org. Requests must be made at least **48 hours** in advance of the meeting.

Upcoming 2025 Meetings of the City Council, Airport Commission, Marina Abrams B Non-Profit Corporation, Preston Park Sustainable Community Nonprofit Corporation, Successor Agency of the Former Redevelopment Agency and Marina Groundwater Sustainability Agency
Regular Meetings: 5:00 p.m. Closed Session;
6:30 p.m. Regular Open Sessions

Tuesday, July 1, 2025	Tuesday, October 7, 2025
Tuesday, July 15, 2025 (Cancelled)	Tuesday, October 21, 2025
*****Wednesday, August 6, 2025***	Tuesday, November 4, 2025
Tuesday, August 19, 2025 (Cancelled)	Tuesday, November 18, 2025
****Wednesday, September 3, 2025***	Tuesday, December 2, 2025
Tuesday, September 16, 2025	Tuesday, December 16, 2025

*** Regular Meeting rescheduled due to Monday Holiday**

**** Regular Meeting rescheduled due to National Night Out**

***** Regular Meeting rescheduled due to General Election Day**

CITY HALL 2025 HOLIDAYS
(City Hall Closed)

Independence Day (City Offices Closed) ----------Friday, July 4, 2025
Labor Day ---------- Monday, September 1, 2025
Veterans Day (City Offices Closed)---------- Tuesday, November 11, 2025
Thanksgiving Day----------Thursday, November 27, 2025
Thanksgiving Break---------- Friday, November 28, 2025
Winter Break ---------- Wednesday, December 24, 2025-Wednesday, December 31, 2025

2025 COMMISSION DATES

Upcoming 2025 Meetings of Planning Commission
2nd and 4th Thursday of every month. Meetings are held at the Council Chambers at 6:30 P.M.

June 26, 2025	August 14, 2025	October 9, 2025
	August 28, 2025	October 23,2 025
July 10, 2025	September 11, 2025	November 13, 2025
July 24, 2025	September 25, 2025	November 27, 2025 (Cancelled)
		December 11, 2025

Upcoming 2025 Meetings of Public Works Commission
1st Thursday of every month. Meetings are held at the Council Chambers at 6:30 P.M.

July 3, 2025	September 4, 2025	November 6, 2025
August 7, 2025	October 2, 2025	December 4, 2025

Upcoming 2025 Meetings of Recreation & Cultural Services Commission
1st Wednesday of every second month. Meetings are held at the Council Chambers at 6:30 P.M.

July 2, 2025	September 10, 2025	November 5, 2025

Upcoming 2025 Meetings of Marina Tree Committee
2nd Wednesday of every quarter month as needed. Meetings are held at the Council Chambers at 6:30 P.M.

July 9, 2025	October 8, 2025

Proclamation

MARINA CHESS FALCONS

Whereas, the Marina Chess Falcons started during September, 2024 , and

Whereas the Marina Chess Falcons has 46 members with the youngest being in 2nd grade; and

Whereas, in collaboration with various host organizations (such as YMCA, Carmel Foundation, CSUMB, Salinas Valley Community Church, Days & Knights of Monterey County) and the Jume 7, 2025, Marina Chess Festival will be the 38th consecutive monthly tournament; and

Whereas, the Friends of Marina Library sponsors the Marina Chess Falcons and staff of the Marina Library is extremely supportive by ensuring access to facilities for tournaments and weekly chess sessions; and

Whereas, chess is important for several reasons, including its ability to enhance cognitive skills, promote social development, provide intellectual stimulation, it fosters critical thinking, problem-solving, and decision-making abilities, while also teaching patience, concentration, and emotional regulation; and

Whereas, the Marina Chess Falcons Club is a safe space for our youth to play chess, a positive competitive environment where our members learn to win with grace and lose with dignity, a place that encourages sportsmanship and friendship, a place of conflict on the chessboard, where difficult situations can be experienced in an abstract manner, and where players learn life lessons that will serve them on and off the chessboard.

Now, therefore be it resolved that the Marina City Council hereby recognizes the Marina Chess Falcons as important for Marina's quality of life and the social fabric of our community.

Dated this 7th day of June 2025

Bruce C. Delgado
Mayor

Liesbeth Visscher
Mayor Pro Tem

Kathy Y. Biala
Councilmember

Brian McCarthy
Councilmember

Jenny McAdams
Councilmember

CITY OF MARINA INCORPORATED NOVEMBER 15, 1975 CALIFORNIA

Proclamation

DEAN XU JING ATHERTON

WHEREAS, Dean Xu Jing Atherton, a Marina resident, won first place in the 2024 All-around National Gymnastics Championship in his age bracket of 11-year-olds; and

WHEREAS, he qualified to compete again in 2025 as a 12-year-old and placed 2nd in the All-Around National Championship as well as first in high bar, parallel bars, pommel horse where he scored a perfect 10, and rings where he scored a second perfect 10; and

WHEREAS, Dean's team, Rising Star Gymnastics, a Monterey-based training facility, placed first overall in this year's National Gymnastics Competition; and

WHEREAS, Dean received strong support from his parents and grandparents, also Marina residents, and Coach Sage Barca-Hall

THEREFORE, BE IT resolved that the entire Marina City Council extend our congratulations to Dean and wish to show him that this is a major accomplishment for our community. We wish to thank him publicly for demonstrating such leadership through dedication, hard work, and success.

Dated this 1st day of July 2025

Bruce C. Delgado
Mayor

Liesbeth Visscher
Mayor Pro Tem

Kathy Y. Biala
Councilmember

Brian McCarthy
Councilmember

Jenny McAdams
Councilmember

CITY OF MARINA INCORPORATED NOVEMBER 13, 1975 CALIFORNIA

Proclamation

National Parks and Recreation Month

-oOo-

Recognizing July as Parks and Recreation Month in the City of Marina, California

WHEREAS, parks and recreation is a vital part of the City of Marina, enriching the lives of all residents through diverse and inclusive programs, accessible parks, and cultural services that promote community health, engagement, and environmental stewardship; and

WHEREAS, the City of Marina's Recreation & Cultural Services Department supports physical and mental health through programs and spaces that encourage outdoor activity, wellness education, and social connection for individuals and families of all ages and abilities; and

WHEREAS, the Department offers youth enrichment, after-school and summer programs, senior services, cultural celebrations, and recreational events that foster lifelong learning, resilience, and a strong sense of belonging in our community; and

WHEREAS, parks and recreation in Marina play a key role in supporting equity and access, by maintaining inclusive facilities such as all-abilities playgrounds, public art installations, and diverse cultural programs that reflect the rich history and diversity of our city; and

WHEREAS, recreation and cultural services contribute to Marina's economic vitality by supporting tourism, job creation, business attraction, and enhancing quality of life for residents and visitors; and

WHEREAS, Marina's parks and open spaces protect our coastal and natural resources, and serve as living classrooms for environmental education, sustainability practices, and community stewardship; and

WHEREAS, the U.S. House of Representatives has designated July as Parks and Recreation Month, encouraging communities nationwide to recognize the essential services and opportunities provided by their local parks and recreation agencies; and

WHEREAS, the City of Marina proudly acknowledges the dedication of its Recreation & Cultural Services Department staff, volunteers, and community partners who enhance the well-being of Marina through outstanding programs, services, and facilities.

NOW, THEREFORE, I, Mayor Bruce Delgado, on behalf of the Marina City Council, do hereby proclaim July 2025 as Parks and Recreation Month in the City of Marina and encourage all residents to explore and enjoy our parks, cultural programs, and recreation services throughout the month and year -round.

Dated this 1st day of July, 2025

CITY OF MARINA INCORPORATED NOVEMBER 18, 1975 CALIFORNIA

Bruce C. Delgado, Mayor

Agenda Item: **6d**

FORTAG

California Ave Segment

→ Overview & Updates

July 1, 2025

Project Partners

TAMC
TRANSPORTATION AGENCY FOR MONTEREY COUNTY

GHD

CITY OF
MARINA
CALIFORNIA

Pathway for Today's Meeting

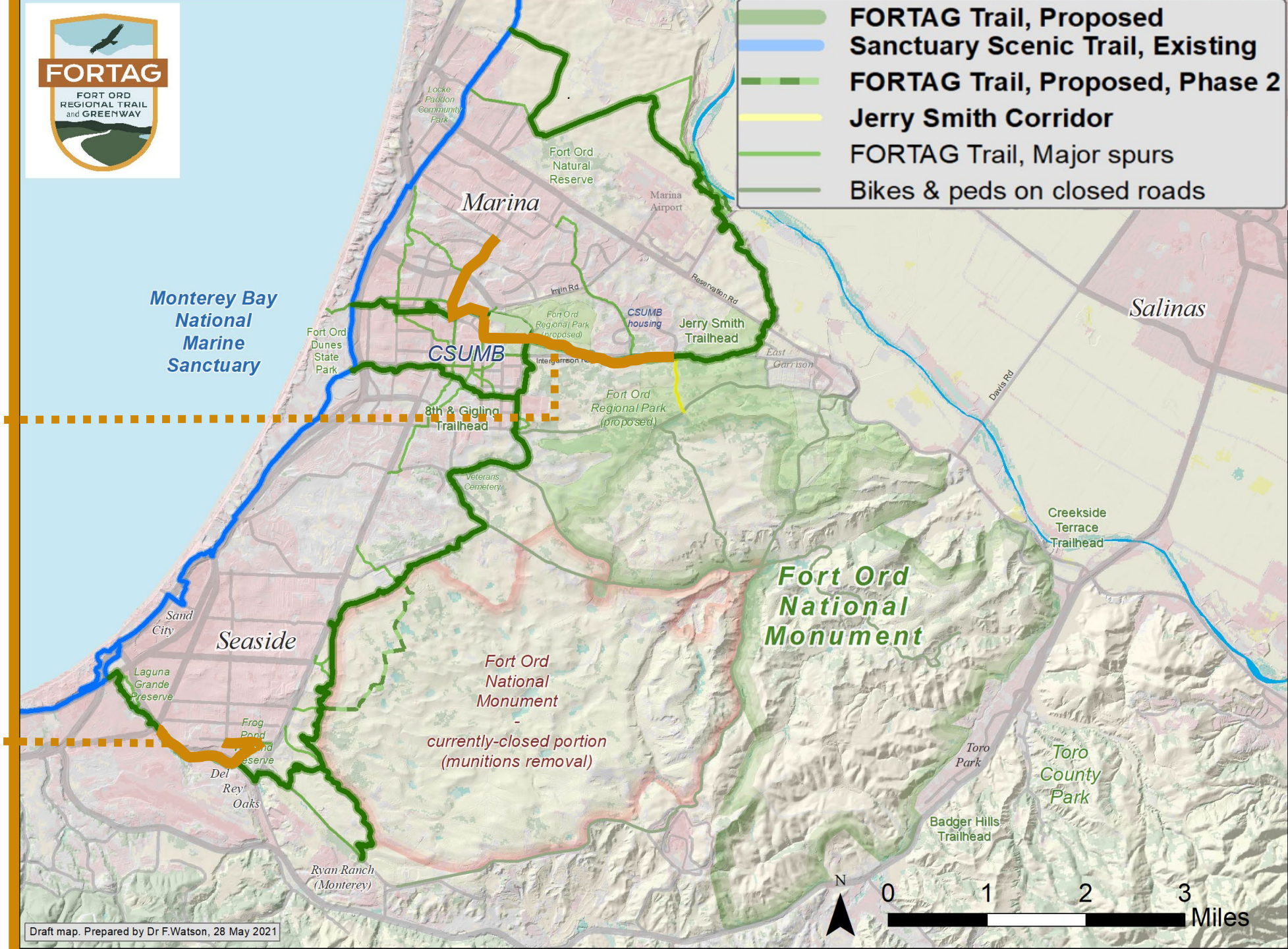
- FORTAG: Overall program overview
- Segments Currently in Design in Marina
- Project Timeline
- Community Outreach
- Sensitive Species
- Trail Design
- Wayfinding
- Supplemental Agreement
- Questions & Answers

FORTAG

28-mile Regional Trail Network

Design Underway

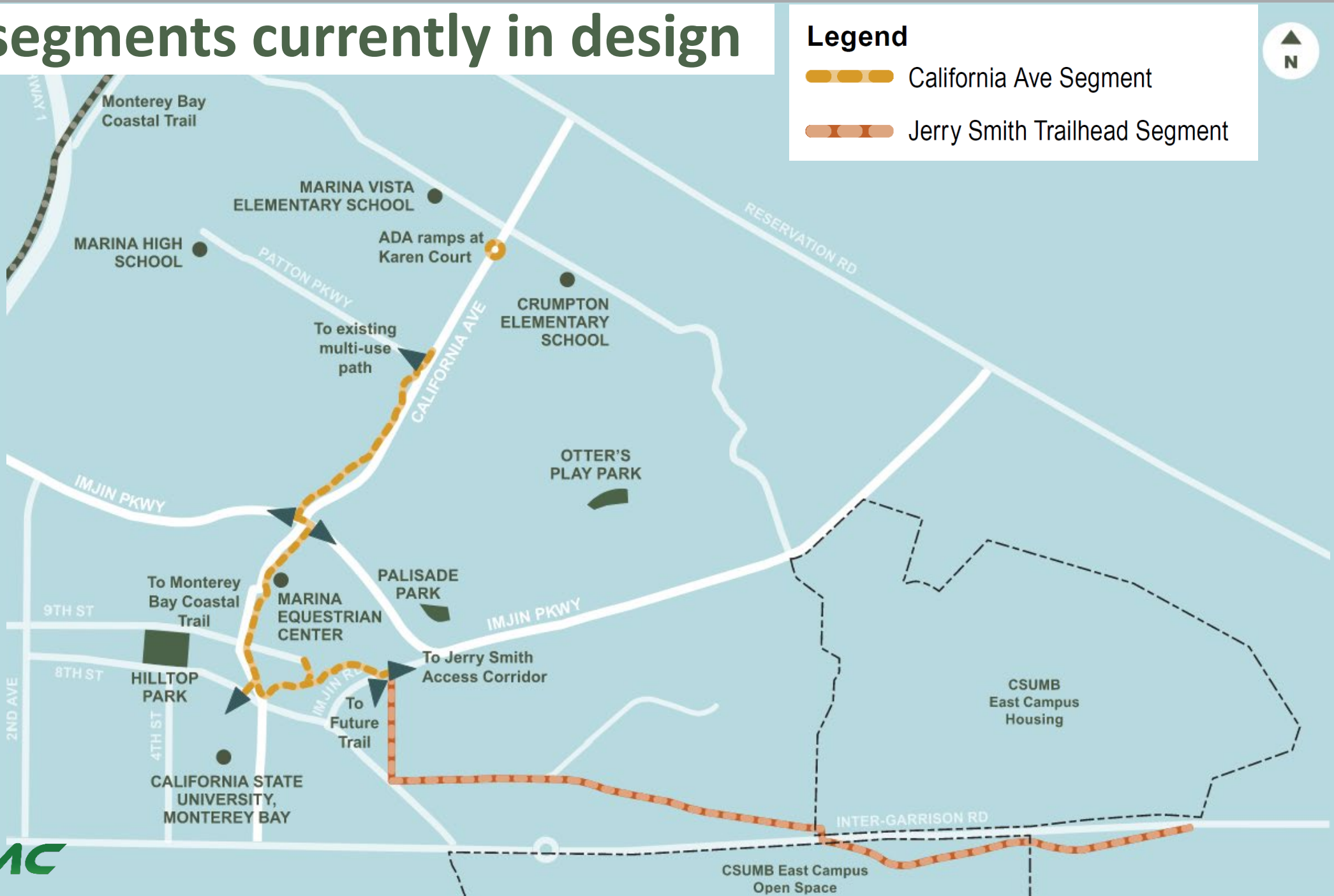
Construction Underway



Draft map. Prepared by Dr F.Watson, 28 May 2021

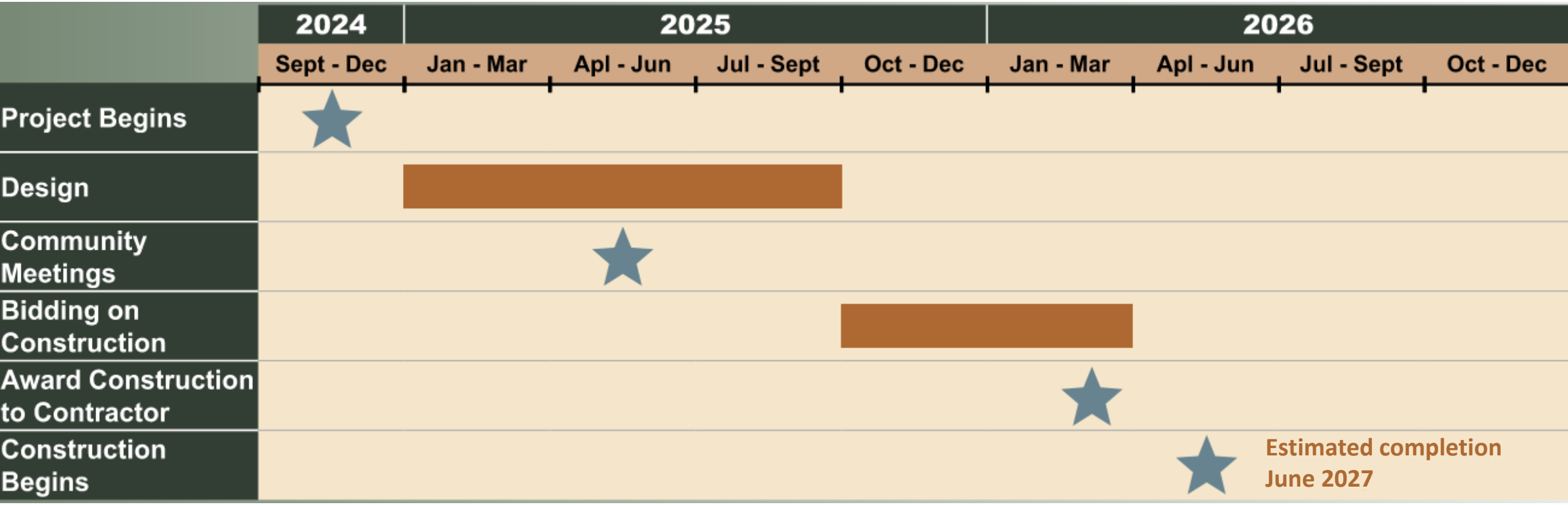
TAMC

Two segments currently in design



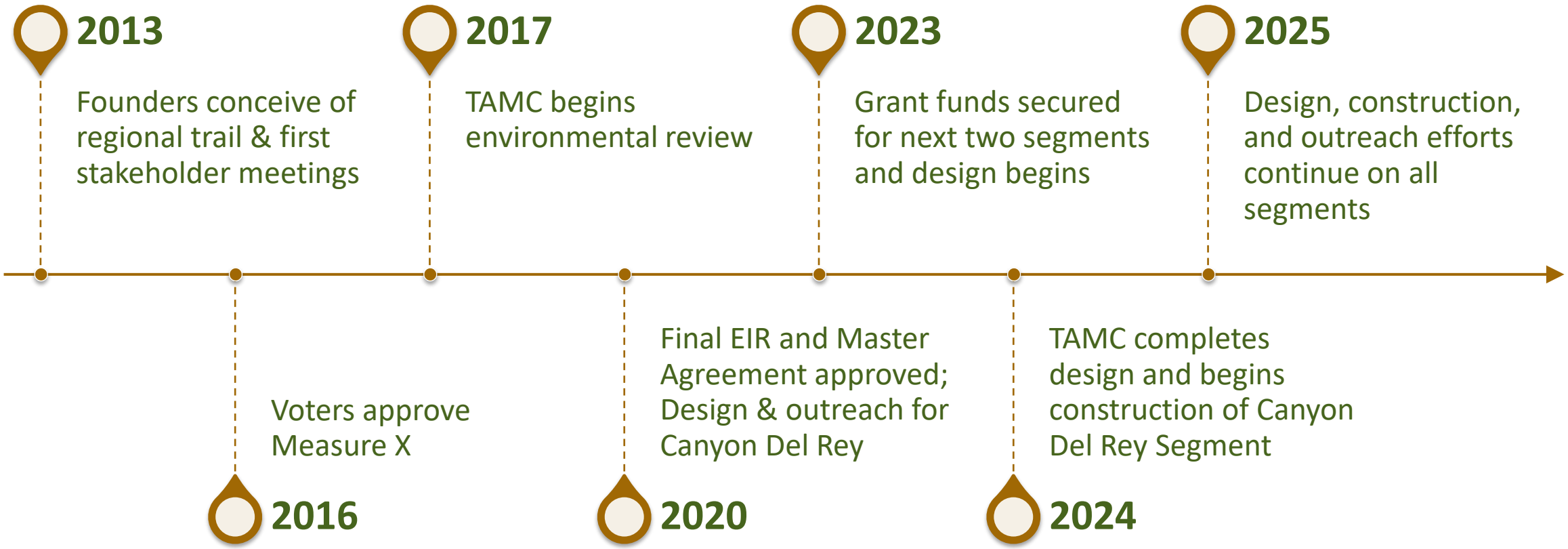
TAMC

Construction Begins in 2026



TAMC

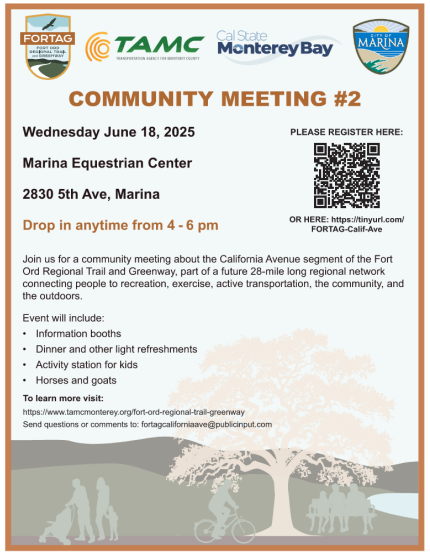
10+ Years of Community Outreach



TAMC

100+ Community Members Attended Recent Meetings

- **Jan 2025** TAMC Bike & Pedestrian Committee
- **May 2025** Community Meeting #1 Crumpton Elementary
- **Jun 2025** Community Meeting #2 Marina Equestrian Center



Incidental Take Permit for Rare Plants

Monterey Gilia

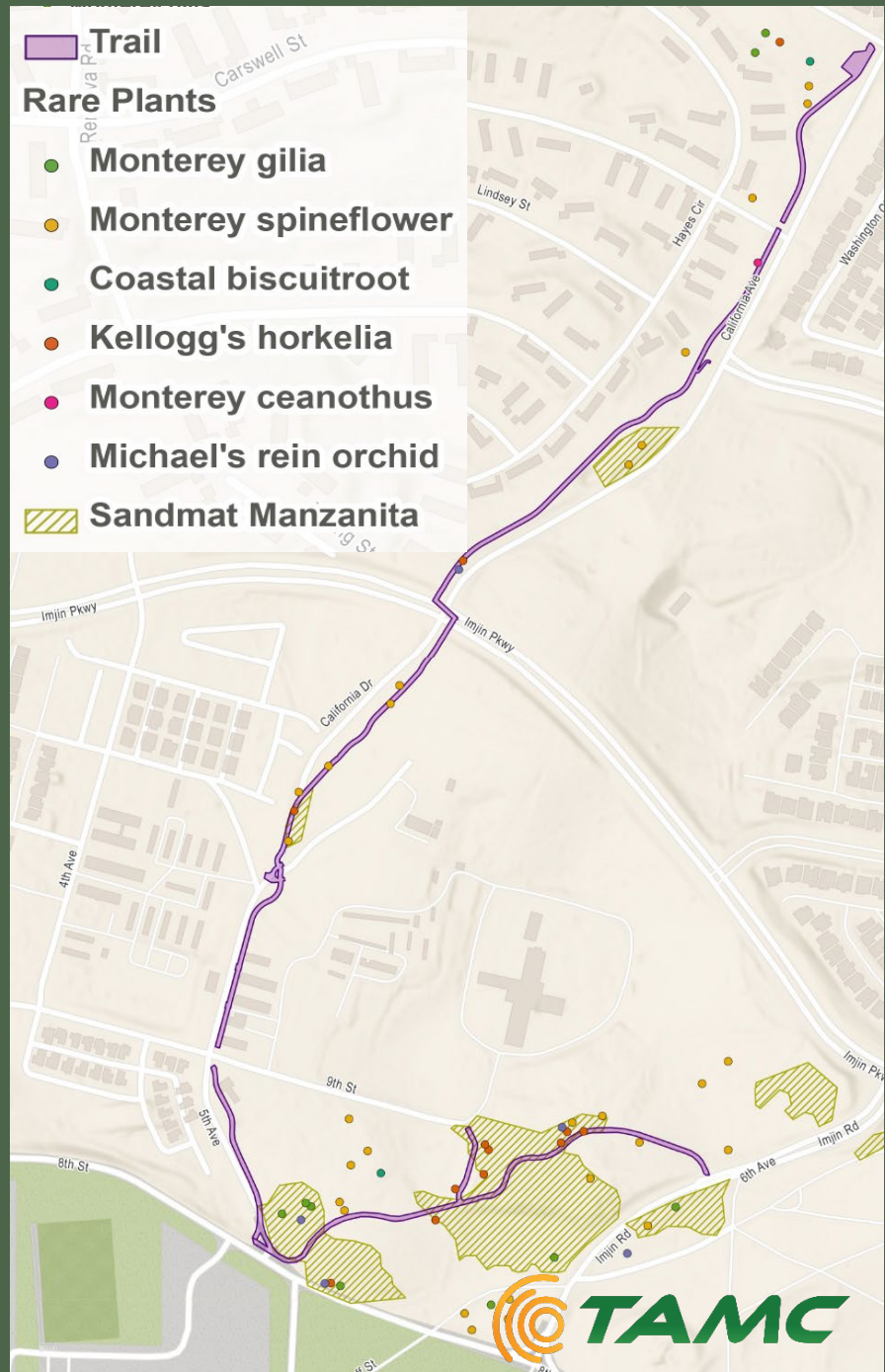
Monterey Spineflower

Coastal Biscuitroot

Kellogg's Horkelia

Monterey Ceanothus

Sandmat Manzanita



Design of California Ave Segment is Nearly Complete

Examples of trail appearance

Open Space

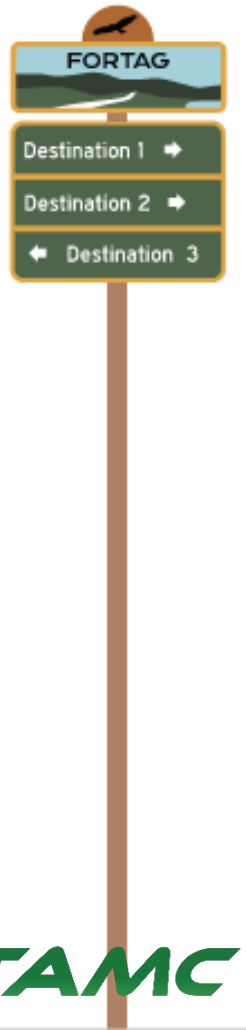
California Avenue

Marina Equestrian Center

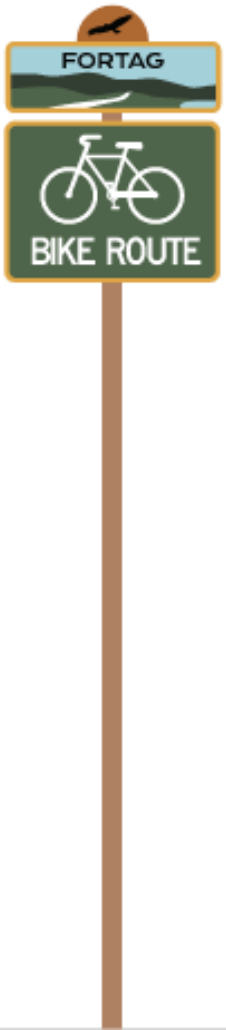
TAMC

Wayfinding Provided for Multiple Types of Users

Sign 1



Sign 2



Pedestrian Kiosk

Post Marker

Seat Marker

TAMC

Future Council Reviews & Approvals to Come

Fall 2025

- Environmental Mitigation Area
- Habitat Mitigation Plan
- Supplemental Agreement

Fall 2027

- Trail Adoption

Groundbreaking of FORTAG Canyon del Rey Segment (May 2024)

TAMC

Thank you!!

→ Project Website:

https://www.tamcmonterey.org
> Programs and Projects
> Fort Ord Regional Trail & Greenway
> FORTAG-California Avenue

Questions & Answers

DUNES ROUNDABOUT | MARINA, CA

BEK collective

July 1, 2025

Form and materials…

Four pillars… one for each major war and conceptually representing number of people deployed… 1941 - 1994

1939-1945

(6 YEARS)

During **World War II**, Fort Ord was a major training and deployment center for U.S. Army troops, particularly infantry units. While exact deployment numbers are difficult to pinpoint, it is estimated that **over 100,000 soldiers** trained at Fort Ord were sent overseas to fight in the war.

Many of these troops were part of the **7th Infantry Division**, which saw significant combat in the Pacific Theater, including battles in the Aleutian Islands, Leyte, and Okinawa. Fort Ord served as a key hub for preparing soldiers before they were shipped out to the front lines.*

1950–1953

(3 YEARS)

During the **Korean War**, Fort Ord was a major training and deployment center for U.S. Army troops, particularly infantry units. While exact numbers are difficult to verify, estimates suggest that **tens of thousands of soldiers** trained at Fort Ord were sent to Korea.

A key unit associated with Fort Ord, the **7th Infantry Division**, played a significant role in the war, including the **Inchon Landing, the Battle of Chosin Reservoir, and operations along the 38th Parallel**. The base continued to process and deploy troops throughout the conflict, serving as a vital hub for preparing soldiers for combat in Korea.*

1955 -1975

(20 YEARS)

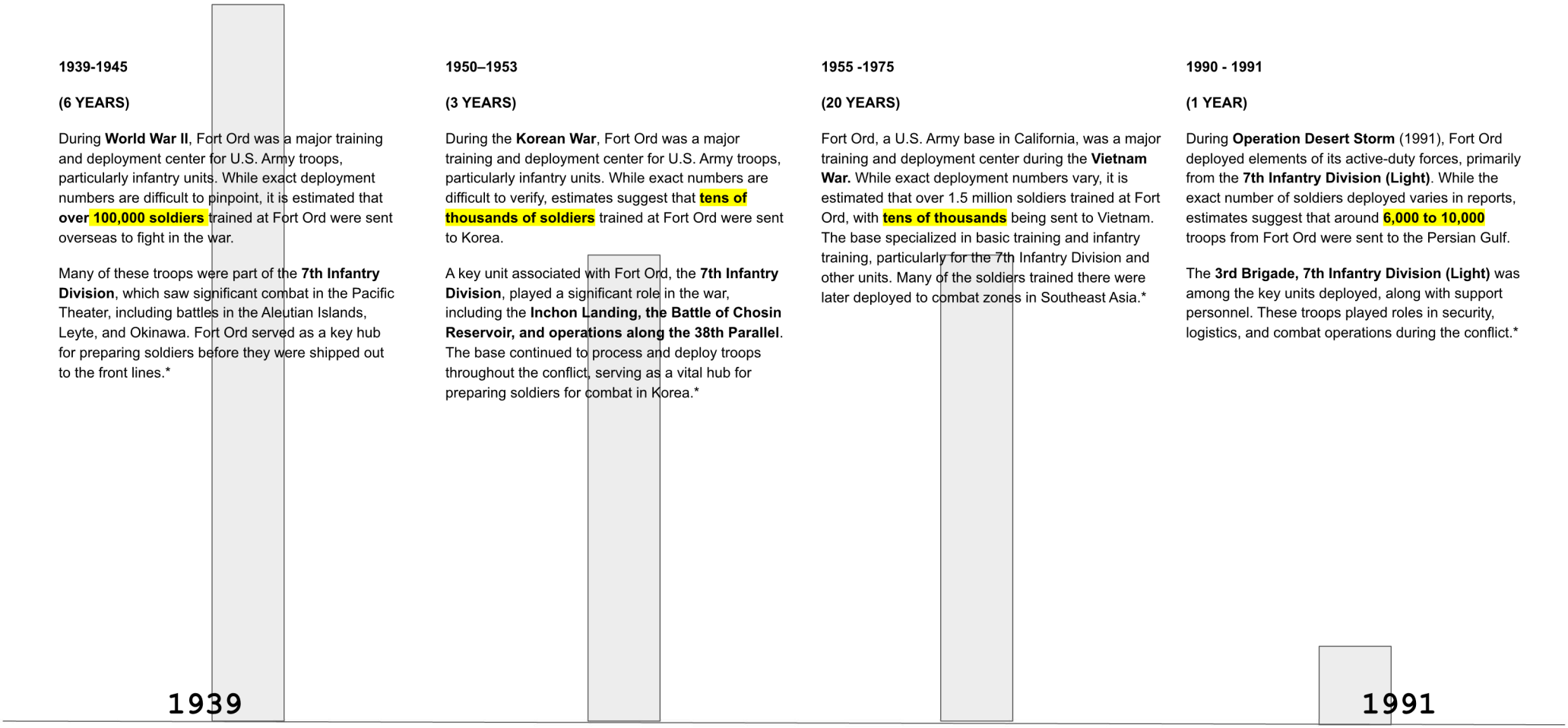
Fort Ord, a U.S. Army base in California, was a major training and deployment center during the **Vietnam War.** While exact deployment numbers vary, it is estimated that over 1.5 million soldiers trained at Fort Ord, with **tens of thousands** being sent to Vietnam. The base specialized in basic training and infantry training, particularly for the 7th Infantry Division and other units. Many of the soldiers trained there were later deployed to combat zones in Southeast Asia.*

1990 - 1991

(1 YEAR)

During **Operation Desert Storm** (1991), Fort Ord deployed elements of its active-duty forces, primarily from the **7th Infantry Division (Light)**. While the exact number of soldiers deployed varies in reports, estimates suggest that around **6,000 to 10,000** troops from Fort Ord were sent to the Persian Gulf.

The **3rd Brigade, 7th Infantry Division (Light)** was among the key units deployed, along with support personnel. These troops played roles in security, logistics, and combat operations during the conflict.*

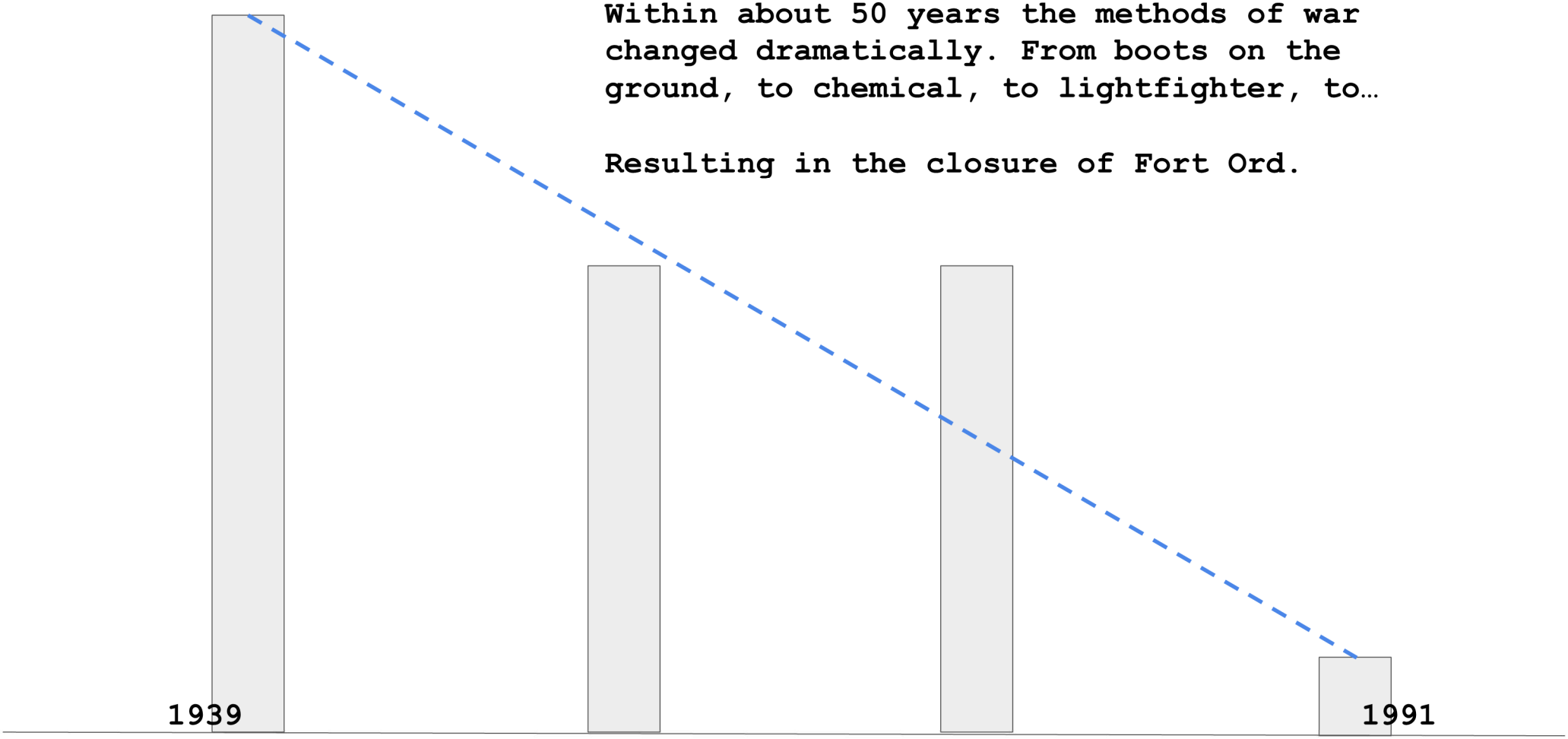


*AI generated summary

What story does this tell?

Within about 50 years the methods of war changed dramatically. From boots on the ground, to chemical, to lightfighter, to…

Resulting in the closure of Fort Ord.



The technology will always change.

But values and purpose should be steadfast.

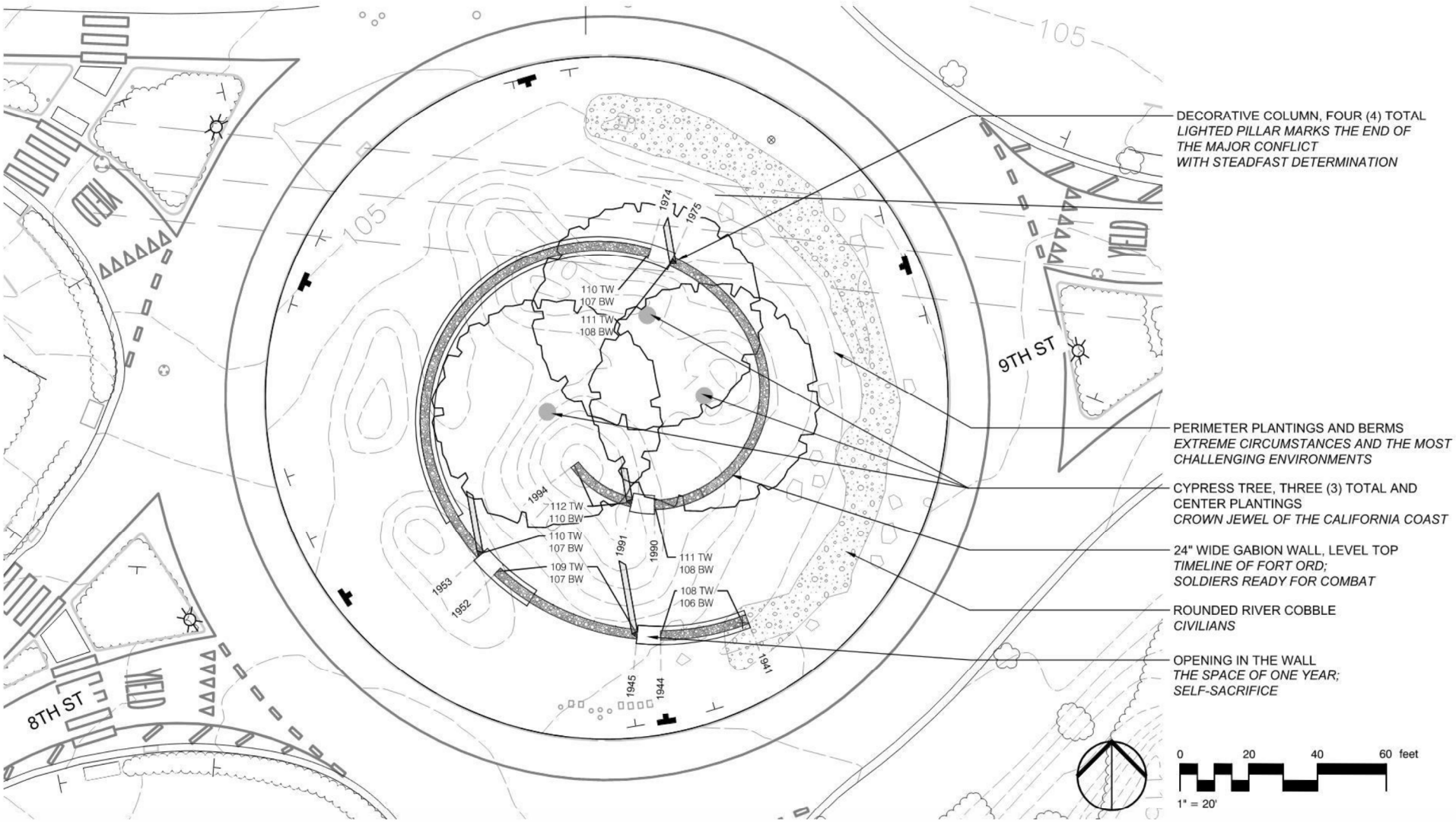
"This national monument will not only protect one of the crown jewels of California's coast, but will also honor the heroism and dedication of men and women who served our nation and fought in the major conflicts of the 20th century,"

-President Barack Obama signed a proclamation April 20 designating Fort Ord, Calif., as a national monument

heroism and dedication

Courage, integrity, and selfless service.

Acting with unwavering determination and fearlessness, even in the most challenging environments.


DECORATIVE COLUMN, FOUR (4) TOTAL
LIGHTED PILLAR MARKS THE END OF
THE MAJOR CONFLICT
WITH STEADFAST DETERMINATION
PERIMETER PLANTINGS AND BERMS
EXTREME CIRCUMSTANCES AND THE MOST
CHALLENGING ENVIRONMENTS
CYPRESS TREE, THREE (3) TOTAL AND
CENTER PLANTINGS
CROWN JEWEL OF THE CALIFORNIA COAST
24" WIDE GABION WALL, LEVEL TOP
TIMELINE OF FORT ORD;
SOLDIERS READY FOR COMBAT
ROUNDED RIVER COBBLE
CIVILIANS
OPENING IN THE WALL
THE SPACE OF ONE YEAR;
SELF-SACRIFICE
9TH ST
8TH ST
105
110 TW
107 BW
111 TW
108 BW
112 TW
110 BW
110 TW
107 BW
109 TW
107 BW
111 TW
108 BW
108 TW
106 BW
1974
1975
1994
1991
1990
1953
1952
1945
1944
1941
0
20
40
60 feet
1" = 20'

Perimeter plantings and berms presenting *extreme circumstances and the most challenging environments*
Decorative, Lighted Columns *Marking the end of each major conflict, with steadfast determination*
Gabion Wall *Timeline of Fort Ord; Soldiers ready for combat*
Monterey Cypress trees (Three total) and colorful plantings at center, *Crown jewel of CA Coast*
Wall opening *The space of one year; Self-sacrifice*
Rounded river cobble *Civilians*

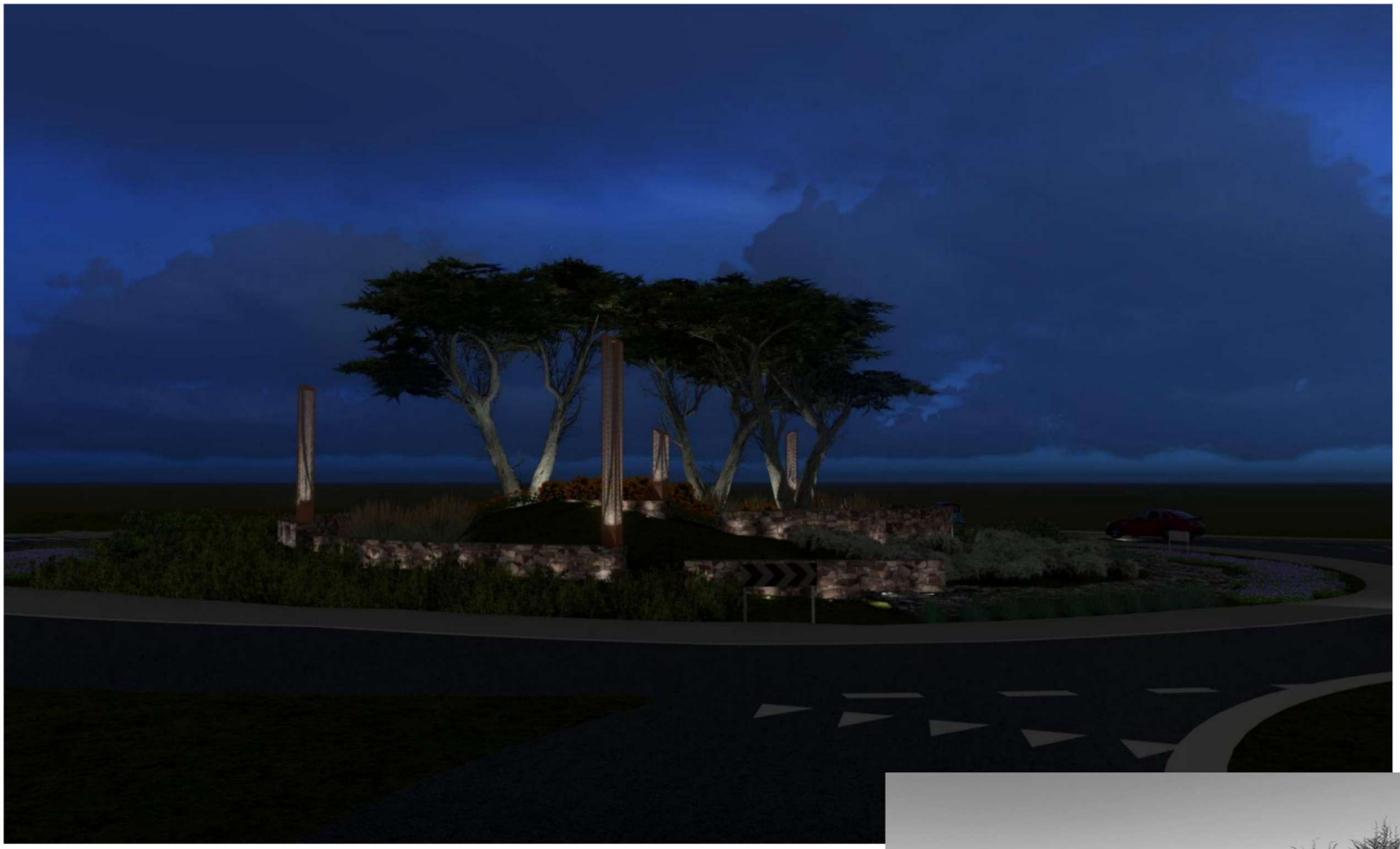
View from Linear Park, Northbound

View from 9th St, Westbound

View from Linear Park, Southbound

View from VA facility exit

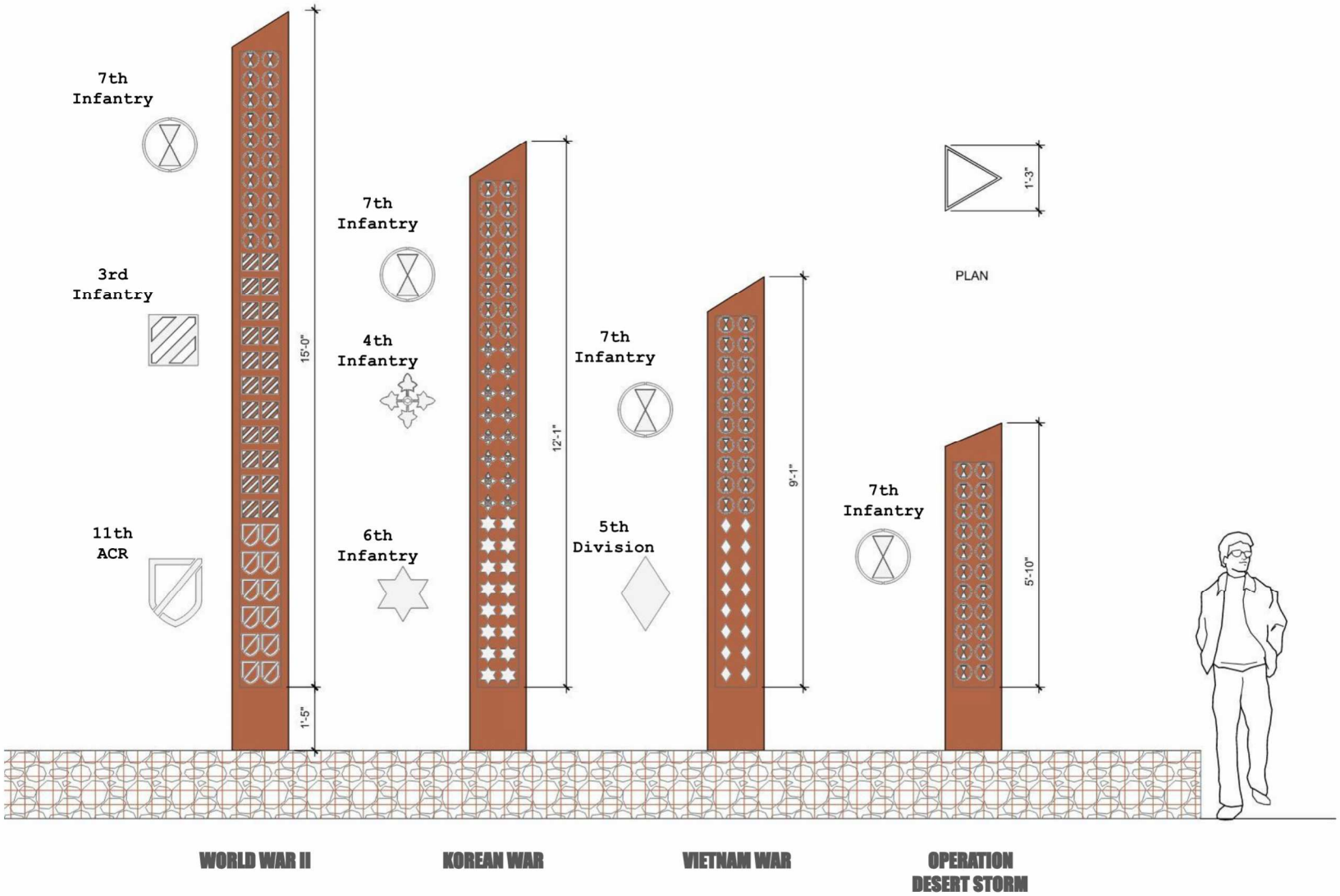
View from 8th Street, Eastbound



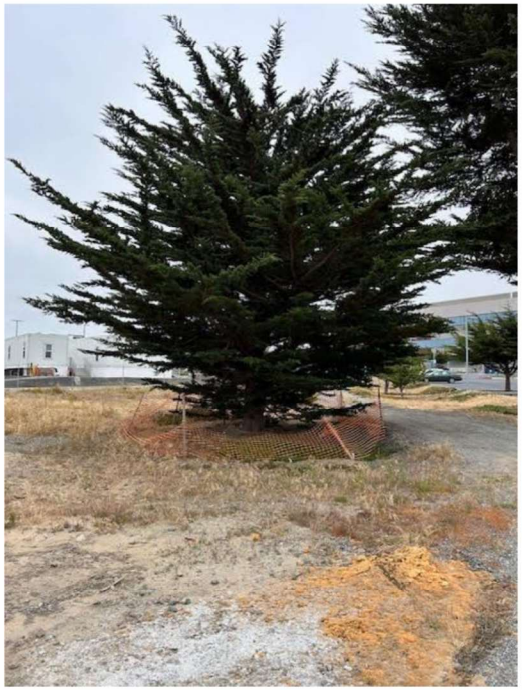
View from Linear Park, Northbound

View from 9th St, Westbound

View from VA facility exit


7th Infantry
3rd Infantry
11th ACR
7th Infantry
4th Infantry
6th Infantry
7th Infantry
5th Division
7th Infantry
15'-0"
1'-5"
12'-1"
9'-1"
5'-10"
1'-3"
PLAN
WORLD WAR II
KOREAN WAR
VIETNAM WAR
OPERATION DESERT STORM

Tree relocation opportunities



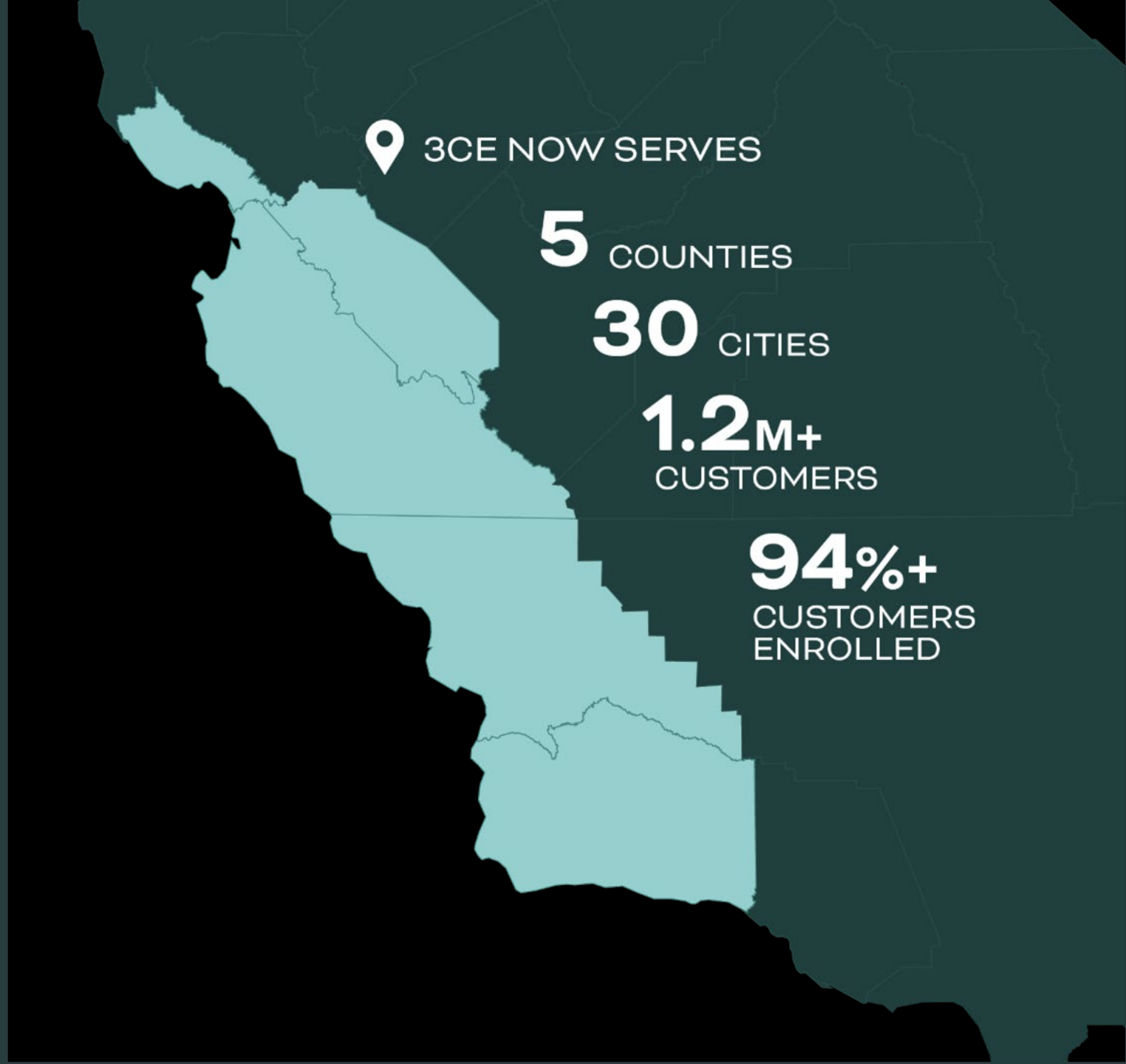
3CE Annual Update

City of Marina

July 1st, 2025

Central Coast Community Energy

Together, Power for Good



Central Coast Community Energy

2024 Energy Highlights

Sourced 409 Megawatts

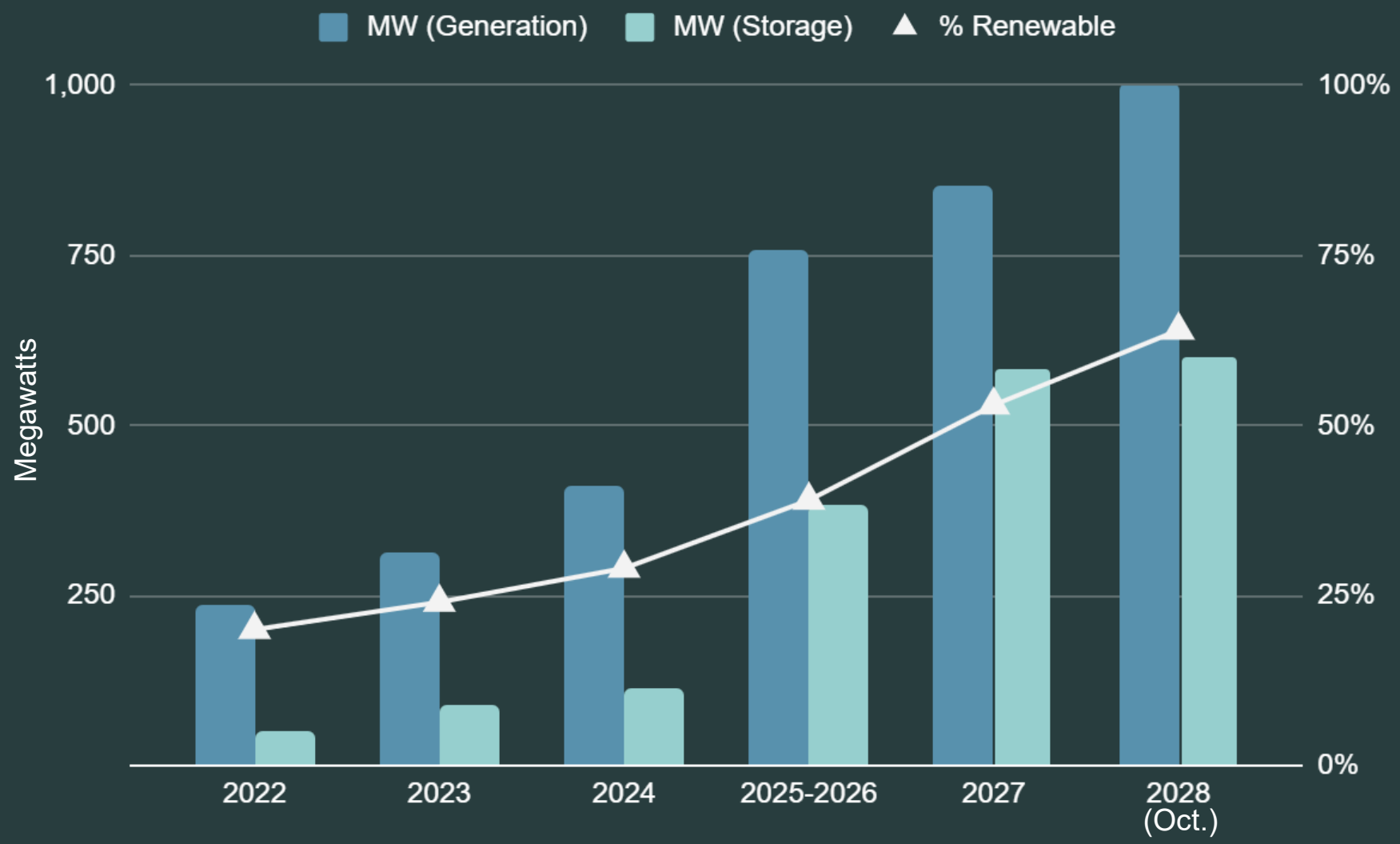
of clean & renewable energy in 2024, enough to power 350,850 households with renewable energy.

Sourcing Renewable Energy

avoided more than 445,000 metric tons of CO_2, the equivalent of taking 105,911 gasoline-powered passenger vehicles off the road for a year.

Central Coast Community Energy

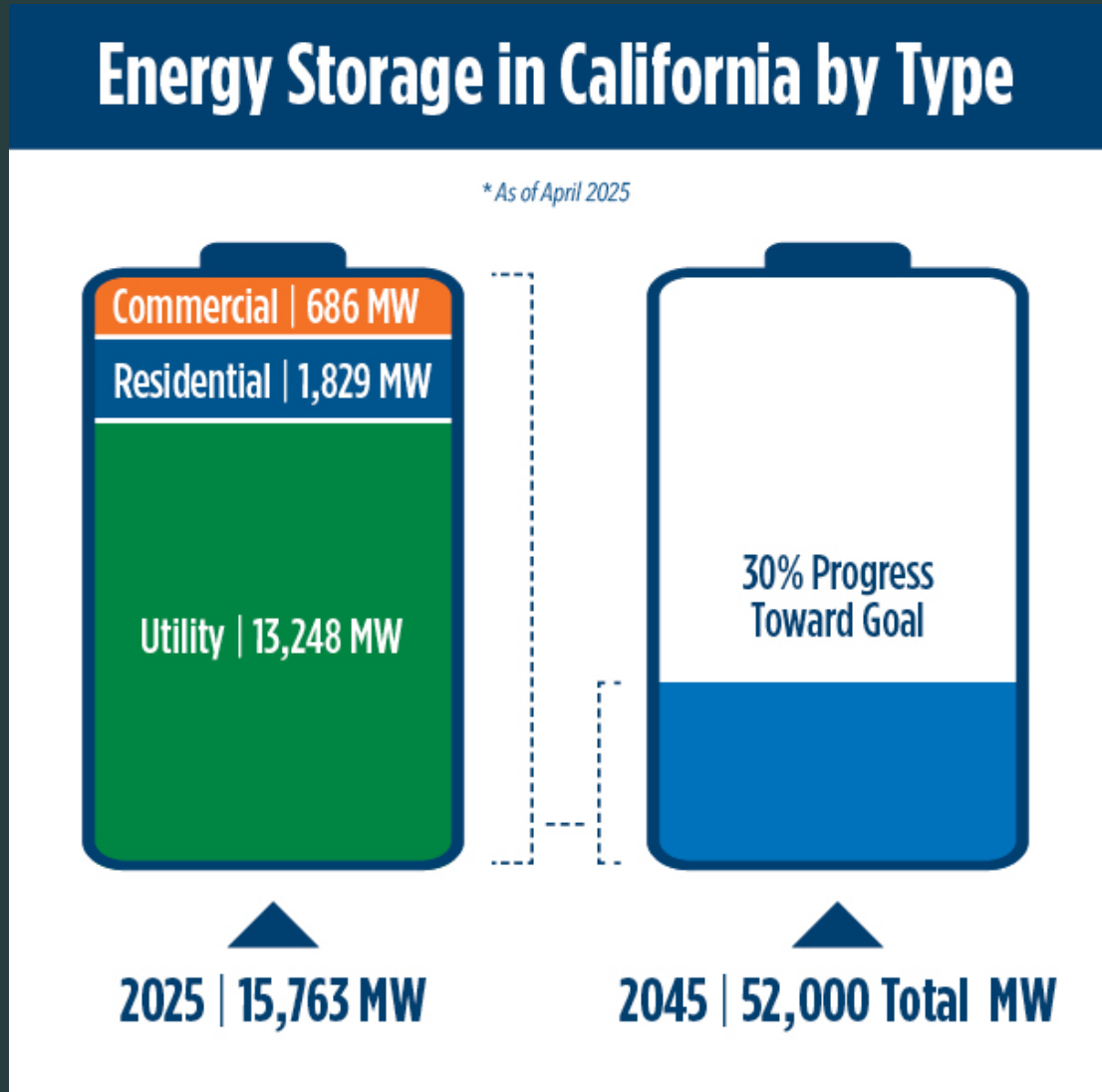
Renewable Energy Progress



Battery Energy Storage Systems

Support the Renewable Transition

- Balances intermittent renewables
- Supports stability
- Reduces reliance on fossil fuels
- Drives affordability
- Empowers customers

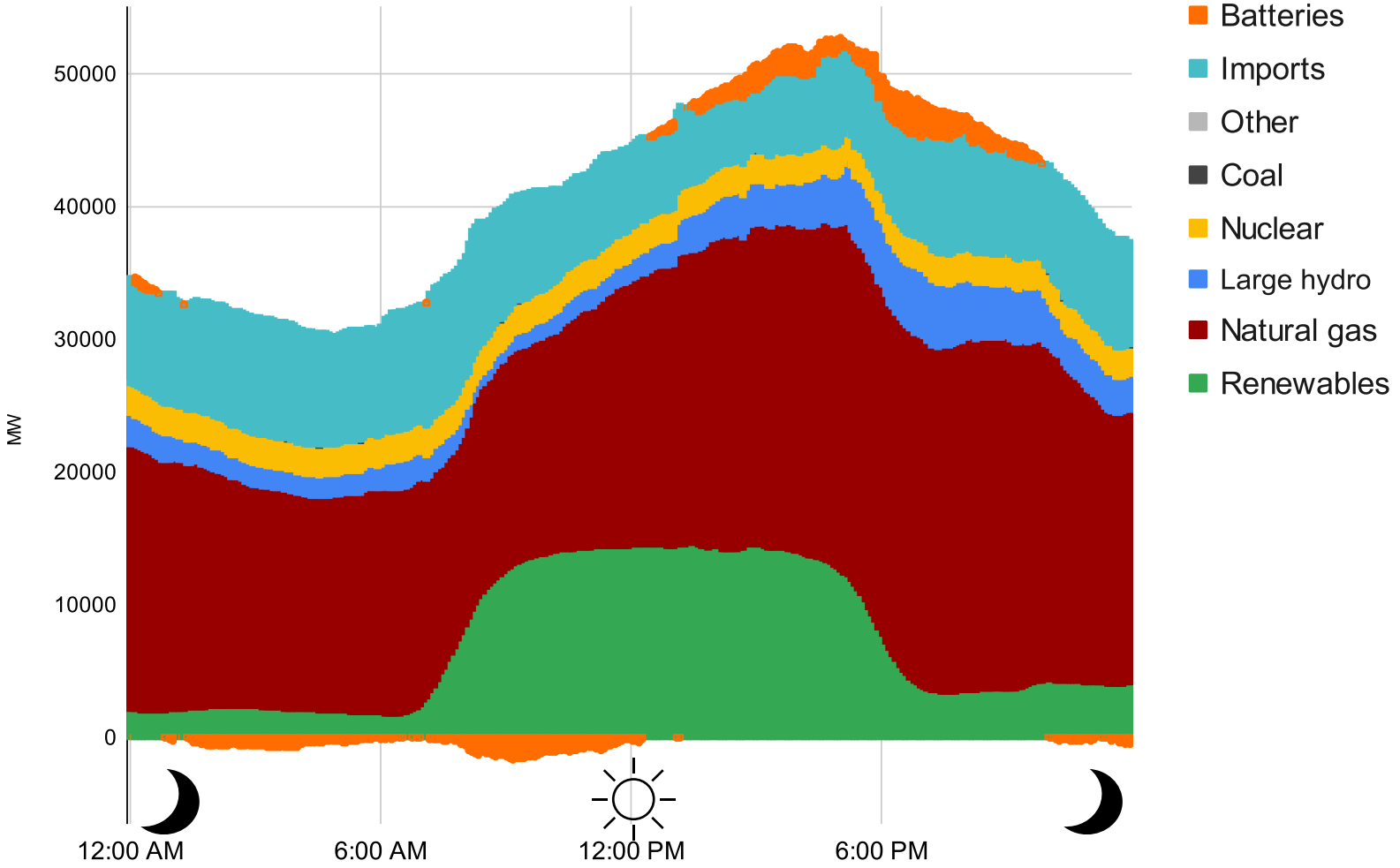


Central Coast Community Energy

Supply Trend September 2022

Central Coast Community Energy

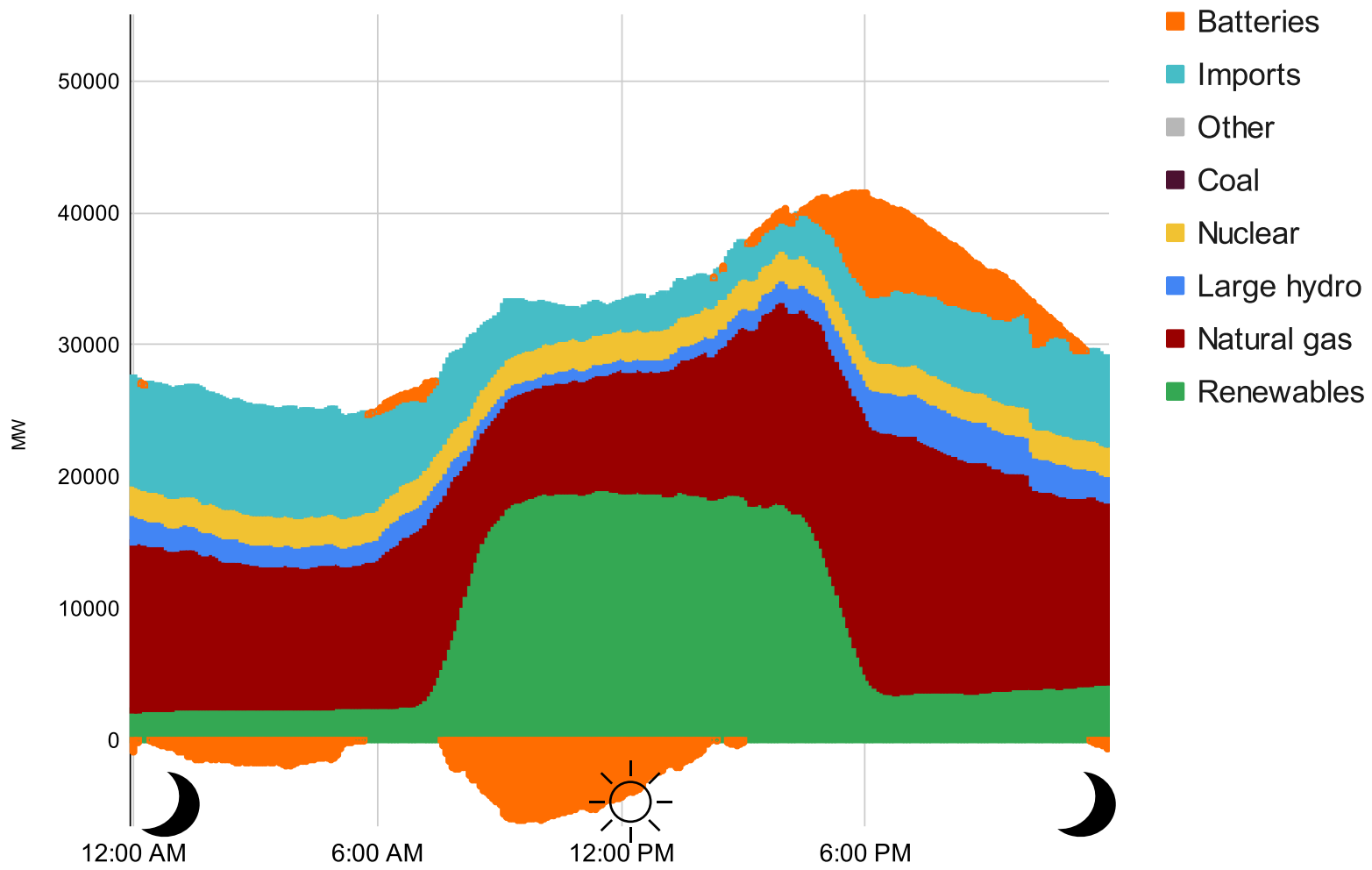
- Labor Day Weekend 2022
- Flex Alert
- Text message from Governor's Office



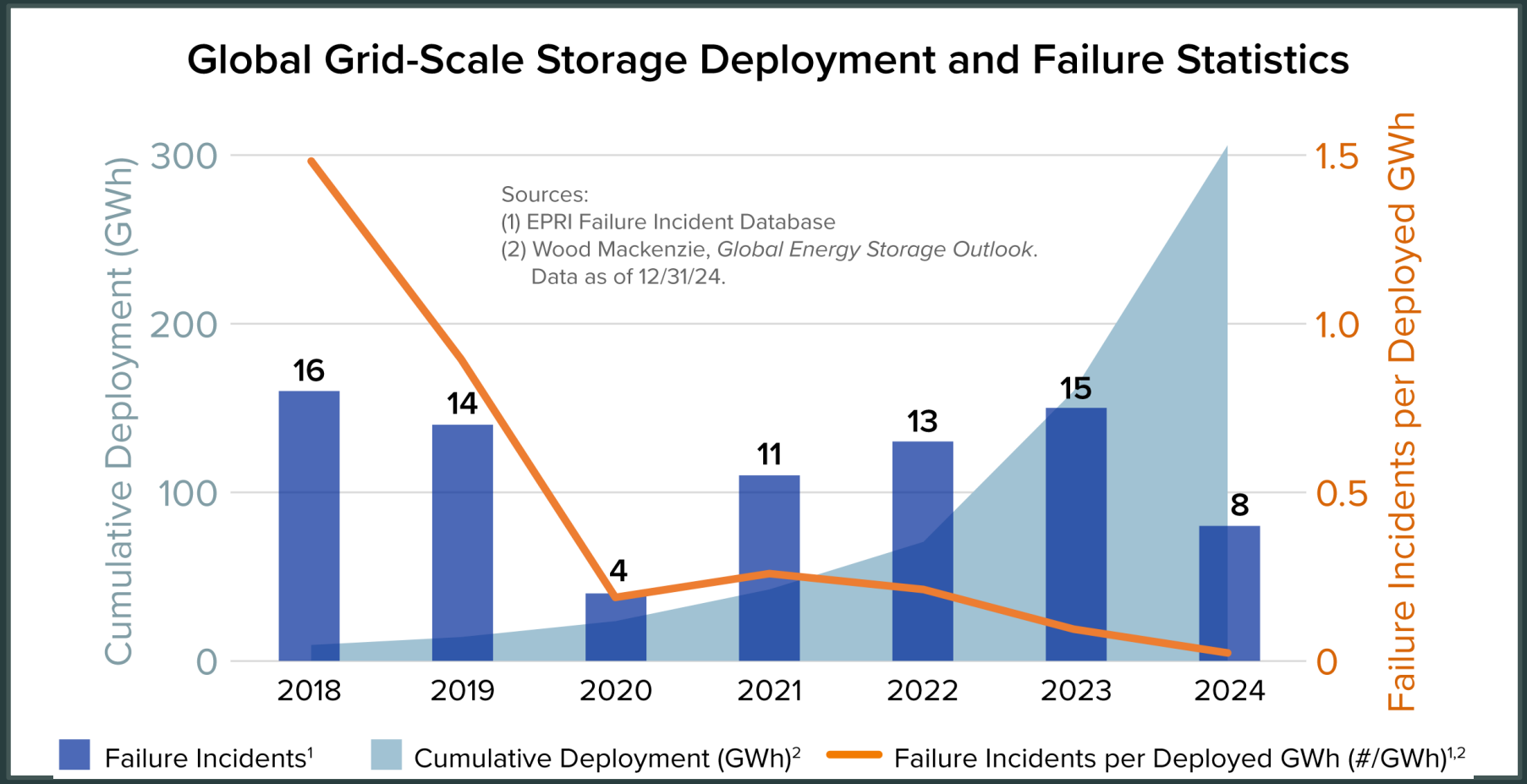
Supply Trend July 2024

Central Coast Community Energy

- Independence Day holiday weekend 2024



Utility Scale Battery Safety



Central Coast Community Energy

Our Energy Future

New Renewable Energy Project

Willow Rock Energy Storage Center

- Storage is essential for CA's transition to carbon-free energy
- Utilizes compressed air to generate power on demand
- Largest compressed air energy storage project in the world
- 200 megawatts for 3CE customers

Our Energy Future

New Renewable Energy Project

Atlas Solar

- 150 megawatts for 3CEcustomers
- Enough to power 105,100 homes

Our Energy Future

New Renewable Energy Project

Aratina Solar + Storage

- 120 megawatts for 3CE customers
- Enough to power 90,000 homes

Central Coast Community Energy

Online Now

New Renewable Energy Project

Victory Pass Solar + Storage

- 100 megawatts for 3CE customers
- Enough to power 68,000 homes

Community Engagement

- Ongoing outreach through events, webinars, ar workshops
- Added bilingual staff and expanded translated materials
- Adopted Underserved Communities Action Plar
- Increased access with interpreters and bilingua promotion

Community Programs

Electrify Your Ride	Electrify Your Home	New Construction Electrification Program	Agricultural Electrification Program	Residential Battery Rebate Program
$1,000-4,000 $150,000	$17,385 $2,500 per unit	$5,000 ADU $250,000	$75,000	$13,000

Central Coast Community Energy

Member Agency Programs

Plan Your Fleet

Fleet & Charging Infrastructure Plans

Electric Bus Program

$400,000

Charge Your Fleet

Up to $150,000

Electrify Your Fleet

Up to $150,000

Reach Codes Program

Assistance for development and adoption

Central Coast Community Energy

Making a Difference
Community Investment

Snapshot of Rebates & Incentives:

- 2,843 electric vehicles
- 2,085 EV chargers
- 1,663 projects for EV readiness
- 38 electric buses
- 746 all-electric water heaters & HVAC systems
- 1,458 all-electric affordable housing units
- 93 all-electric agriculture equipment projects

Community Investment

Rebates & Incentives

Marina 3CE Investment:

- $42,223 – Plan Your Fleet
- $1,000 – Ag Electrification
- $6,800 – Electrify Your Home
- $333,636 – Electrify Your Ride
- $170,000 – New Construction Electrification

Seaside 3CE Investment:

- $61,000 – Electrify Your Home
- $217,612 – Electrify Your Ride
- $240,000 - New Construction Electrification
- $2,500 – Residential Battery Storage Program

Thank You!

Contact Us:

- **Northern Region:** Sophia Schwirzke (sschwirzke@3ce.org)
- **Southern Region:** Spencer Brandt (sbrandt@3ce.org)
- **Senior Advisor for Policy and Legislative Affairs:** Dawes Williams (dwilliams@3ce.org)

Learn more & apply for programs at **3Cenergy.org**

Central Coast Community Energy

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **120 - City Mgr/HR/Risk**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.010 - Prof Svc Admin - Muni Code**										
10149 - Code Publishing Inc. - General Code	GCI0017881	MMC WebUpdate	Paid by Check # 107185		06/20/2025	06/16/2025	06/16/2025		06/27/2025	147.00
				Account **6300.010 - Prof Svc Admin - Muni Code** Totals				Invoice Transactions	1	$147.00
Account **6300.570 - Prof Svc Other**										
10027 - Alliant Insurance Services - CSRMA	3129266	Fourth of July Event Insurance	Paid by EFT # 6317		06/19/2025	06/16/2025	06/16/2025		06/27/2025	760.00
11618 - Tripepi, Smith & Associates, Inc.	14793	PR Support - May 2025	Paid by Check # 107202		05/31/2025	06/16/2025	06/16/2025		06/27/2025	378.75
				Account **6300.570 - Prof Svc Other** Totals				Invoice Transactions	2	$1,138.75
Account **6380.120 - Utilities Comm Mobile & Pager**										
10603 - Verizon Wireless	6115654557	Monthly Verizon Bill-308174766	Paid by EFT # 6324		06/10/2025	06/24/2025	06/24/2025		06/27/2025	213.87
				Account **6380.120 - Utilities Comm Mobile & Pager** Totals				Invoice Transactions	1	$213.87
				Sub-Division **00 - Non-Subdiv** Totals				Invoice Transactions	4	$1,499.62
				Division **000 - Non-Div** Totals				Invoice Transactions	4	$1,499.62
				Department **120 - City Mgr/HR/Risk** Totals				Invoice Transactions	4	$1,499.62
Department **130 - Finance**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.215 - Prof Svc Fin - Audit**										
11476 - Chavan & Associates LLP	C&A-18751	FY24-25 professional audit services: City/Abrams/Preson/MX/FORA	Paid by Check # 107183		06/25/2025	06/25/2025	06/25/2025		06/27/2025	15,000.00
				Account **6300.215 - Prof Svc Fin - Audit** Totals				Invoice Transactions	1	$15,000.00
Account **6380.120 - Utilities Comm Mobile & Pager**										
10603 - Verizon Wireless	6115654557	Monthly Verizon Bill-308174766	Paid by EFT # 6324		06/10/2025	06/24/2025	06/24/2025		06/27/2025	102.86
				Account **6380.120 - Utilities Comm Mobile & Pager** Totals				Invoice Transactions	1	$102.86
				Sub-Division **00 - Non-Subdiv** Totals				Invoice Transactions	2	$15,102.86
				Division **000 - Non-Div** Totals				Invoice Transactions	2	$15,102.86
				Department **130 - Finance** Totals				Invoice Transactions	2	$15,102.86
Department **190 - Citywide Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.570 - Prof Svc Other**										
12047 - Roesling Nakamura Terada Architects	13978	Marina Facilities Concept Plan - May 2025	Paid by Check # 107200		06/18/2025	06/23/2025	06/23/2025		06/27/2025	10,498.00

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **190 - Citywide Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.570 - Prof Svc Other**										
12208 - RAYA AUTOMOTIVE	2269	2022 Dodge Durango 825 PD	Paid by Check # 107199		06/16/2025	06/17/2025	06/17/2025		06/27/2025	555.00
12208 - RAYA AUTOMOTIVE	2270	2022 Dodge Durango 924 PD	Paid by Check # 107199		06/18/2025	06/17/2025	06/17/2025		06/27/2025	249.00
				Account **6300.570 - Prof Svc Other** Totals			Invoice Transactions	3		$11,302.00
Account **6380.150 - Utilities Comm Phone System**										
10758 - AT & T CALNET3	000023633705	CALNET3-9391023482 (884-0985)	Paid by Check # 107179		06/15/2025	06/24/2025	06/24/2025		06/27/2025	31.58
10758 - AT & T CALNET3	000023633707	CALNET3-9391023485 (884-2573)	Paid by Check # 107179		06/15/2025	06/24/2025	06/24/2025		06/27/2025	32.83
10758 - AT & T CALNET3	000023633712	CALNET3-9391023490 (884-9568)	Paid by Check # 107179		06/15/2025	06/24/2025	06/24/2025		06/27/2025	60.05
10758 - AT & T CALNET3	000023633713	CALNET3-9391023491 (884-9654)	Paid by Check # 107179		06/15/2025	06/24/2025	06/24/2025		06/27/2025	92.58
				Account **6380.150 - Utilities Comm Phone System** Totals			Invoice Transactions	4		$217.04
Account **6380.300 - Utilities Gas & Electric**										
10463 - Pacific Gas & Electric	June 2025 683-2	PG&E 6217294683-2	Paid by Check # 107198		06/24/2025	06/24/2025	06/24/2025		06/27/2025	219.62
				Account **6380.300 - Utilities Gas & Electric** Totals			Invoice Transactions	1		$219.62
Account **6380.500 - Utilities Water & Sewer**										
10349 - Marina Coast Water District	June 2025 56-018	208 Palm Ave	Paid by Check # 107194		06/12/2025	06/16/2025	06/16/2025		06/27/2025	255.30
10349 - Marina Coast Water District	June 2025 56-017	208 Palm Ave Unit A	Paid by Check # 107194		06/12/2025	06/16/2025	06/16/2025		06/27/2025	71.59
				Account **6380.500 - Utilities Water & Sewer** Totals			Invoice Transactions	2		$326.89
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	10		$12,065.55
				Division **000 - Non-Div** Totals			Invoice Transactions	10		$12,065.55
				Department **190 - Citywide Non-Dept** Totals			Invoice Transactions	10		$12,065.55
Department **210 - Police**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6600.455 - Other Charges Leased Parking**										
12070 - Open Road Investors, LLC	1059	Monthly Parking Lot Rent	Paid by Check # 107197		06/21/2025	06/23/2025	06/23/2025		06/27/2025	1,600.00
				Account **6600.455 - Other Charges Leased Parking** Totals			Invoice Transactions	1		$1,600.00
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	1		$1,600.00
				Division **000 - Non-Div** Totals			Invoice Transactions	1		$1,600.00
				Department **210 - Police** Totals			Invoice Transactions	1		$1,600.00

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **250 - Fire**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6360.570 - Maint & Repairs Other Svc Agr**										
10129 - Cintas Corporation	4234465774	Towel - Microfiber Towel	Paid by Check # 107184		06/20/2025	06/20/2025	06/20/2025		06/27/2025	159.99
10623 - Xerox Financial Services	40618037	FD Monthly Copier Charges 06/03/25-07/02/25	Paid by Check # 107204		06/13/2025	06/23/2025	06/23/2025		06/27/2025	257.13
			Account **6360.570 - Maint & Repairs Other Svc Agr** Totals					Invoice Transactions	2	$417.12
Account **6360.850 - Maint & Repairs Vehicle**										
10967 - Monterey Signs, Inc.	26758	Installation and Removal of Vinyl Numbers for Trucks 5401 5402	Paid by EFT # 6322		06/23/2025	06/23/2025	06/23/2025		06/27/2025	1,409.29
			Account **6360.850 - Maint & Repairs Vehicle** Totals					Invoice Transactions	1	$1,409.29
Account **6400.796 - Material & Suppl Turnout Equip-Wildland Fires**										
10124 - Charles Murray / JAECO Fire & Safety	20122	Boots for Mike Smith	Paid by Check # 107182		05/29/2025	06/23/2025	06/23/2025		06/27/2025	1,272.73
			Account **6400.796 - Material & Suppl Turnout Equip-Wildland Fires** Totals					Invoice Transactions	1	$1,272.73
Account **6600.455 - Other Charges Leased Parking**										
12070 - Open Road Investors, LLC	1059	Monthly Parking Lot Rent	Paid by Check # 107197		06/21/2025	06/23/2025	06/23/2025		06/27/2025	400.00
			Account **6600.455 - Other Charges Leased Parking** Totals					Invoice Transactions	1	$400.00
			Sub-Division **00 - Non-Subdiv** Totals					Invoice Transactions	5	$3,499.14
			Division **000 - Non-Div** Totals					Invoice Transactions	5	$3,499.14
			Department **250 - Fire** Totals					Invoice Transactions	5	$3,499.14
Department **310 - Public Works**										
Division **311 - Buildings & Grounds**										
Sub-Division **00 - Non-Subdiv**										
Account **6360.065 - Maint & Repairs Bdg NonFlagship**										
10728 - Ace Hardware-Public Works	091622	Streets for Light duty Staff	Paid by Check # 107178		06/11/2025	06/17/2025	06/17/2025		06/27/2025	25.12
10728 - Ace Hardware-Public Works	091643	Facilities Rental Apt	Paid by Check # 107178		06/13/2025	06/17/2025	06/17/2025		06/27/2025	49.14
10728 - Ace Hardware-Public Works	091648	City Hall Handrail and Deck	Paid by Check # 107178		06/16/2025	06/17/2025	06/17/2025		06/27/2025	27.30
10728 - Ace Hardware-Public Works	091639	Community Center Playground	Paid by Check # 107178		06/13/2025	06/17/2025	06/17/2025		06/27/2025	5.51
10728 - Ace Hardware-Public Works	091638	306 Reservation	Paid by Check # 107178		06/13/2025	06/17/2025	06/17/2025		06/27/2025	16.38
10728 - Ace Hardware-Public Works	091614	Water Heater Cap	Paid by Check # 107178		06/10/2025	06/17/2025	06/17/2025		06/27/2025	7.63

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **310 - Public Works**										
Division **311 - Buildings & Grounds**										
Sub-Division **00 - Non-Subdiv**										
Account **6360.065 - Maint & Repairs Bdg NonFlagship**										
10728 - Ace Hardware-Public Works	091612	VD BBQ	Paid by Check # 107178		06/10/2025	06/17/2025	06/17/2025		06/27/2025	29.49
10239 - First Alarm	893888	2660 5th Ave	Paid by EFT # 6320		06/15/2025	06/17/2025	06/17/2025		06/27/2025	390.48
			Account **6360.065 - Maint & Repairs Bdg NonFlagship** Totals					Invoice Transactions	8	$551.05
Account **6380.500 - Utilities Water & Sewer**										
10349 - Marina Coast Water District	June 2025 56-019	211 Hillcrest Ave	Paid by Check # 107194		06/12/2025	06/16/2025	06/16/2025		06/27/2025	709.46
10349 - Marina Coast Water District	June 2025 56-001	209-13 Cypress Ave	Paid by Check # 107194		06/12/2025	06/16/2025	06/16/2025		06/27/2025	197.90
			Account **6380.500 - Utilities Water & Sewer** Totals					Invoice Transactions	2	$907.36
Account **6400.737 - Material & Suppl Tools & Equip**										
11968 - Safetequip, Inc.	110193	PPE	Paid by Check # 107201		06/16/2025	06/16/2025	06/16/2025		06/27/2025	731.54
			Account **6400.737 - Material & Suppl Tools & Equip** Totals					Invoice Transactions	1	$731.54
Account **6400.800 - Material & Suppl Uniform**										
12058 - Melissa Orduno - Employee	02-03-25	Boot reimbursement	Paid by Check # 107195		02/03/2025	06/16/2025	06/16/2025		06/27/2025	141.97
			Account **6400.800 - Material & Suppl Uniform** Totals					Invoice Transactions	1	$141.97
			Sub-Division **00 - Non-Subdiv** Totals					Invoice Transactions	12	$2,331.92
			Division **311 - Buildings & Grounds** Totals					Invoice Transactions	12	$2,331.92
Division **313 - Vehicle Maint**										
Sub-Division **00 - Non-Subdiv**										
Account **6360.850 - Maint & Repairs Vehicle**										
11230 - Golden State Truck & Trailer Repair, Inc.	W50472	Unit 19-01 Rosenbaum FD	Paid by Check # 107190		06/09/2025	06/16/2025	06/16/2025		06/27/2025	12,628.12
12208 - RAYA AUTOMOTIVE	2269	2022 Dodge Durango 825 PD	Paid by Check # 107199		06/16/2025	06/17/2025	06/17/2025		06/27/2025	1,147.98
12208 - RAYA AUTOMOTIVE	2270	2022 Dodge Durango 924 PD	Paid by Check # 107199		06/18/2025	06/17/2025	06/17/2025		06/27/2025	532.43
			Account **6360.850 - Maint & Repairs Vehicle** Totals					Invoice Transactions	3	$14,308.53
			Sub-Division **00 - Non-Subdiv** Totals					Invoice Transactions	3	$14,308.53
			Division **313 - Vehicle Maint** Totals					Invoice Transactions	3	$14,308.53
			Department **310 - Public Works** Totals					Invoice Transactions	15	$16,640.45

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **410 - Planning**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6330.100 - Fee Agr Costs - Planning**										
10171 - CSG Consultants	61532	Marina Station	Paid by EFT # 6319		06/10/2025	06/16/2025	06/16/2025		06/27/2025	13,547.00
Account **6330.100 - Fee Agr Costs - Planning** Totals								Invoice Transactions 1		$13,547.00
Account **6380.120 - Utilities Comm Mobile & Pager**										
10603 - Verizon Wireless	6115654557	Monthly Verizon Bill-308174766	Paid by EFT # 6324		06/10/2025	06/24/2025	06/24/2025		06/27/2025	102.91
Account **6380.120 - Utilities Comm Mobile & Pager** Totals								Invoice Transactions 1		$102.91
Account **6400.565 - Material & Suppl Office Supplies**										
10734 - Office Depot-Public Works Dept.	420168396001	Heater	Paid by Check # 107196		06/02/2025	06/16/2025	06/16/2025		06/27/2025	84.33
Account **6400.565 - Material & Suppl Office Supplies** Totals								Invoice Transactions 1		$84.33
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions 3		$13,734.24
Division **000 - Non-Div** Totals								Invoice Transactions 3		$13,734.24
Department **410 - Planning** Totals								Invoice Transactions 3		$13,734.24
Department **420 - Engineering**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6330.200 - Fee Agr Costs - Engineering**										
10189 - Denise Duffy & Associates	9592	HILLTOP PARK DD&A Project #2024-56	Paid by Check # 107186		01/10/2025	06/24/2025	06/24/2025		06/27/2025	1,872.00
Account **6330.200 - Fee Agr Costs - Engineering** Totals								Invoice Transactions 1		$1,872.00
Account **6400.565 - Material & Suppl Office Supplies**										
10734 - Office Depot-Public Works Dept.	424515842001	Corp Yard	Paid by Check # 107196		06/02/2025	06/16/2025	06/16/2025		06/27/2025	280.98
10734 - Office Depot-Public Works Dept.	426505238001	Annex office supplies	Paid by Check # 107196		06/05/2025	06/17/2025	06/17/2025		06/27/2025	36.57
10734 - Office Depot-Public Works Dept.	426711269001	Corp Yard Cabinet	Paid by Check # 107196		06/05/2025	06/17/2025	06/17/2025		06/27/2025	1,255.28
Account **6400.565 - Material & Suppl Office Supplies** Totals								Invoice Transactions 3		$1,572.83
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions 4		$3,444.83
Division **000 - Non-Div** Totals								Invoice Transactions 4		$3,444.83
Department **420 - Engineering** Totals								Invoice Transactions 4		$3,444.83

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **100 - General Fund**										
Department **430 - Building Inspection**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.100 - Prof Svc Code Enforcement**										
10171 - CSG Consultants	61563	Marina Code Enforcement Services	Paid by EFT # 6319		06/13/2025	06/24/2025	06/24/2025		06/27/2025	3,240.00
Account **6300.100 - Prof Svc Code Enforcement** Totals								Invoice Transactions 1		$3,240.00
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions 1		$3,240.00
Division **000 - Non-Div** Totals								Invoice Transactions 1		$3,240.00
Department **430 - Building Inspection** Totals								Invoice Transactions 1		$3,240.00
Department **510 - Recreation & Culture**										
Division **100 - Admin**										
Sub-Division **00 - Non-Subdiv**										
Account **6400.652 - Material & Suppl Recr Special Progr / Events**										
12116 - GENE FISCHER/MOBILE CLIMB USA, LLC	07-04-25 B	4th of July Event	Paid by Check # 107189		06/18/2025	06/18/2025	06/18/2025		06/27/2025	1,500.00
Account **6400.652 - Material & Suppl Recr Special Progr / Events** Totals								Invoice Transactions 1		$1,500.00
Account **6500.700 - Training & Travel Training & Travel**										
12249 - California Association of Public Information Offic	24398	Optimizing AI for Public Communicators	Paid by Check # 107181		05/29/2025	06/18/2025	06/18/2025		06/27/2025	25.00
Account **6500.700 - Training & Travel Training & Travel** Totals								Invoice Transactions 1		$25.00
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions 2		$1,525.00
Division **100 - Admin** Totals								Invoice Transactions 2		$1,525.00
Division **514 - Sports**										
Sub-Division **00 - Non-Subdiv**										
Account **6400.656 - Material & Suppl Recr Sports Prog**										
11869 - Agile Occupational Medicine PC	EM046216-A	physical exam fees	Paid by EFT # 6316		06/03/2025	06/18/2025	06/18/2025		06/27/2025	125.00
10269 - Hasty Awards	06250485	medals	Paid by Check # 107191		06/16/2025	06/18/2025	06/18/2025		06/27/2025	921.37
Account **6400.656 - Material & Suppl Recr Sports Prog** Totals								Invoice Transactions 2		$1,046.37
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions 2		$1,046.37
Division **514 - Sports** Totals								Invoice Transactions 2		$1,046.37
Department **510 - Recreation & Culture** Totals								Invoice Transactions 4		$2,571.37
Fund **100 - General Fund** Totals								Invoice Transactions 49		$73,398.06

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **220 - Gas Tax**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6380.300 - Utilities Gas & Electric**										
10463 - Pacific Gas & Electric	June 2025 329-1	430 Marina Heights Dr Unit A (2391581329-1)	Paid by Check # 107198		06/12/2025	06/16/2025	06/16/2025		06/27/2025	47.75
10463 - Pacific Gas & Electric	June 2025 080-9	5th Ave Bldg 1A-136 (3479881080-9)	Paid by Check # 107198		06/06/2025	06/16/2025	06/16/2025		06/27/2025	24.64
10463 - Pacific Gas & Electric	June 2025 683-2	PG&E 6217294683-2	Paid by Check # 107198		06/24/2025	06/24/2025	06/24/2025		06/27/2025	1,031.22
			Account **6380.300 - Utilities Gas & Electric** Totals				Invoice Transactions	3		$1,103.61
Account **6380.500 - Utilities Water & Sewer**										
10349 - Marina Coast Water District	June 2025 56-016	Resev Rd & Seacrest Ave-Next to Fire Hyd	Paid by Check # 107194		06/12/2025	06/16/2025	06/16/2025		06/27/2025	65.06
10349 - Marina Coast Water District	June 2025 56-087	Crescent Ave/Costa Del Mar Irrigation	Paid by Check # 107194		06/04/2025	06/17/2025	06/17/2025		06/27/2025	42.29
			Account **6380.500 - Utilities Water & Sewer** Totals				Invoice Transactions	2		$107.35
Account **6400.737 - Material & Suppl Tools & Equip**										
10728 - Ace Hardware-Public Works	091591	Streets	Paid by Check # 107178		06/06/2025	06/17/2025	06/17/2025		06/27/2025	31.57
			Account **6400.737 - Material & Suppl Tools & Equip** Totals				Invoice Transactions	1		$31.57
Account **6400.740 - Material & Suppl Special Dept Suppl**										
12248 - Blue Triton Brands Inc	05F8720337299	209 Cypress Ave	Paid by Check # 107180		06/17/2025	06/16/2025	06/16/2025		06/27/2025	89.54
12248 - Blue Triton Brands Inc	05F8720346923	2660 5th Ave	Paid by Check # 107180		06/06/2025	06/16/2025	06/16/2025		06/27/2025	274.00
10949 - Edges Electrical Group	S6428047.003	Streetlight Fixture	Paid by Check # 107187		06/11/2025	06/17/2025	06/17/2025		06/27/2025	3,267.49
			Account **6400.740 - Material & Suppl Special Dept Suppl** Totals				Invoice Transactions	3		$3,631.03
			Sub-Division **00 - Non-Subdiv** Totals				Invoice Transactions	9		$4,873.56
			Division **000 - Non-Div** Totals				Invoice Transactions	9		$4,873.56
			Department **000 - Non-Dept** Totals				Invoice Transactions	9		$4,873.56
			Fund **220 - Gas Tax** Totals				Invoice Transactions	9		$4,873.56

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **222 - Measure X Trans Sfty/Investment**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.215 - Prof Svc Fin - Audit**										
11476 - Chavan & Associates LLP	C&A-18751	FY24-25 professional audit services: City/Abrams/Preson/MX /FORA	Paid by Check # 107183		06/25/2025	06/25/2025	06/25/2025		06/27/2025	2,000.00
				Account **6300.215 - Prof Svc Fin - Audit** Totals			Invoice Transactions	1		$2,000.00
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	1		$2,000.00
				Division **000 - Non-Div** Totals			Invoice Transactions	1		$2,000.00
				Department **000 - Non-Dept** Totals			Invoice Transactions	1		$2,000.00
				Fund **222 - Measure X Trans Sfty/Investment** Totals			Invoice Transactions	1		$2,000.00

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **223 - FORA Dissolution**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.215 - Prof Svc Fin - Audit**										
11476 - Chavan & Associates LLP	C&A-18751	FY24-25 professional audit services: City/Abrams/Preson/MX /FORA	Paid by Check # 107183		06/25/2025	06/25/2025	06/25/2025		06/27/2025	1,250.00
				Account **6300.215 - Prof Svc Fin - Audit** Totals				Invoice Transactions	1	$1,250.00
Account **6300.570 - Prof Svc Other**										
11489 - Wallace Group, Inc.	65342	Blight Removal	Paid by Check # 107203		06/23/2025	06/24/2025	06/24/2025		06/27/2025	10,541.15
				Account **6300.570 - Prof Svc Other** Totals				Invoice Transactions	1	$10,541.15
				Sub-Division **00 - Non-Subdiv** Totals				Invoice Transactions	2	$11,791.15
				Division **000 - Non-Div** Totals				Invoice Transactions	2	$11,791.15
				Department **000 - Non-Dept** Totals				Invoice Transactions	2	$11,791.15
				Fund **223 - FORA Dissolution** Totals				Invoice Transactions	2	$11,791.15

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **251 - CFD - Locke Paddon**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6380.300 - Utilities Gas & Electric**										
10463 - Pacific Gas & Electric	June 2025 272-1	PG&E - 2862559272-1	Paid by Check # 107198		06/17/2025	06/24/2025	06/24/2025		06/27/2025	49.13
Account **6380.300 - Utilities Gas & Electric** Totals							Invoice Transactions	1		$49.13
Sub-Division **00 - Non-Subdiv** Totals							Invoice Transactions	1		$49.13
Division **000 - Non-Div** Totals							Invoice Transactions	1		$49.13
Department **000 - Non-Dept** Totals							Invoice Transactions	1		$49.13
Fund **251 - CFD - Locke Paddon** Totals							Invoice Transactions	1		$49.13

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **462 - City Capital Projects**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.570 - Prof Svc Other**										
11364 - COAR Design Group	22857	Aquatic & Sports Center	Paid by EFT # 6318		05/31/2025	06/18/2025	06/18/2025		06/27/2025	226,285.00
10316 - Kimley-Horn & Associates, Inc.	31635220	Del Monte Blvd & Beach Rd	Paid by Check # 107192		03/21/2025	06/23/2025	06/23/2025		06/27/2025	18,361.26
10316 - Kimley-Horn & Associates, Inc.	31835579	Del Monte Blvd & Beach Rd	Paid by Check # 107192		04/30/2025	06/24/2025	06/24/2025		06/27/2025	17,977.40
12217 - LEATHERS & ASSOCIATES INC	12354	schematic design phase	Paid by Check # 107193		06/23/2025	06/23/2025	06/23/2025		06/27/2025	13,300.00
10463 - Pacific Gas & Electric	129671881	EV Charging Stations At Glorya Jean Tate Park	Paid by Check # 107207		04/02/2025	06/24/2025	06/24/2025		06/27/2025	34,054.06
12266 - Yamabe & Horn Engineering, Inc.	53585	Windy Hill Park Improvements	Paid by Check # 107205		06/16/2025	06/18/2025	06/18/2025		06/27/2025	12,985.00
10316 - Kimley-Horn & Associates, Inc.	32077670	Marina Speed Surveys	Paid by Check # 107192		05/31/2025	06/16/2025	06/16/2025		06/27/2025	4,460.24
10515 - Rincon Consultants, Inc.	66242	Marina Housing Element Update	Paid by EFT # 6323		06/11/2025	06/24/2025	06/24/2025		06/27/2025	6,038.94
				Account **6300.570 - Prof Svc Other** Totals			Invoice Transactions	8		$333,461.90
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	8		$333,461.90
				Division **000 - Non-Div** Totals			Invoice Transactions	8		$333,461.90
				Department **000 - Non-Dept** Totals			Invoice Transactions	8		$333,461.90
				Fund **462 - City Capital Projects** Totals			Invoice Transactions	8		$333,461.90

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **555 - Marina Airport**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6360.050 - Maint & Repairs Building**										
10967 - Monterey Signs, Inc.	26742	Installation of Pilots Lounge sign	Paid by EFT # 6322		06/19/2025	07/10/2025	06/18/2025		06/27/2025	295.00
Account **6360.050 - Maint & Repairs Building** Totals								Invoice Transactions	1	$295.00
Account **6380.120 - Utilities Comm Mobile & Pager**										
10603 - Verizon Wireless	6115654557	Monthly Verizon Bill-308174766	Paid by EFT # 6324		06/10/2025	06/24/2025	06/24/2025		06/27/2025	102.91
Account **6380.120 - Utilities Comm Mobile & Pager** Totals								Invoice Transactions	1	$102.91
Account **6380.300 - Utilities Gas & Electric**										
10463 - Pacific Gas & Electric	June 2025 683-2	PG&E 6217294683-2	Paid by Check # 107198		06/24/2025	06/24/2025	06/24/2025		06/27/2025	476.14
Account **6380.300 - Utilities Gas & Electric** Totals								Invoice Transactions	1	$476.14
Sub-Division **00 - Non-Subdiv** Totals								Invoice Transactions	3	$874.05
Division **000 - Non-Div** Totals								Invoice Transactions	3	$874.05
Department **000 - Non-Dept** Totals								Invoice Transactions	3	$874.05
Fund **555 - Marina Airport** Totals								Invoice Transactions	3	$874.05

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **556 - Preston Park NonProfit Corp**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.215 - Prof Svc Fin - Audit**										
11476 - Chavan & Associates LLP	C&A-18751	FY24-25 professional audit services: City/Abrams/Preson/MX /FORA	Paid by Check # 107183		06/25/2025	06/25/2025	06/25/2025		06/27/2025	2,125.00
				Account **6300.215 - Prof Svc Fin - Audit** Totals			Invoice Transactions	1		$2,125.00
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	1		$2,125.00
				Division **000 - Non-Div** Totals			Invoice Transactions	1		$2,125.00
				Department **000 - Non-Dept** Totals			Invoice Transactions	1		$2,125.00
				Fund **556 - Preston Park NonProfit Corp** Totals			Invoice Transactions	1		$2,125.00

Accounts Payable by G/L Distribution Report

Payment Date Range 06/27/25 - 06/27/25

Vendor	Invoice No.	Invoice Description	Status	Held Reason	Invoice Date	Due Date	G/L Date	Received Date	Payment Date	Invoice Amount
Fund **557 - Abrams B NonProfit Corp**										
Department **000 - Non-Dept**										
Division **000 - Non-Div**										
Sub-Division **00 - Non-Subdiv**										
Account **6300.215 - Prof Svc Fin - Audit**										
11476 - Chavan & Associates LLP	C&A-18751	FY24-25 professional audit services: City/Abrams/Preson/MX /FORA	Paid by Check # 107183		06/25/2025	06/25/2025	06/25/2025		06/27/2025	2,125.00
				Account **6300.215 - Prof Svc Fin - Audit** Totals			Invoice Transactions	1		$2,125.00
				Sub-Division **00 - Non-Subdiv** Totals			Invoice Transactions	1		$2,125.00
				Division **000 - Non-Div** Totals			Invoice Transactions	1		$2,125.00
				Department **000 - Non-Dept** Totals			Invoice Transactions	1		$2,125.00
				Fund **557 - Abrams B NonProfit Corp** Totals			Invoice Transactions	1		$2,125.00
				Grand Totals			Invoice Transactions	75		$430,697.85

June 26, 2025 Item No. **10f(1)**

Honorable Mayor and Members of the Marina City Council

City Council Meeting of July 1, 2025

CITY COUNCIL TO CONSIDER ADOPTING RESOLUTION NO. 2025-, CONFIRMING LEVY OF THE SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2015-1 (THE DUNES) FOR FISCAL YEAR 2025-26 AS AUTHORIZED BY ORDINANCE NO. 2015-03; AND RESOLUTION NO. 2025-, CERTIFYING CITY OF MARINA COMPLIANCE WITH STATE LAW (PROPOSITION 218) WITH RESPECT TO A SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2015-1 AS AUTHORIZED BY ORDINANCE NO. 2015-03 FOR FISCAL YEAR 2025-26

RECOMMENDATION:
It is requested that the City Council:

1. Consider adopting Resolution No. 2025-, confirming levy of the special tax for the City of Marina Community Facilities District No. 2015-1 (The Dunes) for Fiscal Year 2025-26 as authorized by Ordinance No. 2015-03, and;

2. Resolution No. 2025-, certifying City of Marina compliance with State law (Proposition 218) with respect to a special tax for the City of Marina Community Facilities District No. 2015-1 as authorized by Ordinance No. 2015-03 for Fiscal Year 2025-26

BACKGROUND:
Pursuant to a special election held on June 2, 2015, on June 16, 2015, the City Council unanimously passed Ordinance No. 2015-03, forming the City of Marina Community Facilities District No. 2015-1 (commonly referred to as The Dunes CFD). Ordinance 2015-03 also authorized an annual special tax levy for the purpose of administration and services of District maintenance of streets, sidewalks, curb & gutters, street lighting and storm drains. The special tax was first levied for fiscal year 2015-16, in the amount of $437.22 for each of the assessed residential units and $5,187 per acre of undeveloped property. The assessment was calculated for the ongoing phased future maintenance of the District improvements. Each subsequent year, Ordinance 2015-03 requires the special tax to be increased by the lesser of 4% or the Construction Cost Index as published in the Engineering News Record (ENR) from the previous approved Maximum Special Tax. For Fiscal Year 25/26, the Construction Cost Index did not increase. The Rates and Apportionment for this District therefore applies a maximum annual rate increase of 0.00%.

On June 21, 2016, the City Council adopted Resolution 2016-96, accepting annexation of property into the City of Marina Community Facilities District No. 2015-1(The Dunes). The annexation area incorporates the Dunes Residential Subdivision Phase 1C Final Map 2.

On April 4, 2017, the City Council adopted Resolution 2017-35, accepting annexation of property into the City of Marina Community Facilities District No. 2015-1(The Dunes). The annexation area incorporates the Dunes Residential Subdivision Phase 1C Final Map 3.

On February 15, 2022, the City Council adopted Resolution 2022-21, accepting annexation of property into the City of Marina Community Facilities District No. 2015-1(The Dunes). The annexation area incorporates the Dunes Subdivision Phase 2 East/Residential.

Accordingly, the special tax for each fiscal year since inception has been as follows (NOTE: Monterey County requires that rates be divisible by 2 for placement on the rolls, so calculations are rounded each year):

Fiscal Year	Tax Per Parcel	Tax Per Acre	Total Special Tax (to be) Collected	End of FY Audit Balance
FY 15/16	$437.22	$5,187.00	$54,228.30	
FY 16/17	$452.66	$5,369.89	$101,268.60	
FY 17/18	$459.46	$5,450.69	$162,605.34	
FY 18/19	$470.92	$5,586.73	$160,509.62	
FY 19/20	$484.24	$5,744.70	$160,767.68	
FY 20/21	$501.52	$5,974.48	$166,504.64	
FY 21/22	$520.50	$6,174.70	$172,806.00	$948,045.00
FY 22/23	$541.32	$6,421.69	$303,025.22	
FY 23/24	$541.70	$6,426.16	$297,944.08	
FY 24/25	$541.70	$6,426.31	$298,476.70	
FY 25/26	$541.70	$6,426.31	$298,476.70	

ANALYSIS:

Each year's special tax is collected by the Monterey County Tax Collector, and then disbursed to the City. When received by the City, special taxes are credited in the accounting system to Fund 252 - CFD Dunes No. 2015-1. Likewise, expenditures and costs incurred on behalf of the District are posted to Fund 252 expenditure accounts.

As of June 30, 2023, the fund balance in Fund 252 (cumulative tax revenue in excess of expenditures since inception) is projected to be approximately $1,042,285. Due to the age of the District improvements, scheduled maintenance service expenditures are expected in FY 25/26 into 26/27. Anticipated maintenance costs are approximately $505,402, including a scheduled slurry seal of various streets along with video inspections of the underground stormwater system as shown on **EXHIBIT C**. Improvements are scheduled per the maintenance plan attached as **EXHIBIT D** to cover ongoing maintenance of streets, sidewalks, curbs and gutters, and storm drains. The maintenance funding needs formed the basis for establishing the district and setting the initial assessment.

Ordinance 2015-03 authorizes the finance director "...to determine the specific special tax to be levied for the next ensuing fiscal year for each parcel of real property within the CFD (including any parcel or parcels in the future annexation area that annex into the CFD), in the manner and as provided in the resolution of formation."

However, Monterey County will not impose or collect the special tax on the District's behalf unless the City submits, in a form provided by the County, a certification of compliance with State Law (Proposition 218) that includes a hold harmless and indemnification provision for administrative expenses of the County associated with collection of the City's taxes, assessments, fees or charges, other than the Constitutionally authorized 1% ad valorem tax.

Attached is a resolution which, if adopted by the Council will satisfy the County's certification, hold-harmless and indemnification requirements with respect to the City of Marina Community Facilities District No. 2015-1 Special Tax for the 2025-26 fiscal year.

FISCAL IMPACT:
Special assessments finance the CFD's approved maintenance services. Total to be credited to the district is as follows:

Fund 252 Community Facilities District No. 2015-1	$298,476.70

CONCLUSION:
This request is submitted for City Council consideration and possible action.

Respectfully submitted,

_____
Edrie Delos Santos, P.E.
Engineering Division
Public Works Department

REVIEWED/CONCUR:

_____
Tori Hannah
Finance Director
City of Marina

_____
Ismael Hernandez
Public Works Director
City of Marina

_____
Layne P. Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA CONFIRMING LEVY OF A SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2015-1 AS AUTHORIZED BY ORDINANCE NO. 2015-03 FOR FISCAL YEAR 2025-26

WHEREAS, Ordinance 2015-03 authorized the levy of a special tax for the benefit of The City of Marina Community Facilities District 2015-1 starting in Fiscal Year 2015-16 and increasing by the lesser of 4% or the Construction Cost Index as published in the Engineering News Record (ENR) from the previous approved Maximum Special Tax. For Fiscal Year 25/26, the Construction Cost Index increased by 0.00%. The Rates and Apportionment for this District therefore applies an annual rate increase of 0.00%, and;

WHEREAS the Administrator has calculated the maximum Fiscal Year 2025/26 special tax to be $541.70 per parcel and $6,426.31 per Acre of undeveloped property, and;

WHEREAS, the CFD administrator having further considered the special tax requirements in accordance with Exhibit A to Ordinance 2015-03, by which Community Facilities District 2015-1 was established and continues, has determined that a special tax for fiscal year 2025-26 be assessed at $541.70 per parcel and $6,426.31 per Acre of undeveloped property.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marina that:

1. The City does hereby confirm the diagram and assessment as described in the Engineer's Report on file with the City Clerk.
2. The City does hereby order the levy and collection of said assessment $541.70 per parcel and $6,426.31 per Acre of undeveloped property for FY 2025/26 assessment for The Dunes CFD No. 2015-1.
3. It is the intention of the City of Marina that any monetary advance made by it during any fiscal year to cover a deficit in the improvement fund of Community Facilities District No. 2015-1 shall be repaid from the next annual assessments levied and collected within Community Facilities District No. 2015-1
4. The City Clerk is hereby authorized and directed to file a certified copy of said diagram and assessment with the Monterey County Auditor prior to August 1, 2025.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA CERTIFYING COMPLIANCE WITH STATE LAW (PROPOSITION 218) WITH RESPECT TO LEVYING OF SPECIAL TAXES ON BEHALF OF CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2015-1 FOR FISCAL YEAR 2025-2026

WHEREAS, the City of Marina "Public Agency" requests that the Monterey County Auditor-Controller enter those general or special taxes, assessments, or property-related Fees or charges identified in Exhibit "A" on the tax roll for collection and distribution by the Monterey County Treasurer-Tax Collector commencing with the property tax bills for fiscal year 2025-26

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The Public Agency hereby certifies that it has, without limitation, complied with all legal procedures and requirements necessary for the levying and imposition of the general or special taxes, assessments, or property-related fees or charges identified in Exhibit "A", regardless of whether those procedures and requirements are set forth in the Constitution of the State of California, in State statues, or in the applicable law of the State of California.

2. The Public Agency further certifies that, except for the sole negligence or misconduct of the County of Monterey, its officers, employees, and agents, with regards to the handling of the Cd or electronic file identified as Exhibit "A", the Public Agency shall be solely liable and responsible for defending, at its sole expense, cost, and risk, each and every action, suit, or other proceeding brought against the County of Monterey, its officers, employees, and agents for every claim, demand, or challenge to the levying or imposition of the general or special taxes, assessments, or property –related fees or charges identified in Exhibit "A" and that it shall pay or satisfy any judgment rendered against the County of Monterey, its officers, employees, and agents on every such action, suit, or other proceeding, including all claims for refunds and interest thereon, legal fees and court costs, and administrative expenses of the County of Monterey to correct the tax rolls.

PASSED AND ADOPTED by the City of Marina City Council at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

EXHIBIT A

ATTACHMENT TO RESOLUTION NO. 2025-____ OF THE CITY OF MARINA, COUNTY OF MONTEREY, CALIFORNIA, CERTIFYING COMPLIANCE WITH STATE LAW WITH RESPECT TO THE LEVYING OF SPECIAL TAX

FISCAL YEAR 2024-25

SPECIAL TAXES:

City of Marina CFD No. 2015-1 (The Dunes)

- Developed Property
  - Residential Rate (Per-Unit Rate) $541.70
  - Non-Residential Rate (Per-Acre Rate) $6,426.31
- Undeveloped Property (Per-Acre Rate) $6,426.31

Special Tax Levy Summary		
Developed Property Residential Non-Residential	 551 Units 0.00 Acres	 $298,476.70 $0.00
Undeveloped Property	0.00 Acres	$0.00
Total		**$298,476.70**

Fiscal Year Budget Scenario
The Dunes Community Facilities District (CFD 2015-1)

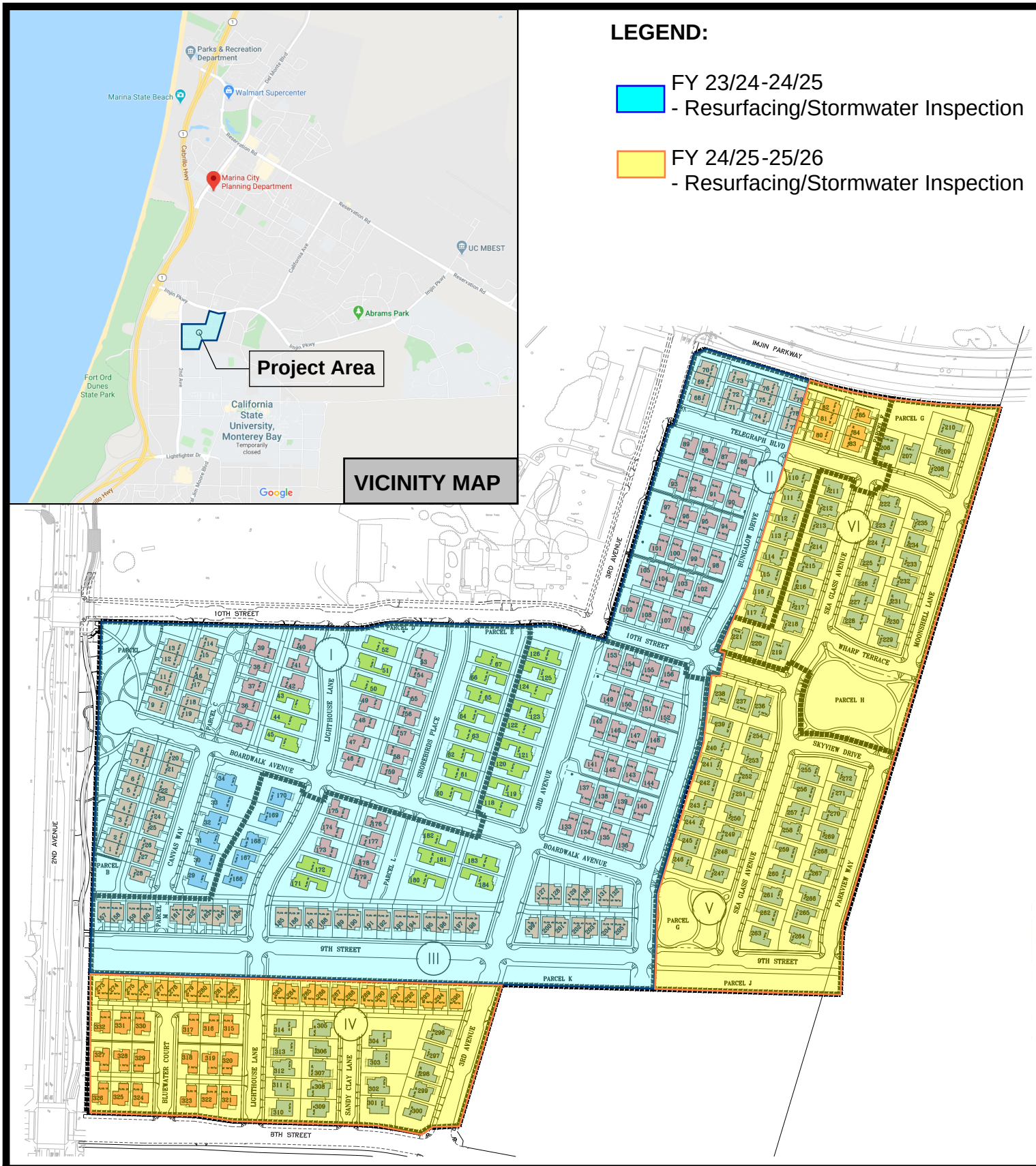
Summary	Estimates FY 2024-2025	Estimates FY 2025-2026	Estimates FY 2026-2027*
Beginning Cash Balance, July 1st	**$ 1,042,847**	**$ 1,065,921**	**$ 858,995**
[(a)] **Total Special Tax Revenue**	$ 298,477	$ 298,477	$ 298,477
[(b)] **Expenditures**			
Maintenance Services			
Facilities Maintenance	$ 21,930	$ 21,930	$ 21,930
Maintenance Cycle Deposit	$ 135,755	$ 135,755	$ 135,755
Construction Cost (Slurry Seal)	$ 110,000	$ 340,000	$ 100,000
Administrative Services			
Financial Administration	$ 4,948	$ 4,948	$ 4,948
Cost Allocation Charges	$ 2,770	$ 2,770	$ 2,770
[(c)] **Total Services Costs**	**$ 275,403**	**$ 505,403**	**$ 265,403**
Ending Fund Balance, June 30th	**$ 1,065,921**	**$ 858,995**	**$ 892,069**

[(a)] *Maximum Assessment per Rate of Apportionment is* $541.70 *per parcel &* $6,426.31 *per undeveloped acre for FY 25/26 (ENR Construction Cost Index increase of 0.00%).*

[(b)] Expenditures for FY 23/24 are estimated with City acceptance of CFD improvements, including a slurry seal for various streets.

[(c)] Total Services Costs include Facilities Maintenance and Administration expenditures. Deposits are held for schedule maintenance projects.

* Revenue and Expenditures for Fiscal Year 2026-27 are only estimates and subject to change.



PUBLIC WORKS DEPARTMENT
CITY OF MARINA
211 HILLCREST AVENUE
MARINA, CALIFORNIA 93933

PH: (831) 884-1212
FAX: (831) 384-0425

N

The Dunes 2015-01 Community Facilities District

Maintenance Exhibit

SCALE: NONE

Exhibit C

07/12/23

City of Marina
211 HILLCREST AVENUE
MARINA, CA 93933
831- 884-1212; FAX 831- 384-0425
www.cityofmarina.org

Exhibit D
Dunes Community Facilities District 2015-01
Maintenance Summary

Pavement Maintenance Cycle

Description	Cycle Period
Slurry Seal	Year 7, Year 14
Overlay	Year 21
Street Sweeping	Semi-Monthly

Sidewalk/Curb & Gutter Maintenance Cycle

Description	Cycle Period
Replacement	35 Year Life
Inspection/Repair	Annually

Streetlights Maintenance Cycle

Description	Cycle Period
Replacement	25 Year Life
Inspection/Repairs	Annually

Storm Drain/Infiltration System Maintenance Cycle

Description	Cycle Period
Replacement	50 Year Life
Vacuum/Deep Clean	Every 5 years
Inspection/Repairs	Annually

June 23, 2025 Item No. **10f(2)**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

RECOMMENDATION TO CONSIDER ADOPTING RESOLUTION NO. 2025-, APPROVING THE CREATION OF UTILITY EASEMENTS ON CITY PROPERTY (GLORIA JEAN TATE PARK, 3254 ABDY WAY), AND; AUTHORIZING ALL OTHER ACTIONS NECESSARY TO ACCEPT AND RECORD SAID EASEMENTS ON BEHALF OF THE CITY OF MARINA, AND; AUTHORIZING THE FINANCE DIRECTOR TO MAKE THE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES, AND; AUTHORIZING THE CITY CLERK TO RECORD A CERTIFIED COPY OF THE RESOLUTION IN THE MONTEREY COUNTY OFFICE OF THE COUNTY RECORDER

RECOMMENDATION:

It is recommended that the City Council Consider adopting Resolution No. 2025-,

1. Approving the creation of utility easement on City property (Gloria Jean Tate Park, 3254 Abdy Way), and;

2. Authorizing all other actions necessary to accept and record said easements on behalf of the City of Marina, and;

3. Authorizing the Finance Director to make the necessary accounting and budgetary entries, and;

4. Authorizing the City Clerk to record a certified copy of the resolution in the Monterey County office of the County Recorder.

BACKGROUND:

The Marina Coast Water District (MCWD) Tate Park Lift Station project is needed to serve the Central Marina customers, as well as the new Marina Station development. The existing lift station facilities are too small to manage the increased sewage flow from the Marina Station development. The Tate Park site is proposed for the new lift station location because it is on the east side of Highway 1, which improves resiliency against climate change.

ANALYSIS:

In order to provide for the installation of the new sanitary sewer lift station and associated gravity and force-main sewer pipes in the northeast corner of Gloria Jean Tate Park, a utility easement is necessary through the Park property. A gravity sewer pipe feeding the lift station is proposed along the north edge of the park. A force main pipe conveying the discharge from the lift station is proposed to replace and up-size the existing force main facility south, across Reservation Road, and through the hotel site immediately east of Highway 1 right-of-way. The required easements have been attached as **EXHIBIT A, B, AND C**

City staff have requested MCWD to provide an appraisal for the three proposed easements. The valuation for the easements per the appraisal report along with the cost to review easement documents amounts to $65,600. Staff is recommending accepting the appraised value for the easements and approving the MCWD easements as proposed.

FISCAL IMPACT:

Should the Council approve this recommendation, City staff will coordinate with the Finance Department and City Attorney to finalize the payment of the appraised value and record the final easement documents with the County Recorder.

CONCLUSION:

This request is submitted for City Council consideration and possible action.

Respectfully submitted,

_____

Edrie Delos Santos, P.E.
Engineering Division
Public Works Department

REVIEWED/CONCUR:

_____

Ismael Hernandez
Public Works Director
City of Marina

_____

Layne P. Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA APPROVING THE CREATION OF UTILITY EASEMENTS ON CITY PROPERTY (GLORIA JEAN TATE PARK, 3254 ABDY WAY), AND; AUTHORIZING ALL OTHER ACTIONS NECESSARY TO ACCEPT AND RECORD SAID EASEMENTS ON BEHALF OF THE CITY OF MARINA, AND; AUTHORIZING THE FINANCE DIRECTOR TO MAKE THE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES, AND; AUTHORIZING THE CITY CLERK TO RECORD A CERTIFIED COPY OF THE RESOLUTION IN THE MONTEREY COUNTY OFFICE OF THE COUNTY RECORDER

WHEREAS, the Marina Coast Water District (MCWD) Tate Park Lift Station project is needed to serve the Central Marina customers, as well as the new Marina Station development. The existing lift station facilities are too small to manage the increased sewage flow from the Marina Station development. The Tate Park site is proposed for the new lift station location because it is on the east side of Highway 1, which improves resiliency against climate change, and;

WHEREAS, in order to provide for the installation of the new sanitary sewer lift station and associated gravity and force-main sewer pipes in the northeast corner of Gloria Jean Tate Park, a utility easement is necessary through the Park property. A gravity sewer pipe feeding the lift station is proposed along the north edge of the park. A force main pipe conveying the discharge from the lift station is proposed to replace and up-size the existing force main facility south, across Reservation Road, and through the hotel site immediately east of Highway 1 right-of-way. The required easements have been attached as Exhibit A, B, and C, and;

WHEREAS, City staff have requested MCWD to provide an appraisal for the three proposed easements. The valuation for the easements per the appraisal report along with the cost to review easement documents amounts to $65,600. Staff is recommending accepting the appraised value for the easements and approving the MCWD easements as proposed, and;

WHEREAS, should the Council approve this recommendation, City staff will coordinate with the Finance Department and City Attorney to finalize the payment of the appraised value and record the final easement documents with the County Recorder.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marina that:

1. Approve the creation of utility easement on City property (Gloria Jean Tate Park, 3254 Abdy Way), and;

2. Authorize all other actions necessary to accept and record said easements on behalf of the City of Marina, and;

3. Authorize the Finance Director to make the necessary accounting and budgetary entries, and;

4. Authorize the City Clerk to record certified copy of resolution in the Monterey County office of the County Recorder.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

EXHIBIT A
SHEET 1 OF 3

LEGAL DESCRIPTION OF A
SANITARY SEWER EASEMENT

Certain real property situate in the City of Marina, County of Monterey, State of California, described as follows:

Being a portion of that certain real property shown as Lot 33 on that certain map filed in Volume 2 of Maps and Grants at Page 15 of the Official Records of said County, more particularly described as follows:

Beginning at a point on the northwesterly boundary of Drew Street, a City Street, as said street is shown on that certain map filed in Volume 14 of Cities and Towns maps at Page 60 of the Official Records of said County, said point also being on the southwesterly sideline of a 20-foot-wide pipeline easement described in the deed recorded September 24, 1970 in Reel 667 at Page 814 of the Official Records of said County, said point bears South 34°32'00" West, 20.00 feet from the most southerly corner of Parcel B, as said Parcel is shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County; thence from said POINT OF BEGINNING and along said northwesterly boundary of Drew Street

1) South 34°32'00" West, 22.14 feet; thence departing said boundary of Drew Street

2) North 55°28'00" West, 147.22 feet; thence

3) South 51°29'57" West, 34.14 feet to a point on the easterly sideline of a 20-foot-wide sanitary sewer easement described in the deed recorded June 28, 1984 in Reel 1746 at Page 108 of the Official Records of said County; thence along said easement sideline

4) North 04°10'12" East, 40.80 feet; thence departing said sanitary sewer easement sideline

5) North 51°29'57" East, 20.48 feet to a point on the southwesterly sideline of said 20-foot-wide pipeline easement; thence along said pipeline easement sideline and parallel with the southwesterly boundary of said Parcel B

6) South 55°28'00" East, 171.83 feet to the POINT OF BEGINNING.

Containing 4,352 square feet, more or less.

Attached hereto is a plat to accompany legal description, and by this reference made a part hereof.

The bearing of South 55°28'00" East along the southwesterly boundary of Parcel B as shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County, is the basis of bearings cited in this description.

END OF DESCRIPTION

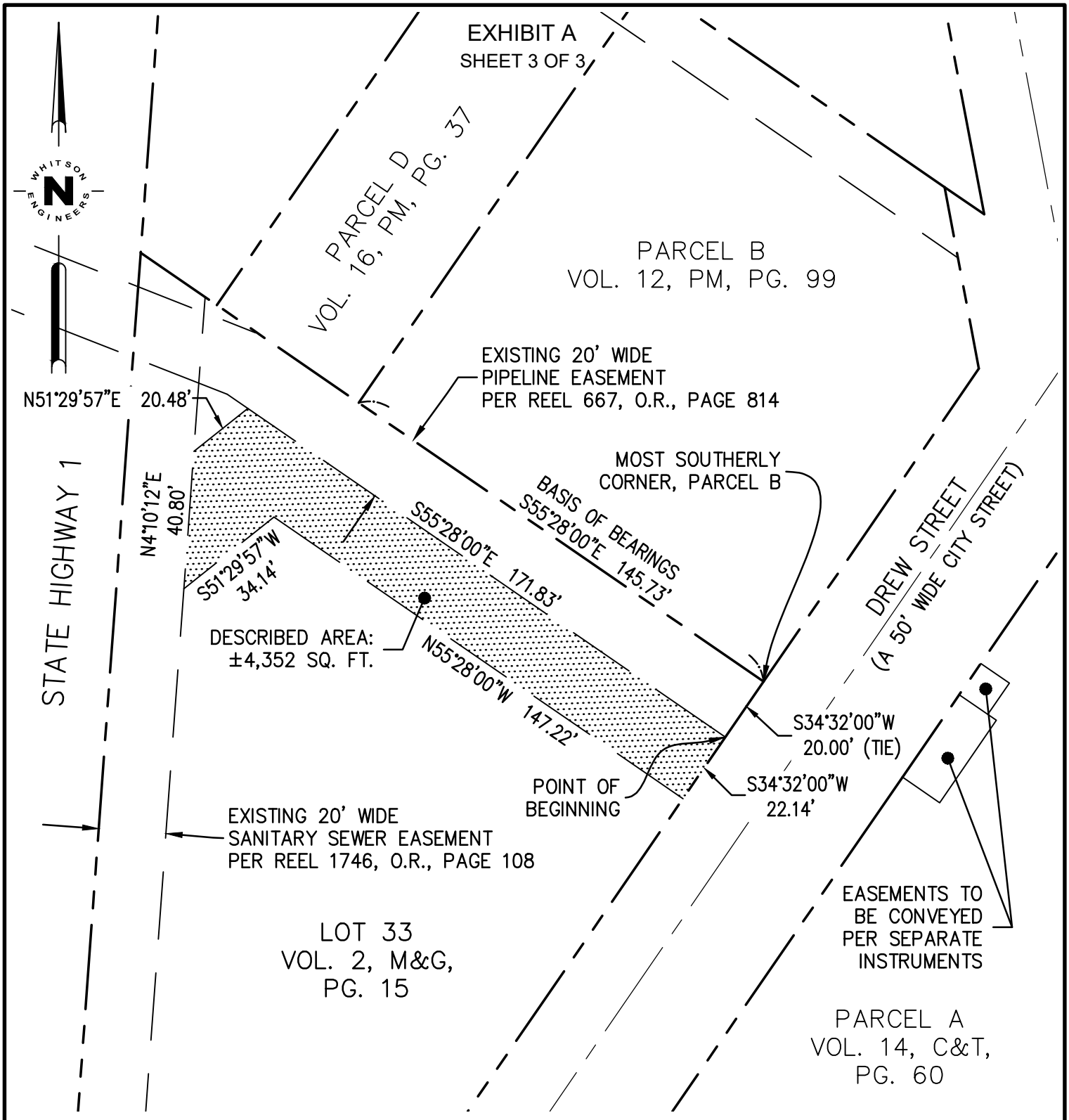
EXHIBIT A
SHEET 2 OF 3

PREPARED BY:
WHITSON ENGINEERS

05/28/2025

RICHARD P. WEBER P.L.S. DATE
L.S. NO. 8002
Job No.: 4105

EXHIBIT A
SHEET 3 OF 3



BASIS OF BEARINGS:

THE BEARING OF SOUTH 55°28'00" EAST ALONG THE SOUTHWESTERLY BOUNDARY OF PARCEL B, SHOWN ON VOLUME 12, PARCEL MAPS, PAGE 99, IS THE BASIS OF BEARINGS SHOWN HEREON.

40 0 40 Feet

SCALE: 1" = 40'

PLAT TO ACCOMPANY DESCRIPTION
SANITARY SEWER EASEMENT
GLORYA JEAN TATE PARK

LOT 33 (VOL. 2, MAPS & GRANTS, PG. 15)
CITY OF MARINA, MONTEREY COUNTY, CA. MAY 2025

Whitson ENGINEERS
Civil Engineering + Land Surveying
6 Harris Court
Monterey, CA 93940
831.649.5225
whitsonengineers.com

T:\Monterey Projects\4105 - Marina Station\SURVEY\LEGAL DESC\Tate Park\Lift Station Esmt-Legal Plat.dwg

PROJECT No.: 4105

EXHIBIT B
SHEET 1 OF 2

LEGAL DESCRIPTION OF A
SANITARY SEWER LIFT STATION EASEMENT

Certain real property situate in the City of Marina, County of Monterey, State of California, described as follows:

Being a portion of that certain real property shown as Parcel A, as shown on that certain map filed in Volume 14 of Cities and Towns maps at Page 60 of the Official Records of said County, more particularly described as follows:

Beginning at a point on the northwesterly boundary of said Parcel A, said point bears South 55°28'00" East, along the prolongation of the southwesterly boundary of Parcel B, as said Parcel B is shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County, and distant 50.00 feet from the most southerly corner of said Parcel B; thence from said POINT OF BEGINNING and along said northwesterly boundary of Parcel A

1) North 34°32'00" East, 29.65 feet; thence departing said boundary of Parcel A
2) South 55°28'00" East, 13.33 feet; thence
3) South 34°32'00" West, 29.65 feet; thence
4) North 55°28'00" West, 13.33 feet to the POINT OF BEGINNING.

Containing 395 square feet, more or less.

Attached hereto is a plat to accompany legal description, and by this reference made a part hereof.

The bearing of South 55°28'00" East along the southwesterly boundary of Parcel B as shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County, is the basis of bearings cited in this description.

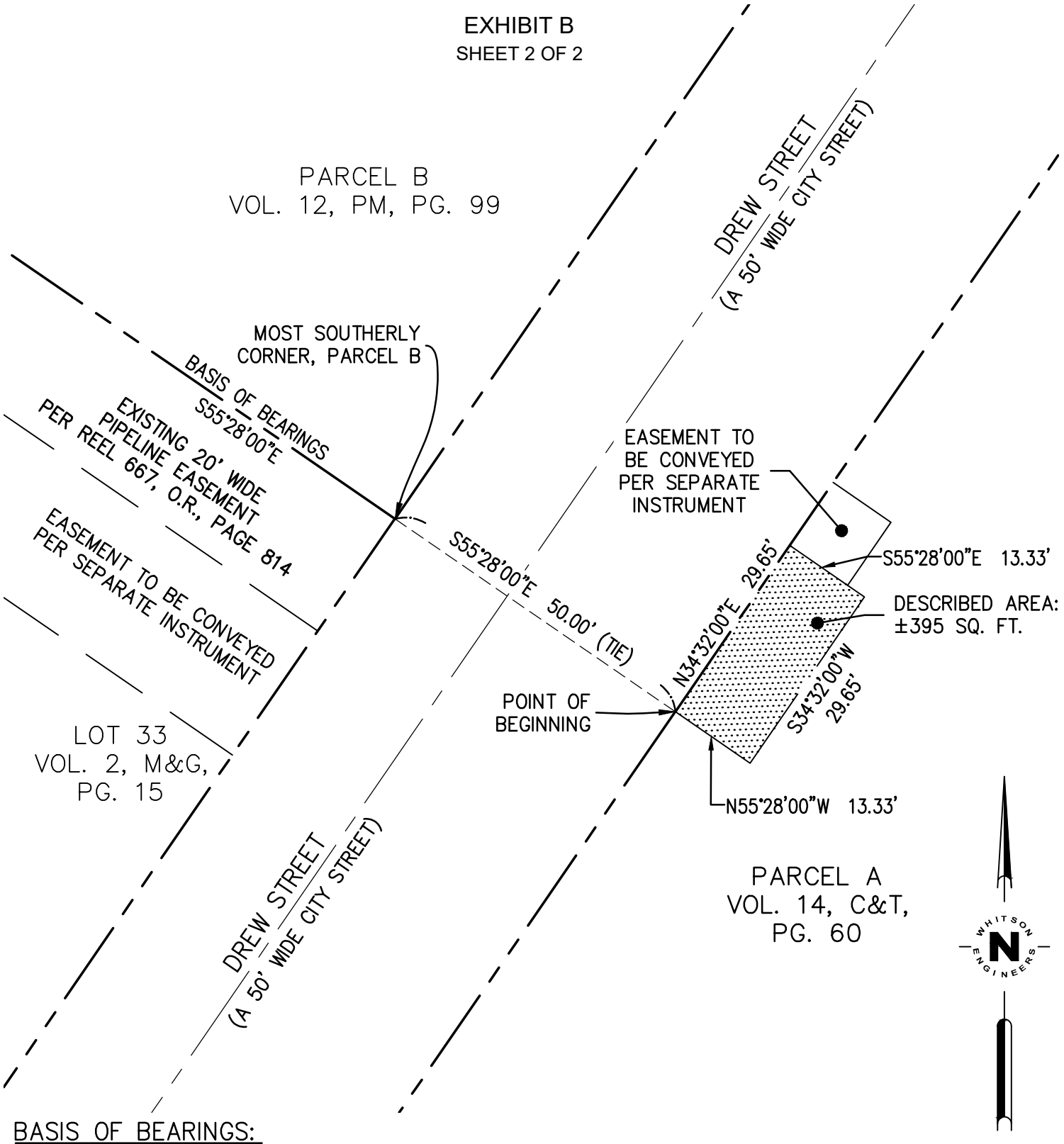
END OF DESCRIPTION

PREPARED BY:
WHITSON ENGINEERS

05/28/2025

RICHARD P. WEBER P.L.S. DATE
L.S. NO. 8002
Job No.: 4105

EXHIBIT B
SHEET 2 OF 2



BASIS OF BEARINGS:

THE BEARING OF SOUTH 55°28'00" EAST ALONG THE SOUTHWESTERLY BOUNDARY OF PARCEL B, SHOWN ON VOLUME 12, PARCEL MAPS, PAGE 99, IS THE BASIS OF BEARINGS SHOWN HEREON.

PLAT TO ACCOMPANY DESCRIPTION
SANITARY SEWER LIFT STATION EASEMENT
PARCEL A

VOL. 14, CITIES & TOWNS, PG. 60
CITY OF MARINA, MONTEREY COUNTY, CA. MAY 2025

Whitson ENGINEERS
Civil Engineering + Land Surveying
6 Harris Court
Monterey, CA 93940
831.649.5225
whitsonengineers.com

PROJECT No.: 4105

T:\Monterey Projects\4105 - Marina Station\SURVEY\LEGAL DESC\Tate Park\Lift Station Esmt-Legal Plat.dwg

EXHIBIT C
SHEET 1 OF 2

LEGAL DESCRIPTION OF A
PG&E UTILITY EASEMENT

Certain real property situate in the City of Marina, County of Monterey, State of California, described as follows:

Being a portion of that certain real property shown as Parcel A, as shown on that certain map filed in Volume 14 of Cities and Towns maps at Page 60 of the Official Records of said County, more particularly described as follows:

Commencing at the most southerly corner of Parcel B, as said Parcel B is shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County; thence from said POINT OF COMMENCEMENT and along the prolongation of the southwesterly boundary of said Parcel B

a) South 55°28'00" East, 50.00 feet to a point on said northwesterly boundary of said Parcel A; thence along said boundary of Parcel A

b) North 34°32'00" East, 29.65 feet to the **POINT OF BEGINNING**; thence continuing along said boundary of Parcel A

1) North 34°32'00" East, 11.25 feet; thence departing said boundary of Parcel A

2) South 55°28'00" East, 10.31 feet; thence

3) South 34°32'00" West, 11.25 feet; thence

4) North 55°28'00" West, 10.31 feet to the POINT OF BEGINNING.

Containing 116 square feet, more or less.

Attached hereto is a plat to accompany legal description, and by this reference made a part hereof.

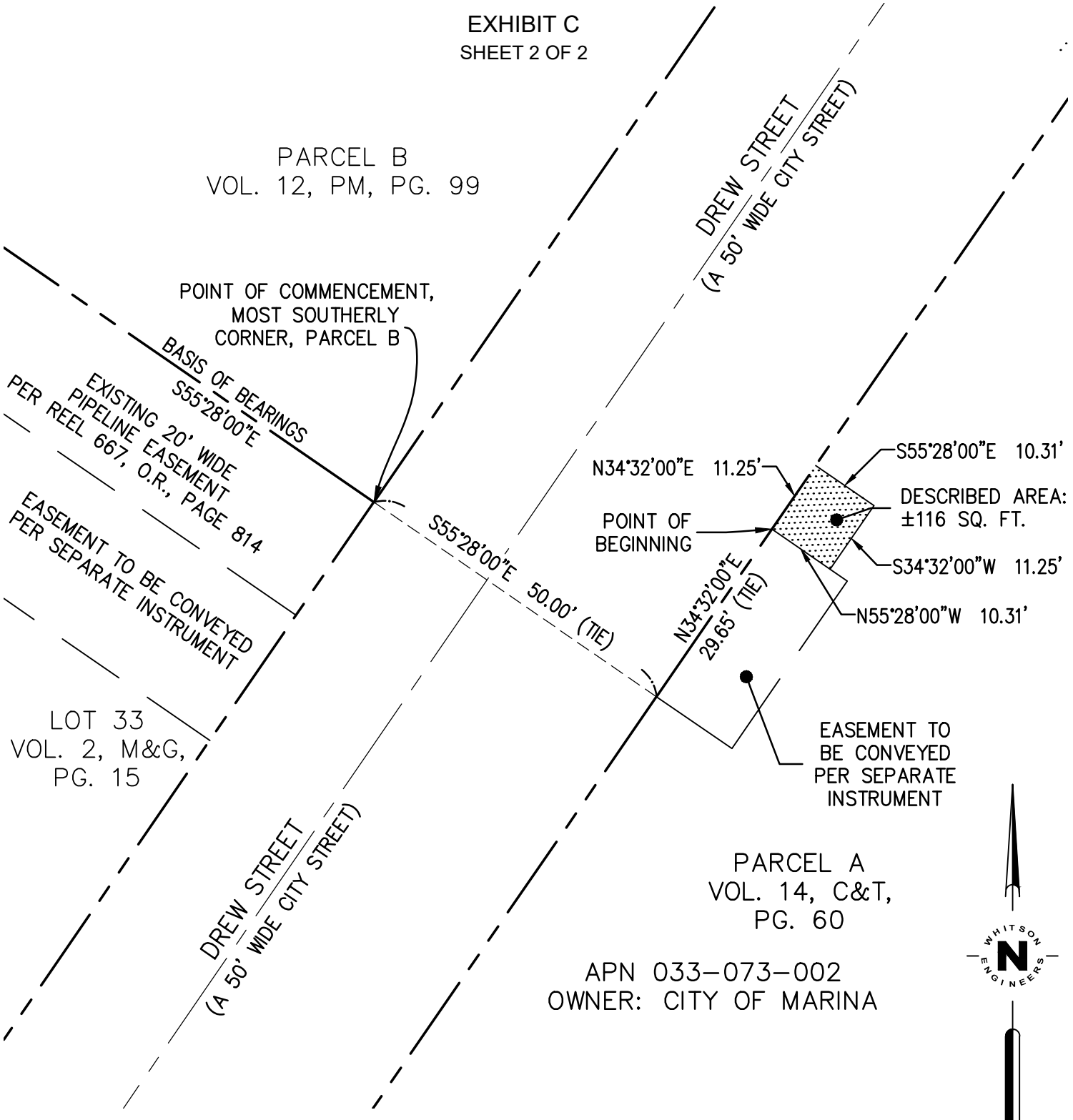
The bearing of South 55°28'00" East along the southwesterly boundary of Parcel B as shown on that certain map filed in Volume 12 of Parcel Maps at Page 99 of the Official Records of said County, is the basis of bearings cited in this description.

END OF DESCRIPTION

PREPARED BY:
WHITSON ENGINEERS

05/28/2025
RICHARD P. WEBER P.L.S. DATE
L.S. NO. 8002
Job No.: 4105

EXHIBIT C
SHEET 2 OF 2



BASIS OF BEARINGS:

THE BEARING OF SOUTH 55°28'00" EAST ALONG THE SOUTHWESTERLY BOUNDARY OF PARCEL B, SHOWN ON VOLUME 12, PARCEL MAPS, PAGE 99, IS THE BASIS OF BEARINGS SHOWN HEREON.

PLAT TO ACCOMPANY DESCRIPTION

PG&E UTILITY EASEMENT

PARCEL A, VOL. 14, CITIES & TOWNS, PG. 60

MONTEREY CITY LANDS (PROJECTED SECTION 24, T 14 S, R 1 E, MDM)
CITY OF MARINA, MONTEREY COUNTY, CA. MAY 2025

Whitson ENGINEERS
Civil Engineering + Land Surveying
6 Harris Court
Monterey, CA 93940
831.649.5225
whitsonengineers.com

PROJECT No.: 4105

T:\Monterey Projects\4105 - Marina Station\SURVEY\LEGAL DESC\Tate Park\Lift Station Esmt-Legal Plat.dwg

SHUTE, MIHALY & WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

RENE A. ORTEGA
Attorney
rortega@smwlaw.com

June 27, 2025

Mayor and City Council
City of Marina
211 Hillcrest Avenue
City of Marina, CA 93933

Re: Waiver of Potential Conflict and Consent to Concurrent Representation – Sierra Club, Inc.

Dear Mayor and City Council:

The firm of Shute, Mihaly & Weinberger LLP (the "Firm") currently serves as City Attorney and represents the City of Marina ("City") in connection with a wide variety of legal matters.

In 1986, the City and the Sierra Club ("Club") entered into a settlement agreement (the "Settlement Agreement") to resolve and settle disputes in a civil action entitled *Sierra Club., Inc., Petitioner and Plaintiff, v. City of Marina, Respondent and Defendant; Roger Post, The Post Companies; Does One through Twenty. Real Parties in Interest and Defendants (together "Real Parties")*, filed in the Superior Court of California, County of Monterey, Civil No. 82333.

Briefly, the Settlement Agreement requires a full EIR (unless categorically exempt) for any project in the City's coastal zone. Locke-Paddon Park, a park owned jointly by the City and Monterey Peninsula Regional Park District is located within the City's local coastal zone (the "Park"). As such, any potential development which constitutes a project would require a full environmental impact report ("EIR") unless exempt. The City and the Club have amended the Settlement Agreement several times in the past to allow certain projects to proceed without an EIR. Recently, there has been communication between Rita Dalessio, Chair of the Ventana Chapter of the Club, and the City concerning potential amendment of the Settlement Agreement again to address CEQA without having to do a full EIR for certain City activities in the Park should they not be categorically exempt.

As City Attorney, the Firm advises the City on land use matters in the City's local coastal zone and has been asked to advise on amending the Settlement Agreement to address certain activities which have been undertaken in the Park (a Martin Luther King, Jr. sculpture garden and an Oak woodland community garden and associated walking paths) as well as certain planned activities, including a children's sensory garden and a hybrid coastal passive garden that would include native and non-native coastal plants, walking paths over streams, a recycled water feature, and interpretive panels ("City Attorney Work").

The Firm currently has an attorney-client relationship with the Club in multiple environmental matters in California related to opposing local government approvals of various warehouse projects and advice regarding related settlements; opposing Cottonwood Sand Mine project in San Diego County; advising regarding enforcement of existing settlement agreements related to development in Kern County; and opposing a specific plan for the development of Mare Island in the City of Vallejo (the Club Matters). We do not believe that there is any conflict of interest between our present work on the Club Matters and our work as City Attorney including advising the City on amending the Settlement Agreement as described above. Moreover, we do not believe that we have received any confidential communication from the Club that would be relevant to the City Attorney Work.

Our City Attorney Work is unrelated to the Club Matters and is unlikely to result in the Firm obtaining any confidential information from the City relevant to our representation of the Club. However, because the Firm represents the Club in the Club Matters, and the City is a party to the Settlement Agreement, the Firm would be in a position of representing two clients whose interests are adverse. Notwithstanding the absence of any risk to confidential information, this situation does give rise to the possibility of divided loyalty on the part of our Firm.

Although we are not aware of any actual or reasonably foreseeable adverse effects of such potential divided loyalty in this case, it is possible that such effects may arise. Because it is possible that an actual or potential conflict of interest could develop in the future from our work on the Club Matters, our City Attorney Work, and the City's interest in the Settlement Agreement, we have decided to seek informed written consent from the City and the Club prior to undertaking advising the City in connection with amending the Settlement Agreement.

Of course, you have the option of retaining separate counsel in connection with amending the Settlement Agreement. I encourage you to seek independent counsel regarding the import of this consent, if you so desire, and would emphasize that you

remain completely free to seek independent counsel at any time even if you decide to sign the consent set forth below.

By signing this letter the City consents to the Firm's representation in connection with amending the Settlement Agreement. The City further agrees not to assert any conflict of interest or to seek to disqualify us from representing the Club notwithstanding any adversity between the Club and the City regarding the Settlement Agreement.

By signing and returning this letter, you will consent to and waive any conflicts arising from this Firm's concurrent representation of the Club in the Club Matters and to this Firm's representation as City Attorney. You further agree not to assert any conflict of interest or otherwise seek to disqualify this Firm from representing the Club, notwithstanding any adversity between the Club and the City regarding the Settlement Agreement. We are also requesting that the Club similarly consent to such concurrent representation.

Please sign the enclosed original and return it to me. If you have any questions about this letter, please do not hesitate to contact me.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Rene A. Ortega

ACCEPTED AND AGREED:
CITY OF MARINA

_____

Layne Long, City Manager

1933120.1

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARINA APPROVING A WAIVER OF CONFLICT OF INTEREST AND CONSENT TO CONCURRENT REPRESENTATION OF THE CITY OF MARINA AND THE SIERRA CLUB, INC. AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE WAIVER AND CONSENT

WHEREAS, the City and the Sierra Club ("Club") entered into a settlement agreement (the "Settlement Agreement") to resolve and settle disputes in a civil action entitled *Sierra Club., Inc., Petitioner and Plaintiff, v. City of Marina, Respondent and Defendant; Roger Post, The Post Companies; Does One through Twenty. Real Parties in Interest and Defendants (together "Real Parties")*, filed in the Superior Court of California, County of Monterey, Civil No. 82333; and

WHEREAS, the firm of Shute, Mihaly & Weinberger LLP (the "Firm") currently serves as City Attorney, wherein such work may involve advising on and potentially amending the Settlement Agreement ("City Attorney Work"); and

WHEREAS, the Firm currently represents the Sierra Club in multiple environmental matters in California related to opposing local government approvals of various warehouse projects and advice regarding related settlements; opposing Cottonwood Sand Mine project in San Diego County; advising regarding enforcement of existing settlement agreements related to development in Kern County; and opposing a specific plan for the development of Mare Island in the City of Vallejo (the "Club Matters"); and

WHEREAS, as City Attorney, the Firm has been asked to advise the City in connection with the Settlement Agreement, including advising on any amendment to the Settlement Agreement; and

WHEREAS, the Firm has reached out to the Club to seek informed consent to the Firm's representation as City Attorney, including waiver of the Firm's involvement in the City Attorney Work; and

WHEREAS, the City desires to have the Firm continue to serve as City Attorney; and

WHEREAS, the City desires to provide informed consent to concurrent representation and waive any potential conflict of interest or conflict of interest that may exist.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Marina does hereby:

1. Approve a waiver of conflict of interest and consent to concurrent representation of the City of Marina and the Sierra Club; and
2. Authorize the City Manager to execute the waiver and consent to concurrent representation.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025 by the following vote:

AYES, COUNCIL MEMBERS:
NOES, COUNCIL MEMBERS:
ABSENT, COUNCIL MEMBERS:
ABSTAIN, COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

June 26, 2025 Item No. **10f(4)**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL TO CONSIDER ADOPTING RESOLUTION NO. 2025-, CONFIRMING LEVY OF THE SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2024-1 (THE DUNES) FOR FISCAL YEAR 2025-26 AS AUTHORIZED BY ORDINANCE NO. 2024-11; AND RESOLUTION NO. 2025-, CERTIFYING CITY OF MARINA COMPLIANCE WITH STATE LAW (PROPOSITION 218) WITH RESPECT TO A SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2024-1 AS AUTHORIZED BY ORDINANCE NO. 2024-11 FOR FISCAL YEAR 2025-26

RECOMMENDATION:
It is requested that the City Council:

1. Consider adopting Resolution No. 2025-, confirming levy of the special tax for the City of Marina Community Facilities District No. 2024-1 (The Dunes) for Fiscal Year 2025-26 as authorized by Ordinance No. 2024-11, and;

2. Resolution No. 2025-, certifying City of Marina compliance with State law (Proposition 218) with respect to a special tax for the City of Marina Community Facilities District No. 2024-1 as authorized by Ordinance No. 2024-11 for Fiscal Year 2025-26

BACKGROUND:
Pursuant to a special election held on November 6, 2024, on November 19, 2024, the City Council unanimously passed Ordinance No. 2024-11, forming the City of Marina Community Facilities District No. 2024-1 (commonly referred to as The Dunes CFD). Ordinance 2024-11 also authorized an annual special tax levy for the purpose of administration and services of District maintenance of streets, sidewalks, curb & gutters, street lighting and storm drains. The total special tax for the first levied fiscal year 2025-26 is detailed in **EXHIBIT A.**

Each subsequent fiscal year, Ordinance 2024-11 requires the special tax to be adjusted by the escalation factor defined as the lesser of the percentage increase, if any, in the Construction Cost Index for the San Francisco region in the twelve (12)-month period ending June 1 of the prior Fiscal Year, as published in the Engineering News Record or four percent (4.0%). If, in any Fiscal Year, it is determined that the Construction Cost Index decreased in the prior Fiscal Year, the Escalation Factor shall be zero and no decrease in the Maximum Special Taxes shall be calculated.

Except for the Constitutionally-limited 1% ad valorem tax, the Monterey County Auditor-Controller will not place taxes, assessments, fees or charges on the rolls unless the City Council certifies by resolution that the City is in compliance with Proposition 218, the 1996 '*Right to Vote on Taxes Act*' with respect to each such tax. A certification resolution must contain hold harmless and indemnification provisions for administrative expenses of the County associated with collection of the City's taxes, assessments, fees and charges placed on the rolls. The certification, along with copies of the resolution setting the tax and certain other documentation, must be submitted to the County no later than August 1 2025.

ANALYSIS:
For the special levies for District's operations which must be included in the certification adopted by the Council, see **Exhibit A.**

FISCAL IMPACT:
Special Taxes finance the Community Facilities District approved maintenance. Total to be credited to the district is as follows:

The Dunes 2024-1 Community Facilities District
- $ 1,034,009.74 through Special Tax Levy

CONCLUSION:
This request is submitted for City Council consideration and possible action.

Respectfully submitted,

_____
Edrie Delos Santos, P.E.
Engineering Division
Public Works Department

REVIEWED/CONCUR:

_____
Tori Hannah
Finance Director
City of Marina

_____
Ismael Hernandez
Public Works Director
City of Marina

_____
Layne P. Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA CONFIRMING LEVY OF A SPECIAL TAX FOR THE CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2024-1 AS AUTHORIZED BY ORDINANCE NO. 2024-11 FOR FISCAL YEAR 2025-26

WHEREAS, Ordinance 2024-11 authorized the levy of a special tax for the benefit of The City of Marina Community Facilities District 2024-1 starting in Fiscal Year 2025-26 and increasing by the lesser of 4% or the Construction Cost Index as published in the Engineering News Record (ENR) from the previous approved Maximum Special Tax.

WHEREAS the Administrator has calculated the maximum Fiscal Year 2025/26 special tax to be as described in Exhibit A to this resolution, and;

WHEREAS, the CFD administrator having further considered the special tax requirements in accordance with Exhibit A to Ordinance 2024-11, by which Community Facilities District 2024-1 was established and continues, has determined that the special taxes for fiscal year 2025-26 be assessed per Exhibit A to this resolution.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marina that:

1. The City does hereby confirm the diagram and assessment as described in the Engineer's Report on file with the City Clerk.
2. The City does hereby order the levy and collection of said assessment per Exhibit A of this resolution for FY 2025/26 assessment for The Dunes CFD No. 2024-1.
3. It is the intention of the City of Marina that any monetary advance made by it during any fiscal year to cover a deficit in the improvement fund of Community Facilities District No. 2024-1 shall be repaid from the next annual assessments levied and collected within Community Facilities District No. 2024-1
4. The City Clerk is hereby authorized and directed to file a certified copy of said diagram and assessment with the Monterey County Auditor prior to August 1, 2025.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA CERTIFYING COMPLIANCE WITH STATE LAW (PROPOSITION 218) WITH RESPECT TO LEVYING OF SPECIAL TAXES ON BEHALF OF CITY OF MARINA COMMUNITY FACILITIES DISTRICT NO. 2024-1 FOR FISCAL YEAR 2025-2026

WHEREAS, the City of Marina "Public Agency" requests that the Monterey County Auditor-Controller enter those general or special taxes, assessments, or property-related Fees or charges identified in Exhibit "A" on the tax roll for collection and distribution by the Monterey County Treasurer-Tax Collector commencing with the property tax bills for fiscal year 2025-26

NOW, THEREFORE, BE IT RESOLVED as follows:

1. The Public Agency hereby certifies that it has, without limitation, complied with all legal procedures and requirements necessary for the levying and imposition of the general or special taxes, assessments, or property-related fees or charges identified in Exhibit "A", regardless of whether those procedures and requirements are set forth in the Constitution of the State of California, in State statues, or in the applicable law of the State of California.

2. The Public Agency further certifies that, except for the sole negligence or misconduct of the County of Monterey, its officers, employees, and agents, with regards to the handling of the Cd or electronic file identified as Exhibit "A", the Public Agency shall be solely liable and responsible for defending, at its sole expense, cost, and risk, each and every action, suit, or other proceeding brought against the County of Monterey, its officers, employees, and agents for every claim, demand, or challenge to the levying or imposition of the general or special taxes, assessments, or property –related fees or charges identified in Exhibit "A" and that it shall pay or satisfy any judgment rendered against the County of Monterey, its officers, employees, and agents on every such action, suit, or other proceeding, including all claims for refunds and interest thereon, legal fees and court costs, and administrative expenses of the County of Monterey to correct the tax rolls.

PASSED AND ADOPTED by the City of Marina City Council at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

EXHIBIT A

ATTACHMENT TO RESOLUTION NO. 2025-____ OF THE CITY OF MARINA, COUNTY OF MONTEREY, CALIFORNIA, CERTIFYING COMPLIANCE WITH STATE LAW WITH RESPECT TO THE LEVYING OF SPECIAL TAX

FISCAL YEAR 2025-26

SPECIAL TAXES:

City of Marina CFD No. 2024-1 (The Dunes West Side Services)

Special Tax Levy Summary			
Tax Zone 1 (1)			
Developed Property	$1,844.50 $2,075.06 $1,959.78 $2,305.62	22 Units 62 Units 18 Units 48 Units	$40,579.00 $128,653.72 $35,276.04 $110,669.76
Undeveloped Property	$1,844.50 $2,075.06 $1,959.78 $2,305.62	0 Units 0 Units 2 Units 0 Units	$0.00 $0.00 $3,919.56 $0.00
Tax Zone 2			
Developed Property Single Family Detached Single Family Attached Non-Residential	 $2,305.62 $1,959.78 $18,974.36	 0 Units 7 Units 0.00 Acres	 $0.00 $13,718.46 $0.00
Undeveloped Property	$18,974.36	33.93 Acres	$643,735.78
Tax Zone 3			
Developed Property Single Family Detached Single Family Attached Non-Residential	 $2,305.62 $2,075.06 $6,442.00	 0 Units 0 Units 0.00 Acres	 $0.00 $0.00 $0.00
Undeveloped Property	$1,500.00	38.30 Acres	$57,457.42
Total			**$1,034,009.74**

(1) Rates in Tax Zone 1 are assigned on a per parcel basis. Please refer to the fiscal year 2025-26 tax roll which identifies the per parcel rates.

June 10, 2025 Item No. **10g(1)**

Members of the Marina City Council

City Council Meeting of July 1, 2024

CITY COUNCIL CONSIDER ADOPTING RESOLUTION NO. 2025-, AUTHORIZING REIMBURSEMENT TO MARINA COAST WATER DISTRICT (MCWD) FOR RINCON CONSULTING, INC. PREPARATION OF A WATER SUPPLY ASSESSMENT (WSA) FOR THE GENERAL PLAN UPDATE (GP2045) ENVIRONMENTAL IMPACT REPORT (EIR); AUTHORIZE THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES AND AUTHORIZE THE CITY MANAGER TO EXECUTE THE AGREEMENT ON BEHALF OF CITY WITH MCWD SUBJECT TO FINAL REVIEW BY THE CITY ATTORNEY. THE REIMBURSEMENT AGREEMENT IS EXEMPT FROM ENVIRONMENTAL REVIEW PER §15061(b)(3) OF THE CEQA GUIDELINES.

REQUEST: It is requested that the Marina City Council:

1. Adopt Resolution 2025-, approving a Reimbursement Agreement with Marina Coast Water District to cover the costs for the preparation of a Water Supply Assessment (WSA) for the City's GP2045 EIR;
2. Authorize the Finance Director to make necessary accounting and budgetary entries; and
3. Authorize the City Manager to execute the Agreement on behalf of City with MCWD subject to final review by the City Attorney.

SUMMARY:

At its meeting on October 18, 2022, the City Council authorized a contract with Raimi+Associates (R+A) to prepare a comprehensive General Plan update (GP2045). The GP2045 process is moving along in its preparation of draft policies, chapters, and other important components of the update. One of the most critical aspects of this process is the creation of growth projections that determine the likely amount, timing, and location of future growth in Marina. The growth projections are one of the main focal points of the EIR as they will determine projected traffic and water impacts that may have a substantial effect on the environment.

Within the City of Marina, potable water is provided by the Marina Coast Water District. MCWD is required to prepare an Urban Water Management Plan (UWMP)[1] every five (5) years. The UWMP analyzes current and future water demands within the service area and compares demands to projections of water supply availability in order to facilitate the identification of areas or circumstances where demand reduction measures or supplemental supply sources are necessary to ensure sufficient supply is available to meet all demands. The District's 2020 UWMP was completed in 2021 and its 2025 will be started this year with an expected completion date of July 1, 2026. The 2025 UWMP is anticipated to provide the updated land use data and water demand projections necessary to inform analysis of water supply availability for the GP2045 EIR; however, the 2025 UWMP will not be available to inform the GP2045 EIR, as the timing of its preparation does not correspond with our completion timeline of early summer 2026.

[1] https://www.mcwd.org/docs/2021_uwmp/DRAFT_MCWD_2020_UWMP_v20210520.pdf

For this reason, the City asked Rincon, which has specific background in local and State water policy, to consider preparing a WSA for the GP2045 EIR as a way to expedite the water analysis timeline. The preparation of a WSA is not explicitly required for a general plan update per Senate Bil (SB) 610, which amended California Water Code to require a WSA for certain types of development projects that will use groundwater as a water supply source. However, the purpose of a WSA is to assess water supply availability for a given proposal, including through consideration of all existing and anticipated demands on a common water supply source, and the WSA for GP2045 will therefore contain the updated service area demand characteristics necessary to inform the GP2045 EIR. This will allow the consultants to analyze the availability of water within the region to accommodate Marina's projected growth through the expected general plan buildout of 2045.

The preparation of WSAs is typically done by the water district or a consultant hired by and managed by the district. For this reason, the City would be entering into a reimbursement agreement with MCWD for the cost of the WSA to be prepared by Rincon, as MCWD's consultant. The *Proposal to Prepare a Water Supply Assessment for the City of Marina General Plan Update* (Proposal) has been provided by Rincon and is included as **EXHIBIT A** to the Resolution referred herein. Also included as **EXHIBIT B** to the Resolution is the draft Reimbursement Agreement (Agreement) with MCWD.

FISCAL IMPACT:
Because a WSA is typically not required for a general plan update, this cost was not included in R+A's original GP2045 budget. Rincon's proposed budget for the preparation of the WSA is $24,399.00 which would be paid directly by MCWD as the lead review authority. MCWD requires a 10% administrative review bringing the total reimbursement amount to **$26,838.90**.

ENVIRONMENTAL REVIEW:
The approval of this Reimbursement Agreement is not subject to California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, 15061(b)(3) because the proposed agreement is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment.

CONCLUSION:
This request is submitted for City Council consideration.

Respectfully submitted,

_____
Alyson Hunter, AICP
Sr. Planner, Community Development Dept.
City of Marina

REVIEWED/CONCUR:

_____
Guido F. Persicone, AICP
Community Development Director
City of Marina

_____
Layne Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARINA AUTHORIZING REIMBURSEMENT TO MARINA COAST WATER DISTRICT (MCWD) FOR RINCON CONSULTING, INC. PREPARATION OF A WATER SUPPLY ASSESSMENT (WSA) FOR THE GENERAL PLAN UPDATE (GP2045) ENVIRONMENTAL IMPACT REPORT (EIR); AUTHORIZE THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES AND AUTHORIZE THE CITY MANAGER TO EXECUTE THE AGREEMENT ON BEHALF OF CITY WITH MCWD SUBJECT TO FINAL REVIEW BY THE CITY ATTORNEY. THE REIMBURSEMENT AGREEMENT IS EXEMPT FROM ENVIRONMENTAL REVIEW PER §15061(b)(3) OF THE CEQA GUIDELINES.

WHEREAS, an integral part of the preparation of the City's General Plan Update (GP2045) and required Environmental Impact Report (EIR) is the analysis of the City of Marina's current and future water supply to ensure that water will be available to meet the City's projected growth;

WHEREAS, one way to conduct this analysis is through the Marina Coast Water District's (MCWD) 5-year Urban Water Management Plan (UWMP) update which will begin this year with an expected completion date in mid- to late 2026;

WHEREAS, the City desires to continue to move quickly with its GP2045 EIR and seeks to complete the water analysis that would otherwise be completed by MCWD through its UWMP update by utilizing Rincon Consultants, Inc. (Rincon) to prepare a Water Supply Assessment (WSA) consistent with Senate Bill (SB) 610. This analysis would provide the City with the water data needed to continue with the EIR in advance of the completion of MCWD's UWMP;

WHEREAS, the cost of the WSA, as described in the scope of work and budget included herein by reference as **Exhibit A** will be borne directly by MCWD which has review authority over such documents. Costs incurred by MCWD (including 10% administrative fee) associated with the preparation of the WSA will be reimbursed by the City as described the Reimbursement Agreement included by reference herein as **Exhibit B**;

WHEREAS, with the adoption of this Resolution, the City of Marina agrees to reimburse MCWD in the amount of $26,838.90, for its review and approval of the WSA; and

WHEREAS, the approval of this Resolution authorizing a Reimbursement Agreement between MCWD and the City of Marina is not subject to California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, 15061(b)(3) because the proposed agreement is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Council of the City of Marina hereby:

1. Approve a Reimbursement Agreement with Marina Coast Water District to cover the costs for the preparation of a Water Supply Assessment (WSA) for the City's GP2045 EIR;
2. Authorize the Finance Director to make necessary accounting and budgetary entries; and

3. Authorize the City Manager to execute the Agreement on behalf of City with MCWD subject to final review by the City Attorney.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES, COUNCIL MEMBERS:
NOES, COUNCIL MEMBERS:
ABSENT, COUNCIL MEMBERS:
ABSTAIN, COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

raimi + associates

Memo

April 28, 2025

To: Alyson Hunter, City of Marina

From: Melissa Stark and Matt Raimi, Raimi + Associates

Subject: Water Supply Assessment and Detailed Growth Projections: Direction and Next Steps

---

Raimi + Associates has prepared summary direction and next steps resulting from the coordination call on April 1, 2025, between Raimi + Associates (R+A), Rincon Consultants (Rincon), City of Marina (City), and the Monterey County Water District (MCWD):

Detailed Growth Projections

MCWD directed the City of Marina to provide detailed growth projections by job and housing category, as defined in the MCWD Codes and Ordinances Appendix C for use in the MCWD 2025 Urban Water Management Plan Update. While R+A's scope on the General Plan Update includes high level growth projections (Task 5.10); this scope does not include the projections to be broken down into specific job and housing types. To meet MCWD's request, the R+A Team must prepare detailed growth projections that further estimate jobs and household categories, beyond what is necessary for the GPU EIR. Thus, R+A will utilize General Plan Budget Contingency Funds, as approved by the City.

Upon finalizing the detailed growth projections, the City will supply MCWD with this data to be used as an input for the 2025 Urban Water Management Plan. The MCWD will find appropriate water supply and sources, as needed, to meet the projected demand outlined in these General Plan Update growth projections. As discussed during the call on April 1, 2025, the MCWD does not provide input or feedback on GPU growth projections.

Water Supply Assessment

Prior to the start of the General Plan Update project, a Water Supply Assessment (WSA) was not deemed necessary and hence was not included in the consultant team's scope and budget. For reference, the General Plan Update scope notes the following regarding a WSA:

> *An official Water Supply Assessment (WSA) is not necessary for the General Plan process. However, if MCWD elects to prepare one, Rincon will incorporate the information into the EIR. (R+A General Plan Update Project Scope - page 30)*

Based on discussions with City and MCWD staff, it was determined that MCWD's 2025 Urban Water Management Plan (UWMP) will not be available to inform the EIR for the General Plan Update, and a WSA will therefore be prepared to document existing water supply and demands in MCWD's service area, with updated information compared to the 2020 UWMP. The WSA will be

used to inform the CEQA analysis of water supply availability for the General Plan Update buildout in lieu of the 2025 UWMP. As required by MCWD, Rincon will contract directly with the MCWD to prepare a WSA for the General Plan Update. The City will then enter into a reimbursement agreement with the MCWD. Rincon's proposed scope and budget for the WSA are attached to this memo, for the City and MCWD's consideration. MCWD will work with Rincon to prepare a WSA for the Marina General Plan Update and Program EIR analysis and will provide the necessary documents to the City of Marina.

Attachment: Rincon's proposed scope and budget for the WSA.

Rincon Consultants, Inc.
80 Garden Court, Suite 240
Monterey, CA 93940
831-333-0310

April 17, 2025
Rincon Project No. 22-13326

Attn: Patrick Breen, Water Resources Manager
Marina Coast Water District
11 Reservation Road
Marina, California 93933
Via email: pbreen@mcwd.org

Subject: Proposal to Prepare a Water Supply Assessment for the City of Marina General Plan Update

Dear Mr. Breen:

Rincon Consultants, Inc. (Rincon) is pleased to provide this proposal to the Marina Coast Water District (MCWD, or District) to prepare a Water Supply Assessment (WSA) for the City of Marina General Plan Update ("proposed project"). The WSA will be prepared for compliance with California Water Code as amended by Senate Bill 610, and will be used to inform the project's environmental analysis for compliance with the California Environmental Quality Act (CEQA). Rincon is currently working with Raimi & Associates and the City of Marina to prepare the General Plan Update and associated CEQA analysis; this scope of work to prepare a WSA for the proposed project is independent from that work, and will be overseen by the District.

Scope of Work

The City of Marina receives water from MCWD, which will review and adopt the WSA for the proposed project, upon approval. MCWD's Urban Water Management Plan (UWMP) is being updated for the 2025 cycle, with 2025 UWMPs due to the Department of Water Resources by July 1, 2026. The CEQA document for the proposed project is anticipated to be published before the updated 2025 UWMP is available; therefore, the WSA will rely on information from the 2020 UWMP for water supply availability projections, and will quantify differences between water demands in the City of Marina under the existing General Plan versus under the proposed project, to characterize how water demands under the proposed project would differ from those presented in the 2020 UWMP.

The WSA will characterize water supply availability for the proposed project based upon projections in the 2020 UWMP for existing water supply sources and water agreements. The WSA will also characterize any additional water supply sources that may be developed or acquired by the City to support the General Plan Update, such as new water projects or revisions to existing agreements. These may include negotiations with parties to the 1993 Fort Ord Annexation Agreement and subsequent amendments, to exchange or acquire water allocated through Fort Ord and make it available to development that would be facilitated by the proposed project (such parties include the cities of Seaside, Del Rey Oaks, and Monterey, in addition to Marina, along with the County of Monterey). This scope of work does not include support for negotiation with parties to the Fort Ord water agreement or other such negotiations to redistribute existing water supplies in the project area or to augment existing supply sources through the development of supplemental supply; however, such support can be provided on a time and materials basis, if requested.

Assumptions

- This scope of work includes one hour-long kickoff meeting and up to three hour-long progress meetings with MCWD.
- No changes to the Project Description involving growth projections or development intensity that affect water demands will be introduced after initiation of the WSA.
- This scope of work does not include coordination or negotiation with parties to the Fort Ord Annexation Agreement or amendments thereto to revise water allocations.
- The City will provide Rincon with the WSAs prepared for projects that were accounted for in MCWD's 2020 UWMP and have not been implemented yet or would be revised under the proposed project; WSAs referenced in the 2020 UWMP include Cypress Knolls (2006), Dunes on Monterey Bay- University Village (2007), Sea Haven- Marina Heights (2003), Marina Station (2006), Marina Downtown Vitalization Specific Plan (2020), and Marina Airport Business Park/UC MBEST (2020).
- Rincon will respond to one round of comments from the District on the Draft WSA.
- Comments will be provided to Rincon in consolidated format, with internal conflicts resolved.
- Rincon will provide the Revised Draft WSA in tracked changes format, with responses included for all comments received on the Draft WSA.
- The Final WSA will consist of the Revised Draft WSA with tracked changes accepted and comments removed; any additional comments on the Revised Draft WSA will be minimal.
- All deliverables will be submitted electronically; no hard copies will be provided. This scope of work and cost estimate do not include providing ADA-accessible deliverables.
- No hydrologic modeling, groundwater modeling, or field work is necessary.

Deliverables

- Draft WSA (for review and comment by the District)
- Revised Draft WSA (for review and approval by the District)
- Final WSA (for attachment to the EIR)

Cost and Timeline

Rincon's proposed cost to complete this scope of work is **$24,399** as shown in the table below. All costs will be billed on a time and materials basis using Rincon's 2025 standard fee schedule (attached).

Task	Budget
Task 1: Kickoff & Progress Meetings	$1,319
Task 2: Draft WSA	$17,326
Task 3: Revised Draft WSA	$3,942
Task 4: Final WSA	$1,812
Total Cost	**$24,399**

Rincon will submit the Draft WSA within approximately six weeks of authorization and receipt of final buildout projections for the project. The Revised Draft and Final WSA will be provided within two weeks of receipt of consolidated comments on the prior deliverable.

This proposal is valid for a period of 30 days and is fully negotiable to meet the needs of the District for this assignment. We appreciate the opportunity to assist with this project. Please let us know if you have any questions about this proposal.

Sincerely,
Rincon Consultants, Inc.

Aubrey Mescher
Water Resources Planner

Megan Jones, MPP
Principal

REIMBURSEMENT AGREEMENT BY AND BETWEEN MARINA COAST WATER DISTRICT AND THE CITY OF MARINA FOR THE PREPARATION OF A WATER SUPPLY ASSESSMENT (WSA) ASSOCIATED WITH THE GENERAL PLAN UPDATE (GP2045) ENVIRONMENTAL IMPACT REPORT (EIR)

This Reimbursement Agreement ("Reimbursement Agreement") is entered into this _____ day of _____, 2025, (the "Effective Date") by and between the Marina Coast Water District, a California county water district ("MCWD") and the City of Marina (the "City"), a California municipal corporation. MCWD and the City are sometimes hereinafter individually referred to as "Party" and/or collectively referred to as the "Parties."

RECITALS

A, The City has undertaken to complete its comprehensive General Plan Update ("GP2045") and has entered into a Professional Service Agreement ("PSA") with Raimi & Associates (R+A) to complete the project. In connection with completing GP2045, R+A has subcontracted with Rincon Consultants, Inc. ("Rincon") to prepare an Environmental Impact Report ("EIR") for the GP2045 as required by the California Environmental Quality Act ("CEQA").

B. In connection with GP2045 and for purposes of complying with CEQA, the City has requested that MCWD prepare a Water Supply Assessment ("WSA") consistent with Senate Bill (SB) 610.

C. MCWD will enter into a separate PSA with Rincon such that Rincon will be MCWD's consultant for purposes of completing the WSA.

D. Pursuant to MCWD Code 6.16.030, City will reimburse MCWD for its costs incurred in providing the WSA, as set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties hereto agree as follows:

1. MCWD's Obligations.

(a) MCWD shall provide a WSA to the City for the GP2045 such that City may utilize the WSA for purposes of CEQA compliance. The WSA shall be conducted in accordance with Water Code §10910.

(b) MCWD shall enter into a separate PSA with Rincon, such that Rincon can conduct the WSA described herein. A copy of the PSA is attached hereto as Attachment No. 1 and incorporated herein.

2. City's Obligations.

(a) City shall pay MCWD all costs incurred by MCWD in conducting the WSA ("WSA Costs"). WSA Costs shall include all amounts paid by MCWD to Rincon in accordance with the PSA and reimbursement to MCWD for MCWD staff time. City's WSA Costs payable to MCWD will include the amount to Rincon of Twenty-four Thousand Three Hundred Ninety-nine Dollars ($26,838.90.00) and MCWD Staff time projected to be 10% of the professional services contracted amount.

(b) Upon completion of the WSA by MCWD and submittal to the City, City shall pay MCWD the WSA Costs within fifteen (15) business days of receiving and approving the detailed invoice from MCWD.

(c) City, at City's own cost and expense, shall comply with all California Environmental Quality Act ("CEQA") laws and regulations with regards to City's approval of the GP2045. City agrees to defend, indemnify, hold harmless and release MCWD, its officers, employees, attorneys, or agents from any claim, action or proceeding brought against any of them, the purpose of which is to attack, set aside, void, or annul, in whole or in part, the City's approval of the GP2045 or environmental documents submitted to support it.

4. Billing Disputes. The City shall submit any billing dispute in writing to MCWD within fifteen (15) calendar days after receipt of the invoice. The Parties shall endeavor to timely resolve any such dispute and thereby allow payment of the balance due within a reasonable amount of time, although in the event of an unresolved dispute, City shall pay the undisputed invoice amount to MCWD within thirty (30) business days of receipt of invoice while the parties continue to resolve the dispute.

5. Indemnity/Hold Harmless. Except as specified in section 3(c), the Parties do hereby mutually agree to indemnify, defend, save, and hold harmless the other and their respective officers officials, agents, employees, contractors, or subcontractors from any and all liabilities, claims, demands, debts, damages, suits, actions and cause of action of whatsoever kind, nature, or sort, including but not by way of limitation, for wrongful death, and for the expenses of defense of said parties, and each of them and the payment of attorney's fees in any such action, arising out or, or in any manner connected with any negligent act or omission of such indemnifying party or its contractors or subcontractors, done or performed in connection with such party's duties and obligations hereunder. It is the mutual intention of the Parties that where comparative fault is determined to have been contributory, principles of comparative fault will be followed and each Party shall bear the proportionate cost of any damage attributable to the fault of that Party, its officers, officials, agents, employees, contractors, or subcontractors. The provisions of this indemnity shall survive the expiration or termination of this Reimbursement Agreement.

6. Notice. All notices or other communications required or permitted hereunder shall be in writing and shall be either personally delivered (which shall include delivery by means of professional overnight courier service which confirms receipt in writing [such as Federal Express or UPS]), sent by telecopier or facsimile (Fax) machine capable of confirming transmission and receipt, or sent by certified or registered mail, return receipt requested, postage prepaid to the following parties at the following addresses or numbers:

If to MCWD: Marina Cost Water District
11 Reservation Road
Marina, CA 93933
Telephone: (831) 384-3161
Fax: (831) 883-5995

If to Marina: City of Marina
211 Hillcrest Avenue
Marina, CA 93933
Telephone: (831) 884-1224
Fax: (831) 384-9148

Notices sent in accordance with this section shall be deemed delivered upon the next business day following the: (1) date of delivery as indicated on the written confirmation of delivery (if sent by overnight courier service); (2) the date of actual receipt (if personally delivered by other means); (3) date of transmission (if sent by telecopier or facsimile machine); or (4) the date of delivery as indicated on the return receipt (if sent by certified or registered mail, return receipt requested). Notice of change of address shall be given by written notice in the manner detailed in this Section 13.

7. Severability. If any term, provision, condition, or covenant of this Reimbursement Agreement, or the application thereof to any party or circumstance, shall to any extent be held invalid or unenforceable, the remainder of the instrument, or the application of such term, provision, condition, or covenant to persons or circumstances other than those as to whom it is held invalid or unenforceable, shall not be affected thereby and each term and provision of this agreement shall be valid and enforceable to the fullest extent permitted by law.

8. Statutes and Law Governing. This Reimbursement Agreement shall be governed and construed in accordance with the statutes and laws of the State of California.

9. Waiver. The Parties' waiver of any term, condition or covenant, or breach of any term, condition or covenant shall not be construed as a waiver of any other term, condition or covenant or breach of any other term, condition or covenant.

10. No Third Party Beneficiary. This Reimbursement Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any clam or right of action hereunder for any cause whatsoever.

11. Counterparts. This Reimbursement Agreement may be executed in one or more counterparts and when a counterpart shall have been signed by each party thereto, each shall be deemed an original, but all of which constitute one and the same instrument.

12. Entire Agreement. This Reimbursement Agreement contains the entire agreement between the parties, and is intended by the parties to completely state the agreement in full. Any agreement or representation respecting the matters dealt with herein or the duties of any party in relation thereto, not expressly set forth in this agreement, is null and void.

IN WITNESS WHEREOF, the Parties have caused this Reimbursement Agreement to be signed on the dates written below:

MARINA COAST WATER DISTRICT

_____
Remleh Scherzinger
General Manager

Date: _____ 2025

ATTEST:

_____
Paula Riso
Clerk to the Board

APPROVED AS TO FORM:

_____
Roger Masuda
District Legal Counsel

CITY OF MARINA

_____
Layne Long
City Manager

Date: _____ 2025

ATTEST: (Pursuant to Resolution No. 2025-__)

_____
Anita Shepherd- Sharp
Deputy City Clerk

_____
Rene A. Ortega
City Attorney

EXHIBIT A

"MCWD-RINCON Professional Services Agreement"

June 11, 2025 Item No. **10g(2)**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL TO CONSIDER ADOPTING RESOLUTION NO. 2025-, APPROVING AN AMENDMENT TO THE LEASE AGREEMENT BETWEEN THE CITY OF MARINA AND NEW CINGULAR WIRELESS PCS, LLC FOR CONSTRUCTION AND OPERATION OF A TELECOMMUNICATIONS FACILITY ON CITY-OWNED PROPERTY AT THE NORTHWEST CORNER OF CALIFORNIA AVE AND 3RD AVENUE (APN 031-201-005), AND AUTHORIZING CITY MANAGER TO EXECUTE THE AMENDMENT ON BEHALF OF THE CITY, SUBJECT TO FINAL REVIEW AND APPROVAL BY CITY ATTORNEY

REQUEST:
It is requested that the City Council:

1. Consider adopting Resolution No. 2025- , approving an Amendment to the Lease Agreement between the City of Marina (City) and New Cingular Wireless PCS, LLC for construction and operation of a telecommunications facility on City-owned property at the northwest corner of California and 3rd avenue; and

2. Authorizing the City Manager to execute the Amendment on behalf of the City, subject to final review and approval by City Attorney.

BACKGROUND:
At the regular meeting of September 19, 2023, the City Council of the City of Marina adopted Resolution No. 2023-96, authorizing a Lease Agreement between the City of Marina and New Cingular Wireless PCS, LLC for construction and operation of a telecommunications facility on city owned property at the northwest corner of California Avenue and 3rd Avenue.

ANALYSIS:
In order to provide power to the facility, PG&E requires access over the leased area. The original agreement did not provide clear construction authorization for the electrical connection to take place. The proposed amendment to the agreement will allow PG&E to access lease area and construct the necessary facilities to power the telecommunications equipment.

FISCAL IMPACT:
There is no fiscal impact should the City Council approve this request.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
Planning Commission found and determined, in accordance with the California Quality Act (CEQA), that the proposed project is exempt from environmental review per a Class 3 Categorical Exemption Section 15303 of CEQA for New Construction and Conversion of Small Structures.

CONCLUSION:
This request is submitted for City Council consideration and possible action.

Respectfully submitted,

_____

Edrie Delos Santos, PE
Engineering Division
Public Works Department

REVIEWED/CONCUR:

_____

Ismael Hernandez
Public Works Director
City of Marina

_____

Layne P. Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF MARINA APPROVING AN AMENDMENT TO THE LEASE AGREEMENT BETWEEN THE CITY OF MARINA AND NEW CINGULAR WIRELESS PCS, LLC FOR CONSTRUCTION AND OPERATION OF A TELECOMMUNICATIONS FACILITY ON CITY-OWNED PROPERTY AT THE NORTHWEST CORNER OF CALIFORNIA AVE AND 3RD AVENUE (APN 031-201-005), AND AUTHORIZING CITY MANAGER TO EXECUTE THE AMENDMENT ON BEHALF OF THE CITY, SUBJECT TO FINAL REVIEW AND APPROVAL BY THE CITY ATTORNEY

WHEREAS, at the regular meeting of September 19, 2023, the City Council of the City of Marina adopted Resolution No. 2023-96, authorizing a Lease Agreement between the City of Marina and New Cingular Wireless PCS, LLC for construction and operation of a telecommunications facility on city owned property at the northwest corner of California Avenue and 3rd Avenue, and;

WHEREAS, in order to provide power to the facility, PG&E requires access over the leased area. The original agreement did not provide clear construction authorization for the electrical connection to take place. The proposed amendment to the agreement will allow PG&E to access lease area and construct the necessary facilities to power the telecommunications equipment. There is no fiscal impact should the City Council approve this request, and;

WHEREAS, the Planning Commission found and determined, in accordance with the California Quality Act (CEQA), that the proposed project is exempt from environmental review per a Class 3 Categorical Exemption Section 15303 of CEQA for New Construction and Conversion of Small Structures.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Marina does hereby:

1. Approve an Amendment to the Lease Agreement between the City of Marina (City) and New Cingular Wireless PCS, LLC for construction and operation of a telecommunications facility on City-owned property at the northwest corner of California and 3rd avenue; and

2. Authorize the City Manager to execute the Amendment on behalf of the City, subject to final review and approval by City Attorney.

PASSED AND ADOPTED, at a regular meeting of the City Council of the City of Marina, duly held on the 1st day of July 2025, by the following vote:

AYES, COUNCIL MEMBERS:
NOES, COUNCIL MEMBERS:
ABSENT, COUNCIL MEMBERS:
ABSTAIN, COUNCIL MEMBERS:

_____
Bruce Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

Market: Northern California
Cell Site Number: CCL05573
Cell Site Name: California Ave. and Imjin Parkway (CA)
Fixed Asset Number: 15923553

FIRST AMENDMENT TO LAND LEASE AGREEMENT

THIS FIRST AMENDMENT TO LAND LEASE AGREEMENT ("**First Amendment**"), dated as of the latter of the signature dates below (the "**Effective Date**"), is by and between the City of Marina, a municipal corporation, having a mailing address of 211 Hillcrest Avenue, Marina, CA 93933 ("**Landlord**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, 3rd Floor, Atlanta, GA 30319 ("**Tenant**"). Landlord and Tenant may be hereinafter referred to collectively as the "**Parties**" and individually as a "**Party**".

WHEREAS, Landlord and Tenant entered into a Land Lease Agreement as of March 25, 2024 (the "**Agreement**"); and

WHEREAS, the Parties wish to confirm the easement and access rights associated with the utility route established in the Agreement.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Amendment to Access Provision**. Paragraph 12, "Access" is hereby amended to add the following:

> "In addition to the provisions of this Paragraph 12, and for the avoidance of any doubt regarding utility access rights, Landlord grants to Tenant and utility service supplier the right to receive utility services including, but not limited to electric facilities, appurtenances and associated equipment, and the right for the utility service supplier to excavate for, construct, reconstruct, replace (of initial or any other size), remove, maintain, inspect and use said utility facilities, together with the right for the utility service supplier to ingress and egress from said utility facilities across the Property as set forth in Exhibit 1-A. Landlord grants the right for the utility service supplier to trim or cut down any trees or brush within five (5) feet on each side of the centerline of said utility facilities if said utilities are underground and sixteen (16) feet on each side of the centerline of said utilities facilities if said facilities are above-ground. In addition, Landlord shall not erect or construct any building or other structure, or drill or operate any well within five (5) feet on each side of the centerline of said utility facilities if said utility facilities are underground and sixteen (16) feet on each side of the centerline of said utility facilities if said facilities are above-ground."

2. **Other Terms and Conditions Remain.** In the event of any inconsistencies between the Agreement and this First Amendment, the terms of this First Amendment shall control. Except as expressly set forth in this First Amendment, the Agreement otherwise is unmodified and remains in

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full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this First Amendment.

3. **Capitalized Terms**. All capitalized terms used but not defined herein shall have the meaning as defined in the Agreement; and

4. **Entirety; Counterparts**. This First Amendment, together with the Agreement, constitutes the entire agreement among the undersigned parties hereto. Any modification to this First Amendment must be in writing and signed and delivered by authorized representatives of the Parties in order to be effective. This First Amendment will be governed by the laws of the state in which the Premises is located. This First Amendment may be executed in any number of counterparts, each of which shall be an original, which may be delivered electronically, but all of which taken together shall constitute one instrument.

5. **Electronic Signatures.** The Parties that this First Amendment and any other documents to be delivered in connection herewith may be electronically signed, and that any electronic signatures appearing on this First Amendment or such other documents are the same as handwritten signatures for the purposes of validity, enforceability, and admissibility.

IN WITNESS WHEREOF, the parties have caused this First Amendment to be effective as of the last date written below.

"**Landlord**"

City of Marnia,
a municipal corporation

By: _____
Print Name: _____
Its:_____
Date: _____

"**Tenant**"

New Cingular Wireless PCS, LLC,
a Delaware limited liability company

By: AT&T Mobility Corporation
Its: Manager

By: _____
Print Name:_____
Its: _____
Date: _____

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Exhibit 1A

Page 1 of 2

Utility Services

PG&E Drawing entitled "Construction Sketch" dated 8/30/23 appears on following page

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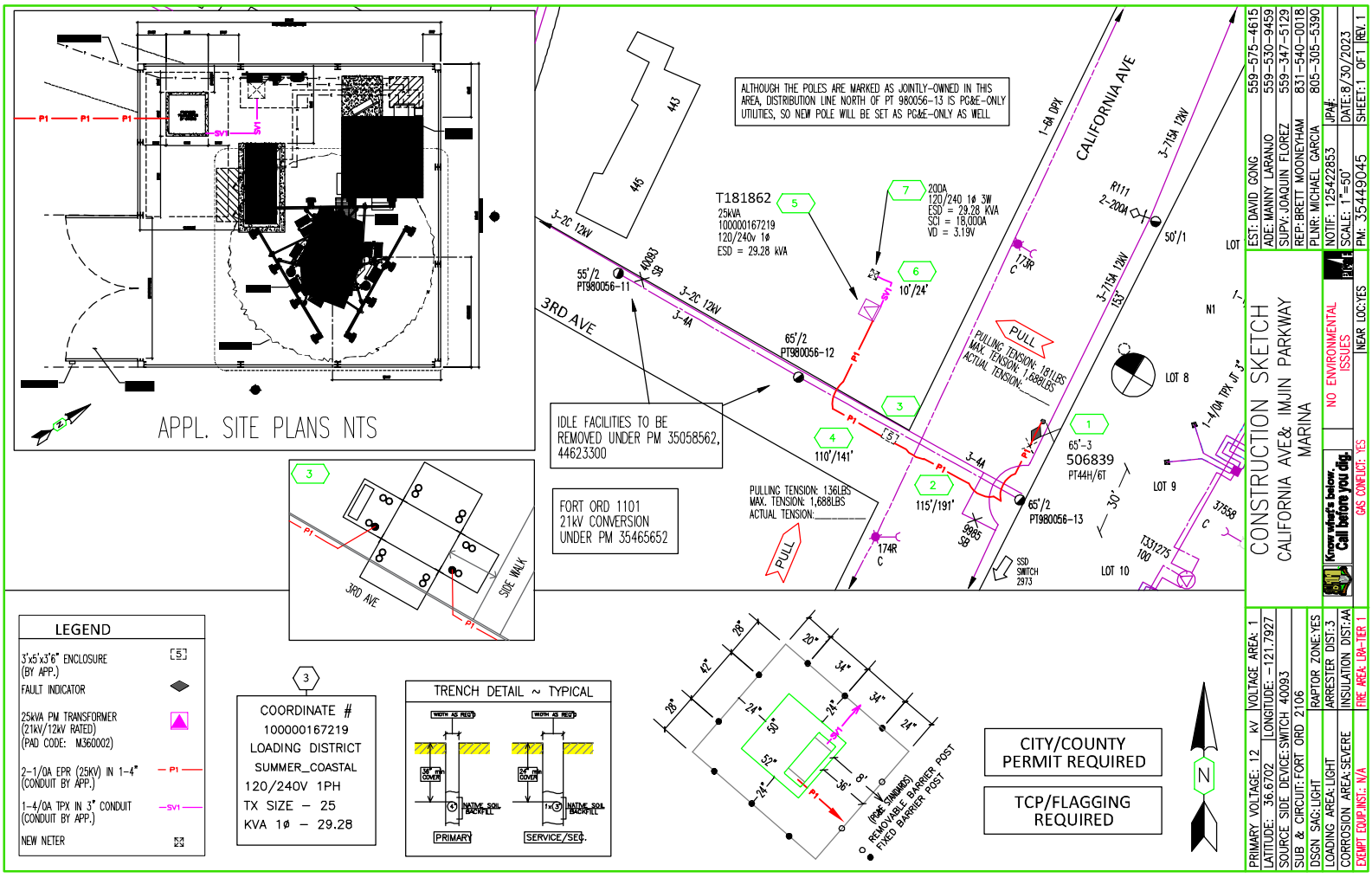

APPL. SITE PLANS NTS
ALTHOUGH THE POLES ARE MARKED AS JOINTLY-OWNED IN THIS AREA, DISTRIBUTION LINE NORTH OF PT 980056-13 IS PG&E-ONLY UTILITIES, SO NEW POLE WILL BE SET AS PG&E-ONLY AS WELL
T181862
25kVA
100000167219
120/240v 1ø
ESD = 29.28 kVA
200A
120/240 1ø 3W
ESD = 29.28 KVA
SCI = 18,000A
VD = 3.19V
CALIFORNIA AVE
3RD AVE
55'/2
PT980056-11
65'/2
PT980056-12
65'/2
PT980056-13
IDLE FACILITIES TO BE REMOVED UNDER PM 35058562, 44623300
FORT ORD 1101
21kV CONVERSION
UNDER PM 35465652
PULLING TENSION: 191LBS
MAX. TENSION: 1,688LBS
ACTUAL TENSION:
PULLING TENSION: 136LBS
MAX. TENSION: 1,688LBS
ACTUAL TENSION:
PULL
110'/141'
115'/191'
10'/24'
65'-3
506839
PT44H/6T
LOT 8
LOT 9
LOT 10
SSD SWITCH 2973
SIDE WALK
CONSTRUCTION SKETCH
CALIFORNIA AVE& IMJIN PARKWAY
MARINA
NO ENVIRONMENTAL ISSUES
Know what's below. Call before you dig.
LEGEND
3'x5'x3'6" ENCLOSURE (BY APP.)
FAULT INDICATOR
25kVA PM TRANSFORMER (21kV/12kV RATED) (PAD CODE: M360002)
2-1/0A EPR (25KV) IN 1-4" (CONDUIT BY APP.)
1-4/0A TPX IN 3" CONDUIT (CONDUIT BY APP.)
NEW METER
COORDINATE #
100000167219
LOADING DISTRICT
SUMMER_COASTAL
120/240V 1PH
TX SIZE – 25
KVA 1ø – 29.28
TRENCH DETAIL ~ TYPICAL
PRIMARY
SERVICE/SEC.
CITY/COUNTY PERMIT REQUIRED
TCP/FLAGGING REQUIRED
REMOVABLE BARRIER POST
FIXED BARRIER POST
EST: DAVID GONG 559-575-4615
ADE: MANNY LARANJO 559-530-9459
SUPV: JOAQUIN FLOREZ 559-347-5129
REP: BRETT MOONEYHAM 831-540-0018
PLNR: MICHAEL GARCIA 805-305-5390
NOTIF: 125422853
SCALE: 1"=50'
PM: 354490045
JPA#:
DATE: 8/30/2023
SHEET: 1 OF 1 REV: 1
PRIMARY VOLTAGE: 12 kV
LATITUDE: 36.6702
SOURCE SIDE DEVICE: SWITCH 40093
SUB & CIRCUIT: FORT ORD 2106
DSGN SAG: LIGHT
LOADING AREA: LIGHT
CORROSION AREA: SEVERE
EXEMPT EQUIP INST.: N/A
VOLTAGE AREA: 1
LONGITUDE: -121.7927
RAPTOR ZONE: YES
ARRESTER DIST: 3
INSULATION DIST: AA
FIRE AREA: LRA-TIER 1
GAS CONFLICT: YES
NEAR LOC: YES

June 27, 2025 Item No. **10g(3)**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL CONSIDER ADOPTING RESOLUTION NO. 2025-, AMENDING THE MEMORANDUM OF UNDERSTANDING (MOU) REGARDING COOPERATIVE ASSISTANCE TO COMPLY WITH SENATE BILL 1383, FOOD WASTE REDUCTION AND ORGANICS RECYCLING REGULATIONS, INCORPORATING CHANGES IN THE ANNUAL COST OF PROGRAM ACTIVITIES, AUTHORIZING THE CITY MANAGER TO EXECUTE THE MOU SUBJECT TO FINAL REVIEW AND APPROVAL BY THE CITY ATTORNEY, AND AUTHORIZING THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES.

REQUEST:

It is requested that the City Council consider adopting Resolution 2025- for the following action:

1. Amending the Memorandum of Understanding (MOU) regarding cooperative assistance to comply with Senate Bill 1383, Food Waste Reduction and Organics Recycling Regulations, incorporating changes in the annual cost of program activities; and
2. Authorizing the City Manager to execute the amended MOU with revised **EXHIBIT A** and **EXHIBIT B** subject to final review and approval by the City Attorney; and
3. Authorizing the Finance Director to make necessary accounting and budgetary entries.

BACKGROUND:

The State of California has passed legislation, known as Senate Bill 1383, California's Short-Lived Climate Pollutants legislation. The regulation has significant impact on each Member Agency with the goal of reducing organic material being landfilled by 75% by 2025, compared to a 2014 basis. The legislation mandates that Member Agencies undertake certain activities around the handling of organic waste materials collected within their jurisdictions. The regulation also requires 20% recovery of edible food by 2025 to direct it to a beneficial use and thus, prevent it from entering the waste stream. Regulations took effect and local program implementation began on January 1, 2022.

The City of Marina is a Member Agency of ReGen Monterey (ReGen), formerly known as MRWMD Joints Powers Authority, which is responsible for managing solid waste on behalf of the Cities and unincorporated County communities of coastal Monterey County. The City participates on the Technical Advisory Committee (TAC) for SB 1383 led by ReGen and comprised of staff from each member jurisdiction, the three haulers in the ReGen service area, and ReGen staff.

While the regulation places the program implementation responsibility on the member jurisdictions, the TAC has been collectively analyzing who best should implement each element of the regulation between the member jurisdictions, waste haulers, or ReGen. The TAC determined that many of the requirements are best completed using shared resources. As such, an MOU between ReGen and each of its member jurisdictions was created to have ReGen incur the shared costs and bill each member jurisdiction twice annually for reimbursement. The City Council adopted Resolution 2021-93 on August 17th, 2021 approving the MOU between ReGen and Member Jurisdictions for SB 1383 Shared Costs. Since the MOU was adopted in 2021, the Member Agencies have annually adopted revisions to Exhibits A and B of the MOU which establish member agency costs for FY 2025-2026.

ANALYSIS:
Each year ReGen staff identifies expected expenses associated with jurisdictional compliance with SB 1383 and compiles those expenses in Exhibit A of the SB 1383 Shared Costs MOU. Expenses include items such as program administration, public education, monitoring, reporting and edible food recovery capacity building, program administration and outreach. These expenses are then broken down to proportional percentages per population in Exhibit B. The draft budget is first presented to the TAC for review, feedback, and consensus. It then is presented to the ReGen Monterey Board of Directors and Member Agencies' Councils and Boards for approval. The amendment to Exhibits A and B of the MOU would supersede exhibits covering previous fiscal years.

On May 23, 2025, the ReGen Board of Directors approved revised Exhibits A and B of the MOU which establish member agency costs for FY 2025-2026.

FISCAL IMPACT:
The estimated annual expense to Marina for FY 2025-2026 will be $69,729 as shown in Exhibit B of the draft MOU (see Attachment), which outlines the estimated annual expenses to each Member Agency of ReGen. This is an increase of $9,747 from FY 2024-2025. These expenses are averaged and weighted on various factors providing an "economy of scale" to each Member Agency depending upon their needs. This includes expenses related to SB 1383 implementation, general shared and monitoring costs for Member Agencies, and franchise agreement management. These efforts, as with past solid waste efforts, are funded through franchise fees collected and remitted to the City.

CONCLUSION:
This request is submitted for City Council consideration and action.

EXHIBITS:
Exhibit A – Revised Exhibit A of the Memorandum of Understanding for FY 2025-2026.
Exhibit B – Revised Exhibit B of the Memorandum of Understanding for FY 2025-2026
Exhibit C – Memorandum of Understanding for 2024-2025

Respectfully submitted,

_____
Ismael Hernandez
Public Works Director
City of Marina

_____
Layne Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARINA AMENDING THE MEMORANDUM OF UNDERSTANDING (MOU) REGARDING COOPERATIVE ASSISTANCE TO COMPLY WITH SENATE BILL 1383, FOOD WASTE REDUCTION AND ORGANICS RECYCLING REGULATIONS, INCORPORATING CHANGES IN THE ANNUAL COST OF PROGRAM ACTIVITIES, AUTHORIZING THE CITY MANAGER TO EXECUTE THE MOU SUBJECT TO FINAL REVIEW AND APPROVAL BY THE CITY ATTORNEY, AND AUTHORIZING THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUDGETARY ENTRIES.

WHEREAS, in September 2016, Governor Edmund Brown Jr. set methane emissions reduction targets for California (SB 1383 Lara, Chapter 395, Statutes of 2016) in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP); and

WHEREAS, the City of Marina is a Member Agency of ReGen Monterey (ReGen), formerly known as MRWMD Joints Powers Authority, which is responsible for managing solid waste on behalf of the Cities and unincorporated County communities of coastal Monterey County. The City participates on the Technical Advisory Committee (TAC) for SB 1383 led by ReGen and comprised of staff from each member jurisdiction, the three haulers in the ReGen service area, and ReGen staff; and

WHEREAS, while the regulation places the program implementation responsibility on the member jurisdictions, the TAC has been collectively analyzing who best should implement each element of the regulation between the member jurisdictions, waste haulers, or ReGen. The TAC determined that many of the requirements are best completed using shared resources. As such, an MOU between ReGen and each of its member jurisdictions was created to have ReGen incur the shared costs and bill each member jurisdiction twice annually for reimbursement. The City Council adopted Resolution 2021-93 on August 17th, 2021 approving the MOU between ReGen and Member Jurisdictions for SB 1383 Shared Costs; and

WHEREAS, each year ReGen staff identifies expected expenses associated with jurisdictional compliance with SB 1383 and compiles those expenses in Exhibit A of the 1383 Shared Costs MOU. Expenses include items such as program administration, public education, monitoring, reporting and edible food recovery capacity building, program administration and outreach. These expenses are then broken down to proportional percentages per population in Exhibit B. The draft budget is first presented to the TAC for review, feedback, and consensus. It then is presented to the ReGen Monterey Board of Directors and Member Agencies' Councils and Boards for approval. The amendment to Exhibits A and B of the MOU would supersede exhibits covering previous fiscal years; and

WHEREAS, on May 25, 2025, the ReGen Board of Directors approved revised Exhibits A and B of the MOU which establish member agency costs for FY 202-2026;

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of Marina does hereby:

1. Amend the Memorandum of Understanding (MOU) regarding cooperative assistance to comply with Senate Bill 1383, Food Waste Reduction and Organics Recycling Regulations, incorporating changes in the annual cost of program activities; and

2. Authorize the City Manager to execute the amended MOU (Exhibit A) subject to final review and approval by the City Attorney; and

3. Authorize the Finance Director to make necessary accounting and budgetary entries.

PASSES AND ADOPTED, by the City Council of the City of Marina at a regular meeting duly held on the 4th day of June 2024 by the following vote:

AYES, COUNCIL MEMBERS:
NOES, COUNCIL MEMBERS:
ABSENT, COUNCIL MEMBERS:
ABSTAIN, COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

EXHBIT A

DETAILED ACTIVITIES & COSTS
FY 2025-2026

Scope of Work

The activities related to the implementation of SB 1383 may include contracting and policy development; public education; materials purchasing and distribution; reporting; contamination monitoring; edible food waste recovery; enforcement; procurement; organics processing; rate setting; cost monitoring; and any other related activities the Parties choose to address.

The District will take the lead producing public education campaigns in concert with the already provided Hauler and/or Member Agency resources. The Member Agencies will be responsible for production and mailing fees associated with outreach. The District will also contract with a vendor to administer contamination monitoring in the form of curbside lid flipping. The District will also provide CalRecycle reporting services to the Member Agencies. In addition, funds will be allocated to food recovery organizations for procurement of refrigerated holding facilities or transport vehicles to support edible food recovery efforts.

Costs

SB 1383 Fee Category	Detail	FY 25/26 Budget	Notes
HF&H General Support & TAC meetings	Task #5 (general support) & task #6 (monthly TAC meetings) of HF&H FY 2026 proposal	$ 20,500	
Edible Food Recovery Capacity Building	$50,000 for ReGen portion of grant allocations $10,500 for grant administration	$ 60,500	Grants offered jointly by ReGen & SVR. County is omitted from this line item.
Edible Food Recovery Program Administration	Assessment Updates - Living Document FRO Annual Capacity Survey Updates Other support (TBD): Edible Food Outreach - Follow-up target groups Organics Collections Outreach - Follow-up target groups School Food Waste Reductions - Targeted groups Conference presentations	$ 17,700	ReGen member agency portion only. Split 50/50 with SVR.
Edible Food Generator Inspections for Tier 1 & 2		$ 4,838	Omits County of Monterey as they perform their own inspections
Public Education	Design/creation of public education materials. Does not include production or distribution of materials created.	$ 10,000	
Contamination Monitoring (Lid Flipping)		$ 18,000	Omits County of Monterey due to WM Smart Truck.
Recyclist Fees	Cloud-based recordkeeping and reporting system shared by haulers, jurisdictions and processor.	$ 13,665	Omits County & City of Monterey, who subscribe separately.
ReGen Monterey Staff Time	Coordination and Hosting of Monthly TAC Meetings Hosting and/or participating in TAC Subcommittees SB 1383 Program Coordination and Development of Pub Edu CalRecycle Reporting Outreach at Community Events School Outreach & Compliance Coordination with Sustainability Groups	$ 60,000	
Total		**$ 205,203**	

HF&H Franchise Management Fees		
Task #	**Detail**	**FY 25/26 Budget**
1. Review Contractor's Quarterly Reports		$16,000
2. Review Contractor's Annual Report		$3,000
3. Review Franchise Fee Payments		$2,500
4. Review Contractor's Annual Rate Adjustments		$50,000
8. Monitor Contract Compliance		$24,000
One-time catch-up from Q1 & Q2 2023 when billing switched from CY to FY to match MOU		$26,059
Total		**$121,559**

These fees are charged to ReGen Monterey by HF&H and are to be billed to the GreenWaste Recovery member jurisdictions only (omitting the City and County of Monterey).

Exhibit A Total	**$**	**326,762**

EXHBIT B

MEMBER AGENCIES' ANNUAL PROPORTIONATE SHARES & COSTS*
FY 2025-2026

County Participation in Entire MOU

	Population			
	#	%	Per Agency Cost/Year	With $5,000 Minimum
Carmel	3,830	2.4%	$ 4,908	$ 5,000
DRO	1,525	1.0%	$ 1,954	$ 5,000
Marina	21,981	13.7%	$ 28,167	$ 27,151
PG	15,522	9.7%	$ 19,890	$ 19,173
PBCSD	4,531	2.8%	$ 5,806	$ 5,000
Sand City	310	0.2%	$ 397	$ 5,000
Seaside	33,956	21.2%	$ 43,513	$ 41,942
Monterey City	28,352	17.7%	$ 36,331	$ 35,020
County	50,128	31.3%	$ 64,236	$ 61,918
TOTAL	160,135		$ 205,203	$ 205,203

Edible Food Activities

	Population			
	#	%	Per Agency Cost/Year	With $4,000 Minimum
Carmel	3,830	3.5%	$ 2,026	$ 4,000
DRO	1,525	1.4%	$ 807	$ 4,000
Marina	21,981	20.0%	$ 11,629	$ 9,294
PG	15,522	14.1%	$ 8,212	$ 6,563
PBCSD	4,531	4.1%	$ 2,397	$ 4,000
Sand City	310	0.3%	$ 164	$ 4,000
Seaside	33,956	30.9%	$ 17,965	$ 14,357
Monterey	28,352	25.8%	$ 15,000	$ 11,987
County	50,128		$ 20,000	$ 20,000
TOTAL	160,135		$ 78,200	$ 78,200

Remainder of Costs

	Population			
	#	%	Per Agency Cost/Year	With $4,000 Minimum
Carmel	3,830	3.5%	$ 4,422	$ 4,213
DRO	1,525	1.4%	$ 1,761	$ 4,000
Marina	21,981	20.0%	$ 25,377	$ 24,182
PG	15,522	14.1%	$ 17,920	$ 17,076
PBCSD	4,531	4.1%	$ 5,231	$ 4,985
Sand City	310	0.3%	$ 358	$ 4,000
Seaside	33,956	30.9%	$ 39,202	$ 37,356
Monterey City	28,352	25.8%	$ 32,732	$ 31,191
County			$ -	$ -
TOTAL	110,007		$ 127,003	$ 127,003

Total County in EFR Only (Before other HFH Costs)

	Population			
	#	%	Per Agency Cost/Year	With $8,000 Minimum
Carmel	3,830	2.4%	$ 6,448	$ 8,213
DRO	1,525	1.0%	$ 2,567	$ 8,000
Marina	21,981	13.7%	$ 37,006	$ 33,475
PG	15,522	9.7%	$ 26,132	$ 23,639
PBCSD	4,531	2.8%	$ 7,628	$ 8,985
Sand City	310	0.2%	$ 522	$ 8,000
Seaside	33,956	21.2%	$ 57,167	$ 51,713
Monterey City	28,352	17.7%	$ 47,732	$ 43,178
County	50,128	31.3%	$ 20,000	$ 20,000
TOTAL	160,135		$ 205,203	$ 205,203

Contract Management

	Population			
	#	%	Per Agency Cost/Year	With $6,000 Minimum
Carmel	3,830	4.7%	$ 5,702	$ 6,000
DRO	1,525	1.9%	$ 2,270	$ 6,000
Marina	21,981	26.9%	$ 32,723	$ 29,956
PG	15,522	19.0%	$ 23,107	$ 21,153
PBCSD	4,531	5.5%	$ 6,745	$ 6,175
Sand City	310	0.4%	$ 461	$ 6,000
Seaside	33,956	41.6%	$ 50,550	$ 46,275
TOTAL	81,655		$ 121,559	$ 121,559

Total Costs - Full County Participation

	Population			
	#	%	Per Agency Cost/Year	With Minimums
Carmel	3,830	2.4%	$ 10,610	$ 11,000
DRO	1,525	1.0%	$ 4,224	$ 11,000
Marina	21,981	13.7%	$ 60,890	$ 57,106
PG	15,522	9.7%	$ 42,998	$ 40,326
PBCSD	4,531	2.8%	$ 12,551	$ 11,175
Sand City	310	0.2%	$ 859	$ 11,000
Seaside	33,956	21.2%	$ 94,062	$ 88,217
Monterey City	28,352	17.7%	$ 36,331	$ 35,020
County	50,128	31.3%	$ 64,236	$ 61,918
TOTAL	160,135		$ 326,762	$ 326,762

Member agencies will be invoiced an annual amount not to exceed column below titled "with minimums."

Total Costs - County in EFR Only

	Population			
	#	%	Per Agency Cost/Year	With Minimums
Carmel	3,830	2.4%	$ 12,150	$ 14,213
DRO	1,525	1.0%	$ 4,838	$ 14,000
Marina	21,981	13.7%	$ 69,729	$ 63,431
PG	15,522	9.7%	$ 49,240	$ 44,792
PBCSD	4,531	2.8%	$ 14,373	$ 15,160
Sand City	310	0.2%	$ 983	$ 14,000
Seaside	33,956	21.2%	$ 107,717	$ 97,988
Monterey City	28,352	17.7%	$ 47,732	$ 43,178
County	50,128	31.3%	$ 20,000	$ 20,000
TOTAL	160,135		$ 326,762	$ 326,762

*Member Agencies' proportionate costs subject to adjustment annually in accordance with any change in scope and total costs.

MEMORANDUM OF UNDERSTANDING

BETWEEN THE MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT AND ITS MEMBER AGENCIES REGARDING ASSISTANCE WITH COMPLIANCE WITH CALIFORNIA SENATE BILL 1383

This Memorandum of Understanding ("MOU") is made and entered into as of the date of the signatures set forth below by and between the MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT ("District", "MRWMD"), a California Garbage and Refuse Disposal District, and its member agencies including the cities of CARMEL-BY-THE-SEA, DEL REY OAKS, MARINA, MONTEREY, PACIFIC GROVE, SAND CITY, and SEASIDE; THE PEBBLE BEACH COMMUNITY SERVICES DISTRICT; and THE COUNTY OF MONTEREY ("Member Agencies"). Collectively these entities shall be known herein as "Parties" or individually as a "Party."

Recitals

A. The State of California has passed legislation, known as Senate Bill 1383, California's Short-Lived Climate Pollutants regulation. The regulation will have significant impact on each Member Agency, with the goal of reducing organic material being landfilled by 75% by 2025, compared to a 2014 basis. The legislation mandates that Member Agencies undertake certain activities around the handling of organic waste materials collected within their jurisdictions. The regulation also requires 20% recovery of edible food by 2025 to direct it to a beneficial use and thus prevent it from entering the waste stream. Regulations take effect, and local program implementation will begin, on January 1, 2022.

B. The Member Agencies have determined that it is in their best interest to coordinate their activities related to this legislation. This coordination is being facilitated by the District's Technical Advisory Committee (TAC) comprised of staff from each Member Agency, the three Haulers in the District service area (Haulers), Salinas Valley Recycles (SVR) and MRWMD.

C. The Member Agencies have further determined that the District has the expertise and resources necessary to implement some of these activities on the Member Agencies' behalf and have now requested that the District incur costs to provide these activities.

D. The Member Agencies have agreed to reimburse the District for proportionate shares of certain designated annual costs incurred by the District for these activities.

E. The form and content of this MOU have been presented to the TAC, and the TAC has recommended it for approval by the Parties

NOW THEREFORE, in consideration of the mutual benefits to be derived by the District and the Member Agencies, and of the promises contained in this MOU, the Parties agree as

follows:

Section 1. Recitals: The recitals set forth above are incorporated into this MOU.

Section 2. Purpose: The purpose of this MOU is to provide a structure for the Member Agencies to reimburse the District for SB 1383 related activities it performs on behalf of the Member Agencies.

Section 3. Voluntary: This MOU is voluntarily entered into by the Parties for the purpose of facilitating the implementation of SB 1383.

Section 4. Term: This MOU shall become effective on the last day of its execution by a Party and shall remain in effect until terminated by the Parties.

Section 5. Scope of Work, Costs & Cost Sharing: The scope of work, and associated costs, are set out in Exhibit A, entitled Detailed Activities and Costs, attached hereto and incorporated herein. Allocation of such costs to the Member Agencies is set out in Exhibit B, entitled Member Agencies' Annual Proportionate Shares and Costs, attached hereto and incorporated herein. Exhibit C outlines estimated individual Member Agencies' allocations related to the Department of Resources Recycling and Recovery (CalRecycle) SB 1383 Local Assistance Grant Program (OWR1: 2021-22), attached hereto and incorporated herein. Exhibit D defines the estimated annual procurement requirements of organic material and estimated cost per ton of compost for each Member Agency, attached hereto and incorporated herein.

No later than March 1 of each year, and at such other times as directed by the Parties, the TAC shall meet to consider and, if deemed necessary, modify Exhibits A, B, C, and/or D subject to direction from the governing bodies of each Member Agency to its TAC representative.

Section 6. The District Agrees:

(a) District staff will manage activities as identified in Exhibit A, C, and D which activities include contracting with third party vendors when reasonably necessary and paying those vendors for contracted costs.

(b) Two times per year, on dates to be determined by the TAC, District will invoice Member Agencies for each Member Agency's proportionate share of costs as shown in Exhibit B with each invoice to be fifty percent (50%) of the Member Agency's share of costs.

(c) Upon award of CalRecycle SB 1383 Local Assistance Grant Program funds, the District will invoice Member Agencies for their full allocation of grant funds as shown in Exhibit C. Four times during the grant term, aligned with dates identified by CalRecycle grant Terms & Conditions, the District shall report to Member Agencies a summary of actual grant expenditures and progress toward grant tasks to date.

(d) District will maintain an accounting of activities and expenses and provide reconciliation of payments annually. Material differences between estimated costs and actual incurred costs will result in either: 1) an adjustment made to the final annual payment for each Member Agency, or 2) such cost difference shall be incorporated into the subsequent year cost allocation.

(e) In year one only, in recognition of expected continuation of improved recycling revenues for the District from recyclable material sales, the District will off-set $140,000 of the costs identified in Exhibit A. This off-set is reflected in the cost allocations set out in Exhibit B for FY 2021-22.

Section 7. The Member Agencies Agree:

(a) To reimburse the District for all expenses incurred by the District under this MOU in accordance with each Member Agency's proportionate share as shown on Exhibit B, C, and D.

(b) To make a full-faith effort to cooperate with one another and with the District to achieve the purposes of this MOU by providing information, reviewing information in a timely manner, and informing their respective administration and governing bodies.

Section 8. Termination. Any Party may terminate its participation in this MOU upon giving written notice to the District no later than April 1 of any calendar year during the term of this MOU. Within ten days following a Party's termination date, such party shall pay District all charges then due and payable and shall pay when determined any additional charges that shall later come due under the MOU, subject to the limits set out in Exhibits A, B, C, and D.

Section 9. General Provisions.

(a) This MOU is binding and for the benefit of the respective successors, heirs, and assigns of each Party and the District; provided however, no Party may assign its respective rights or obligations under this MOU without the prior written consent of the District.

(b) This MOU is governed by, interpreted under, and construed and enforced in accordance with the laws of the State of California.

(c) If any provision of this MOU is determined by any court to be invalid, illegal, or unenforceable to any extent, then the remainder of this MOU will not be affected, and this MOU will be construed as if the invalid, illegal, or unenforceable provision had never been contained in this MOU.

(d) Waiver by the District or any Party to this MOU of any term, condition, or covenant of this MOU will not constitute a waiver of any other term, condition, or covenant.

Waiver by the District or any Party of any breach of the provisions of this MOU will not constitute a waiver of any other provision, nor a waiver of any subsequent breach or violation of any provision of this MOU.

(e) This MOU may be executed in any number of counterparts, each of which is an original but all of which taken together will constitute one and the same instrument, provided, however, that such counterparts have been delivered to all parties to this MOU.

(f) All parties acknowledge they have been represented, or have had the opportunity to be represented, by counsel in the preparation and negotiation of this MOU. Accordingly, this MOU will be construed according to its fair language. Any ambiguities will be resolved in a collaborative manner by the District and the Parties and must be rectified by amending this MOU.

IN WITNESS WHEREOF, the District and the Parties have caused this MOU to be executed by their duly authorized representatives as of the date of their respective signatures.

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF CARMEL-BY-THE-SEA

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF DEL REY OAKS

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF MARINA

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF MONTEREY

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF PACIFIC GROVE

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

SAND CITY

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

CITY OF SEASIDE

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

PEBBLE BEACH COMMUNITY SERVICES DISTRICT

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

COUNTY OF MONTEREY

By: _____ DATE: _____

APPROVED AS TO FORM:

_____

EXHIBIT A

DETAILED ACTIVITIES & COSTS
FY 2024-2025

Scope of Work

The activities related to the implementation of SB 1383 may include contracting and policy development; public education; materials purchasing and distribution; reporting; contamination monitoring; edible food waste recovery; enforcement; procurement; organics processing; rate setting; cost monitoring; and any other related activities the Parties choose to address.

The District will take the lead producing public education campaigns in concert with the already-provided Hauler and/or Member Agency resources. The Member Agencies will be responsible for production and mailing fees associated with outreach. The District will also contract with a vendor to administer contamination monitoring in the form of curbside lid flipping. The District will also provide CalRecycle reporting services to the Member Agencies. In addition, funds will be allocated to food recovery organizations for procurement of refrigerated holding facilities or transport vehicles to support edible food recovery efforts.

Costs

SB 1383 Fee Category	Detail	FY 24/25 Cost	Notes
HF&H General Support & TAC meetings	Task #5 (general support) & task #6 (monthly TAC meetings) of HF&H FY 2025 proposal	$ 20,500	
Edible Food Recovery Capacity Building	$40,000 for grant allocations. $10,000 for grant administration.	$ 50,000	Grants offered jointly by ReGen & SVR. SVR allocating $60k. ReGen allocating $50k (inclusive of $10k for grant admin) as County is omitted from this line item.
Edible Food Recovery Program Administration	Assessment Updates - Living Document Generation Estimate Update-Using ReGen WCS FRO Capacity Survey - Annual Update Conference Presentations (CRRA) and Other Support TBD EFR E&O - Cycle 2 - Tier 1&2 Follow-up target groups TBD Organics Collections E&O - Target Groups TBD School Food Waste Reductions - Targeted Groups TBD Total split 50/50 with Salinas Valley Recycles	$ 25,000	ReGen member agency portion only. Split 50/50 with SVR. Omits County of Monterey.
Edible Food Generator Inspections for Tier 1 & 2		$ 4,000	Omits County of Monterey.
Public Education	Design/creation of public education materials. Does not include production or distribution of materials created.	$ 20,000	
Contamination Monitoring (Lid Flipping)		$ 15,000	Omits County of Monterey due to WM Smart Truck.
Recyclist Fees	Cloud-based recordkeeping and reporting system shared by haulers, jurisdictions and processor.	$ 12,912	Omits County & City of Monterey, who subscribe separately.
ReGen Monterey Staff Time	Coordination and Hosting of Monthly TAC Meetings Hosting and/or participating in TAC Subcommittees SB 1383 Program Coordination and Development of Pub Edu CalRecycle Reporting Outreach at Community Events School Outreach & Compliance Coordination with Sustainability Groups	$ 50,000	
Total		**$ 197,412**	

EXHIBIT A

DETAILED ACTIVITIES & COSTS
FY 2024-2025 (CONTINUED)

HF&H Franchise Management Fees

Task #	Detail	FY 2025	
1	Review Contractor's Quarterly Reports	$	12,500.00
2	Review Contractor's Annual Report	$	2,500
3	Review Franchise Fee Payments	$	2,500
4	Review Contractor's Annual Rate Adjustments	$	50,000
7	Develop New Reporting Templates	$	8,000
8	Monitor Contract Compliance	$	24,000
	Total	**$**	**99,500**

These fees are charged to ReGen Monterey by HF&H and are to be billed to the GreenWaste Recovery member jurisdictions only (omitting the City and County of Monterey).

EXHIBIT B

MEMBER AGENCIES' ANNUAL PROPORTIONATE SHARES & COSTS*
FY 2024-2025

	Population			
	#	%	Per Agency Cost/Year	With Minimums
Carmel	3,830	2.4%	$ 11,018	$ 11,225
DRO	1,525	1.0%	$ 4,387	$ 9,000
Marina	21,981	13.7%	$ 63,233	$ 59,982
PG	15,522	9.7%	$ 44,653	$ 42,357
PBCSD	4,531	2.8%	$ 13,034	$ 12,821
Sand City	310	0.2%	$ 892	$ 9,000
Seaside	33,956	21.2%	$ 97,682	$ 92,660
Monterey City	28,352	17.7%	$ 47,013	$ 44,867
County	50,128	31.3%	$ 15,000	$ 15,000
TOTAL	**160,135**		**$ 296,912**	**$ 296,912**

*Member Agencies' proportionate costs subject to adjustment annually in accordance with any change in scope and total costs. Costs "with minimums" will be utilized.

EXHIBIT C

MEMBER AGENCIES' ESTIMATED ALLOCATION OF CALRECYCLE LOCAL ASSISTANCE GRANT PROGRAM FUNDING (OWR1: 2021-22)**

The Member Agencies of Carmel, Del Rey Oaks, Marina, Monterey, Sand City, Seaside, Pacific Grove, and the Pebble Beach Community Services District (PBCSD) join the Local Assistance Grant Program as a regional collaborative project for the implementation of regulation requirements associated with SB 1383, in coordination with other jurisdictions of the Monterey County region to maximize project impact and cost-effectiveness across the countywide area. This regional grant-funded project will be coordinated through the two local waste management governmental agencies within Monterey County, Monterey Regional Waste Management (MRWMD), and Salinas Valley Solid Waste Authority (SVSWA).

The Member Agencies, along with each of the MRWMD and SVSWA member agencies are applying individually to this grant program using a unified regional project design, budget and implementation approach. All participating jurisdictions' individual grant funding will be pooled together and expended in a cooperative manner by their agencies' respective waste districts, MRWMD and SVSWA. The County of Monterey is applying separately and will manage its budget and project implementation independently, in coordination with broader regional planning efforts.

Based on current regional needs and findings to date related to SB 1383 in Monterey County, the following four major components will comprise the principal focus areas of program expenditures under the proposed regional project approach:

1) Grant Management, Tracking & Reporting
2) Agency Procurement Support
3) Edible Food Recovery Implementation and Capacity Building
4) Organics & Edible Food Recovery Education, Outreach and Technical Assistance

Each element will be informed by regional coordination through the established MRWMD and SVSWA Technical Advisory Committee forums, Capacity Planning Assessments and related studies completed or in process throughout the region, and new data and information obtained through program implementation trials, stakeholder feedback and best practices as identified. All expenditures will be incurred jointly, facilitated through each respective waste agency, and tracked and reported by each jurisdiction, based on the percentage of grant funds received by each agency compared to the full funding received collectively by all participating member agencies. CalRecycle, based on per capita calculations, using the Department of Finance's January 2021 population statistics, estimates jurisdictions' proportionate grant allocations. A summary of individual and collective agency grant allocations is presented below as **Table 1**.

Table 1. Thirteen Agency Collaborative Approach Budget Summary

Agencies	Estimated Funding	% of District Subtotal	% of Region Total	Waste District
Carmel-by-the-Sea	$20,000	9%	4%	MRWMD
Del Rey Oaks	$20,000	9%	4%	MRWMD
Marina	$29,771	14%	6%	MRWMD
Monterey	$38,247	18%	7%	MRWMD
Pacific Grove	$21,398	10%	4%	MRWMD
Sand City	$20,000	9%	4%	MRWMD
Seaside	$43,151	20%	8%	MRWMD
Pebble Beach Community Services District	$20,000	9%	4%	MRWMD
Subtotal (MRWMD):	**$212,566**	**100%**	**41%**	
Gonzales	$20,000	6%	4%	SVSWA
Greenfield	$25,157	8%	5%	SVSWA
King City	$20,665	7%	4%	SVSWA
Salinas	$211,143	68%	40%	SVSWA
Soledad	$33,095	11%	6%	SVSWA
Subtotal (SVSWA):	**$310,060**	**100%**	**59%**	
TOTAL (13 Agency Regional Approach):	**$522,626**		**100%**	

** Working in coordination with the designated CalRecycle grant manager or other agency representatives as appropriate, the region may adjust these proposed expenditure areas, amounts, or priorities, consistent with grant expenditure eligibility requirements, as needed during the course of the grant term based on the needs of the region.

EXHIBIT D
MEMBER AGENCIES' ESTIMATED PROCURMENT REQUIRMENTS
OF ORGANIC MATERIAL

The list below indicates the annual recovered organic waste product procurement targets for each jurisdiction (city, county, or city and county) that will be in effect from January 1, 2022, through December 31, 2026 per CalRecycle.

Member Jurisdiction	Population (1/1/21 estimate)	% of Population	Annual Procurement Target (Tons of Organic Waste)	Tons of Compost (.58)	Cost /Ton Compost	Cost of Compost
Carmel-by-the-Sea	4,023	1%	322	187	$ 28.00	$ 5,229.28
Del Rey Oaks	1,670	0%	134	78	$ 28.00	$ 2,176.16
Marina	21,920	7%	1,754	1,017	$ 28.00	$ 28,484.96
Monterey	28,382	8%	2,271	1,317	$ 28.00	$ 36,881.04
Pacific Grove	15,536	5%	1,243	721	$ 28.00	$ 20,186.32
Sand City	385	0%	31	18	$ 28.00	$ 503.44
Seaside	32,121	10%	2,570	1,491	$ 28.00	$ 41,736.80
Pebble Beach CSD	4531	1%	362	210	$ 28.00	$ 5,878.88
Unincorporated County*						$ -
Total MRWMD	**108,568**	**32%**	**8,687**	**5,038**		**$ 141,076.88**

*Unincorporated County not participating in procurement portion of MOU
All product quoted as unbagged F.O.B MRWMD site.
Transportation costs are not included.

June 27, 2025 Item No. **10g(4)**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL TO CONSIDER ADOPTING RESOLUTION NO. 2025-, AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT TO WALD, RUHNKE & DOST ARCHITECTS, LLP (WRD) FOR ARCHITECTURAL AND DESIGN SERVICES FOR THE FIRE STATION #2 EXPANSION PROJECT; AND AUTHORIZING THE CITY MANAGER OR DESIGNEE TO EXECUTE CONTRACT DOCUMENTS SUBJECT TO FINAL REVIEW AND APPROVAL BY THE CITY ATTORNEY; AND AUTHORIZING THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUGETARY ENTRIES.

REQUEST: It is requested that the City Council:

1. Consider adopting Resolution No. 2025- authorizing a professional services agreement with Wald, Ruhnke & Dost Architects, LLP (WRD) for architectural and design services for the Fire Station #2 Expansion Project beginning July 2, 2025, in an amount not to exceed $131,475.00.
2. Authorize the City Manager or designee to execute the agreement on behalf of the City subject to final review and approval by the City Attorney.
3. Authorize the Finance Director to make necessary accounting and budgetary entries.

BACKGROUND:

Fire Station #2, located at the Marina Municipal Airport, plays a crucial role in delivering emergency fire services to the City of Marina and surrounding areas. Over time, the station's existing facilities have become insufficient to meet current operational needs. Fire Department staff have outgrown the station, which now necessitates an expansion to accommodate additional personnel, equipment, and improved facilities. Presently, the station houses a crew of 3-4 firefighters on duty, including both male and female staff, who share a single bathroom and shower, an inadequate setup for the current staffing levels. Storage space is limited, affecting the storage of personal items, department supplies, and protective gear. The existing office areas do not provide sufficient privacy or space, and storage for PPE such as firefighter turnouts is suboptimal, being stored in the engine bay exposed to exhaust fumes..

ANALYSIS:

The proposed expansion aims to address these deficiencies by increasing the size and functionality of Fire Station #2. Key improvements include:

- Expanding housing and crew facilities to support current staffing levels and future growth
- Providing additional restrooms and shower facilities to ensure adequate sanitation for all personnel
- Increasing storage capacity for personal belongings, department supplies, and PPE, including dedicated, well-ventilated storage for firefighter turnouts
- Upgrading office spaces to improve privacy and efficiency
- Enlarging the Engine Bay to comfortably accommodate current fire trucks and the ladder truck expected to arrive in late 2025

The City Council approved in the New Fiscal year 2025-2026 and 2026-2027 budget a Capital Project for the renovation of Fire Station No. 2 for $1.2 million.

Approving an agreement with WRD to develop the design and construction drawings will allow this important project to move forward quickly.

FISCAL IMPACT:
The total fiscal impact for the staff report is estimated at $131,475. This amount will be financed through funds already allocated in the Capital Improvement Project HSF 2608.

EXHIBITS:
Exhibit A – Professional Services Agreement with Wald, Ruhnke & Dost Architects, LLP.
Exhibit B – Wald, Ruhnke & Dost Architects, LLP Proposal and Scope of Services for design of the Fire Station #2 Expansion Project

Respectfully submitted,

_____
Ismael Hernandez
Public Works Director
City of Marina

_____
Layne Long
City Manager
City of Marina

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF MARINA AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT TO WALD, RUHNKE & DOST ARCHITECTS, LLP (WRD) FOR ARCHITECTURAL AND DESIGN SERVICES FOR THE FIRE STATION #2 EXPANSION PROJECT; AND AUTHORIZING THE CITY MANAGER OR DESIGNEE TO EXECUTE CONTRACT DOCUMENTS SUBJECT TO FINAL REVIEW AND APPROVAL BY THE CITY ATTORNEY; AND AUTHORIZING THE FINANCE DIRECTOR TO MAKE NECESSARY ACCOUNTING AND BUGETARY ENTRIES

WHEREAS, Fire Station #2, located at the Marina Municipal Airport, provides essential emergency fire services to the City of Marina and surrounding areas; and

WHEREAS, the existing facilities at Fire Station #2 have become inadequate to meet current staffing, storage, and operational needs; and

WHEREAS, an expansion of Fire Station #2 is necessary to improve housing, sanitation facilities, storage space, and the Engine Bay to support current and future fire service demands; and

WHEREAS, the City Staff has identified Wald, Ruhnke & Dost Architects, LLP (WRD) as a qualified and experienced firm to provide architectural and design services for the station expansion project; and

WHEREAS, the City Council has reviewed the staff report and recommends moving forward with the Professional Services Agreement to facilitate efficient and effective project development.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Marina does hereby:

1. Adopt Resolution No. 2025- authorizing a professional services agreement with Wald, Ruhnke & Dost Architects, LLP (WRD) for architectural and design services for the Fire Station #2 Expansion Project beginning July 2, 2025, in an amount not to exceed $131,475.00.
2. Authorize the City Manager or designee to execute the agreement on behalf of the City subject to final review and approval by the City Attorney.
3. Authorize the Finance Director to make necessary accounting and budgetary entries.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st Day of July, 2025 by the following vote:

AYES, COUNCIL MEMBERS:
NOES, COUNCIL MEMBERS:
ABSENT, COUNCIL MEMBERS:
ABSTAIN, COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

CITY OF MARINA
AGREEMENT FOR ARCHITECTURE AND DESIGN SERVICES

THIS AGREEMENT is made and entered into on July 2, 2025, by and between the City of Marina, a California charter city, hereinafter referred to as the "City," and *Wald, Ruhnke, and Dost Architects, LLP*, a Limited Liability Partnership hereinafter referred to as the "Contractor." City and Contractor are sometimes individually referred to as "party" and collectively as "parties" in this Agreement.

Recitals

A. City desires to retain Contractor to:

Provide architectural and design services for the Fire Station #2 Expansion Project, hereinafter referred to as the "Project."

B. Contractor represents and warrants that it has the qualifications, experience and personnel necessary to properly perform the services as set forth herein.

C. City desires to retain Contractor to provide such services.

Terms and Conditions

For of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and in consideration of the mutual promises contained herein, City and Contractor agree to the following terms and conditions:

1. Scope of Work.

(a) Contractor is hereby hired and retained by the City to work in a cooperative manner with the City to fully and adequately perform those services set forth in Exhibit "A" attached hereto ("Scope of Work") and by this reference made a part hereof. With prior written notice to Contractor, City may elect to delete certain tasks of the Scope of Work at its sole discretion.

(b) Contractor shall perform all such work with skill and diligence and pursuant to generally accepted standards of practice in effect at the time of performance. Contractor shall provide corrective services without charge to the City for work which fails to meet these standards and which is reported to Contractor in writing within sixty days of discovery. Should Contractor fail or refuse to perform promptly its obligations under this Agreement, the City may render or undertake the performance thereof and the Contractor shall be liable for any expenses thereby incurred.

(c) If services under this Agreement are to be performed by a design professional, as that term is defined in California Civil Code §2782.8(b)(2), design professional certifies that all design professional services shall be provided by a person or persons duly licensed by the State of California to provide the type of services described in Section 1(a). By delivery of completed work, design professional certifies that the work conforms to the requirements of this Agreement and all applicable federal, state and local laws, and the professional standard of care in California.

(d) Contractor is responsible for making an independent evaluation and judgment of all relevant conditions affecting performance of the work, including without limitation site conditions, existing facilities, seismic, geologic, soils, hydrologic, geographic, climatic conditions, applicable federal, state and local laws and regulations and all other contingencies or considerations.

(e) City shall cooperate with Contractor and will furnish all information data, records and reports existing and available to City to enable Contractor to carry out work outlined in Exhibit “A." Contractor shall be entitled to reasonably rely on information, data, records and reports furnished by the City, however, the City makes no warranty as to the accuracy or completeness of any such information, data, records or reports available to it and provided to Contractor which were furnished to the City by a third party. Contractor shall have a duty to bring to the City's attention any deficiency or error it may discover in any information provided to the Contractor by the City or a third party.

2. Term of Agreement & Commencement of Work.

(a) Unless otherwise provided, the term of this Agreement shall begin on July 2, 2025 and shall expire on December 31, 2026, unless extended by amendment or terminated earlier as provided herein. The date of full execution is defined as the date when all of the following events have occurred:

(i) This Agreement has been approved by the City's Council or by the board, officer or employee authorized to give such approval; and

(ii) The office of the City Attorney has indicated in writing its approval of this Agreement as to form; and

(iii) This Agreement has been signed on behalf of Contractor by the person or persons authorized to bind the Contractor hereto; and.

(iv) This Agreement has been signed on behalf of the City by the person designated to so sign by the City's Council or by the officer or employee authorized to enter into this Contract and is attested to by the Marina City Clerk.

(b) Contractor shall commence work on the Project on or by July 2, 2025. This Agreement may be extended upon written agreement of both parties. Contractor may be required to prepare a written schedule for the work to be performed, which schedule shall be approved by the City and made a part of Exhibit A, and to perform the work in accordance with the approved schedule.

3. Compensation.

(a) City liability for compensation to Contractor under this Agreement shall only be to the extent of the present appropriation to fund this Agreement. For services to be provided under this Agreement City shall compensate Contractor in an amount not to exceed One Hundred Thirty-One Thousand, Four Hundred Seventy Five Dollars ($ 131,475.00) in accordance with the provisions of this Section.

(b) Invoice(s) in a format and on a schedule acceptable to the City shall be submitted to and be reviewed and verified by the Project Administrator (see Section 5(a)) and forwarded to the City's Finance Department for payment. City shall notify Contractor of exceptions or disputed items and their dollar value within fifteen days of receipt. Payment of the undisputed amount of the invoice will typically be made approximately thirty days after the invoice is submitted to the Finance Department.

(c) Contractor will maintain clearly identifiable, complete and accurate records with respect to all costs incurred under this Agreement on an industry recognized accounting basis. Contractor shall make available to the representative of City all such books and records related to this Agreement, and the right to examine, copy and audit the same during regular business hours upon 24-hour's notice for a period of four years from the date of final payment under this Agreement.

(d) Contractor shall not receive any compensation for Extra Work without the prior written authorization of City. As used herein, "Extra Work" means any work that is determined by the City to be necessary for the proper completion of the Project but which is not included within the Scope of Work and which the parties did not reasonably anticipate would be necessary at the execution of this Agreement.

(e) Expenses not otherwise addressed in the Scope of Services or the Fee Schedule incurred by Contractor in performing services under this Agreement shall be reviewed and approved in advance by the Project Administrator (Section 5(a)), be charged at cost and reimbursed to Contractor.

(f) There shall be no charge for transportation within Monterey, Santa Cruz and San Benito Counties required for the performance of the services under this Agreement; travel to other locations must be approved in writing and in advance by the City, mileage will be charged at the then current standard rate for business travel as set by the U.S. Internal Revenue Service for such approved travel.

4. <u>Termination or Suspension</u>.

(a) This Agreement may be terminated in whole or in part in writing by either party in the event of a substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given (1) not less than ten days written notice of intent to terminate, and (2) provided an opportunity for consultation with the terminating party prior to termination.

(b) If termination for default is effected by the City, an equitable adjustment in the price provided for in this Agreement shall be made, but (1) no amount shall be allowed for anticipated profit on unperformed services or other work, and (2) any payment due the Contractor at the time of termination may be adjusted to cover any additional costs to the City because of the Contractor's default. If after the termination for failure of Contractor to fulfill its contractual obligations, it is determined that the Contractor had not failed to fulfill contractual obligations, the termination shall be deemed to have been for the convenience of the City.

(c) The City may terminate or suspend this Agreement at any time for its convenience upon not less than thirty days prior written notice to Contractor. Not later

than the effective date of such termination or suspension, Contractor shall discontinue all affected work and deliver all work product and other documents, whether completed or in progress, to the City.

(d) If termination for default is effected by the Contractor or if termination for convenience is effected by the City, the equitable adjustment shall include a reasonable profit for services or other work performed. The equitable adjustment for termination shall provide for payment to the Contractor for services rendered and expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by Contractor relating to written commitments that were executed prior to the termination.

5. Project Administrator, Project Manager & Key Personnel.

(a) City designates as its Project Administrator Ismael Hernandez who shall have the authority to act for the City under this Agreement. The Project Administrator or his/her authorized representative shall represent the City in all matters pertaining to the work to be performed pursuant to this Agreement.

(b) Contractor designates Henry Ruhnke as its Project Manager who shall coordinate all phases of the Project. The Project manager shall be available to City at all reasonable times during the Agreement term.

(c) Contractor warrants that it will continuously furnish the necessary personnel to complete the Project on a timely basis as contemplated by this Agreement. Contractor, at the sole discretion of City, shall remove from the Project any of its personnel assigned to the performance of services upon written request of City. Contractor has represented to City that certain key personnel will perform and coordinate the work under this Agreement. Should one or more of such personnel become unavailable, Contractor may substitute other personnel of at least equal competence upon written approval of the City. In the event that City and Contractor cannot agree as to the substitution of key personnel, City shall be entitled to terminate this Agreement for cause.

6. Delegation of Work.

(a) If Contractor utilizes any subcontractors, consultants, persons, employees or firms having applicable expertise to assist Contractor in performing the services under this Agreement, Contractor shall obtain City's prior written approval to such employment. Contractor's contract with any subcontractor shall contain a provision making the subcontract subject to all provisions of this Agreement. Contractor will be fully responsible and liable for payment for, administration, completion, presentation, and quality of all work performed. If such persons are utilized, they shall be charged at cost. City reserves its right to employ other contractors in connection with this Project.

(b) If the work hereunder is performed by a design professional, design professional shall be directly involved with performing the work or shall work through his, her or its employees. The design professional's responsibilities under this Agreement shall not be delegated. The design professional shall be responsible to the City for acts, errors or omissions of his, her or its subcontractors. Negligence of subcontractors or agents retained by the design professional is conclusively deemed to be the negligence

of the design professional if not adequately corrected by the design professional. Use of the term subcontractor in any other provision of this Agreement shall not be construed to imply authorization for a design professional to use subcontractors for performance of any professional service under this Agreement.

(c) The City is an intended beneficiary of any work performed by a subcontractor for purposes of establishing a duty of care between the subcontractor and the City.

7. Skill of Employees. Contractor shall ensure that any employees or agents providing services under this Agreement possess the requisite skill, training and experience to properly perform such services.

8. Confidential and Proprietary Information. In the course of performing services under this Agreement Contractor may obtain, receive, and review confidential or proprietary documents, information or materials that are and shall remain the exclusive property of the City. Should Contractor undertake the work on behalf of other agencies, entities, firms or persons relating to the matters described in the Scope of Work, it is expressly agreed by Contractor that any such confidential or proprietary information or materials shall not be provided or disclosed in any manner to any of Contractor's other clients, or to any other third party, without the City's prior express written consent.

9. Ownership of Data. Unless otherwise provided for herein, all documents, material, data, drawings, plans, specifications, computer data files, basis for design calculations, engineering notes, and reports originated and prepared by Contractor, or any subcontractor of any tier, under this Agreement shall be and remain the property of the City for its use in any manner it deems appropriate. Contractor agrees that all copyrights which arise from creation of the work pursuant to this Agreement shall be vested in the City and waives and relinquishes all claims to copyright or intellectual property rights in favor of the City. Contractor shall provide two (2) sets of reproducible of the above-cited items, except for the computer data files which shall consist of one (1) set. Contractor shall use all reasonable efforts to ensure that any electronic files provided to the City will be compatible with the City's computer hardware and software. Contractor makes no representation as to long-term compatibility, usability or readability of the format resulting from the use of software application packages, operating systems or computer hardware differing from those in use by the City at the commencement of this Agreement. Contractor shall be permitted to maintain copies of all such data for its files. City acknowledges that its use of the work product is limited to the purposes contemplated by the Scope of Work and, should City use these products or data in connection with additions to the work required under this Agreement or for new work without consultation with and without additional compensation to Contractor, Contractor makes no representation as to the suitability of the work product for use in or application to circumstances not contemplated by the Scope of Work and shall have no liability or responsibility whatsoever in connection with such use which shall be at the City's sole risk. Any and all liability arising out of changes made by the City to Contractor's deliverables is waived against Contractor unless City has given Contractor prior written notice of the changes and has received Contractor's written consent to such changes.

10. Conflict of Interest.

(a) Contractor covenants that neither it, nor any officer or principal of its firm has or shall acquire any interest, directly or indirectly, which would conflict in any manner

with the interests of the City or which would in any way hinder Contractor's performance of services under this Agreement. Contractor further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor without the express written consent of the City Manager. Contractor agrees to at all times avoid conflicts of interest or the appearance of any conflicts of interest with the interests of the City in the performance of this Agreement. Contractor shall represent the interest of the City in any discussion or negotiation.

(b) City understands and acknowledges that Contractor may be, as of the date of commencement of services under this Agreement, independently involved in the performance of non-related services for other governmental agencies and private parties. Contractor is unaware of any stated position of the City relative to such projects. Any future position of the City on such projects may result in a conflict of interest for purposes of this section.

11. Disclosure. Contractor may be subject to the appropriate disclosure requirements of the California Fair Political Practices Act, as determined by the City Manager.

12. Non-Discrimination.

(a) During the performance of this Agreement the Contractor and its subcontractors shall comply with the applicable laws of the United States of America, the State of California and the City prohibiting discrimination and harassment. In performing this Agreement, Contractor shall not discriminate, harass, or allow harassment, against any employee or applicant for employment because of gender, gender expression, gender identity, genetic characteristics, sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (including cancer), mental disability, age, marital status, denial of family and medical care leave and denial of pregnancy disability leave, sexual orientation, military/veteran status and any other characteristics protected by state or federal law. Contractor shall give written notice of its obligations under this clause to labor organizations with which it has a collective bargaining or other agreement.

(b) Contractor shall include the provisions of this Section 12(a) in all subcontracts related to this Agreement.

13. Indemnification.

(a) Other than in the performance of design professional services by a design professional, which shall be solely as addressed by subsection (b) below, and to the full extent permitted by law, Contractor shall indemnify, immediately defend (with independent counsel reasonably acceptable to the City) and hold harmless the City, its Council, boards, commissions, employees, officials and agents (collectively "Indemnified Parties" or in the singular "Indemnified Party") from and against any claims, losses, damages, penalties, fines and judgments, associated investigation and administrative expenses, and defense costs including but not limited to reasonable attorney's fees, court costs, expert witness fees and costs of alternate dispute resolution (collectively "Liabilities"), where same arise out of the performance of this Agreement by Contractor,

its officers, employees, agents and sub-contractors. The duty to defend is a separate and distinct obligation from the Contractor's duty to indemnify and Contractor shall be obligated to defend in all legal, equitable, administrative or special proceedings upon tender to the Contractor of any claim in any form or at any stage of an action or proceeding, whether or not liability is established and the obligation extends through final judgment including exhaustion of any appeals.. The Contractor's obligation to indemnify applies unless it is finally determined that the liability was caused by the sole active negligence or sole willful misconduct of an indemnified party. If it is finally determined that liability is caused by the comparative active negligence or willful misconduct of an Indemnified Party, the Contractor's indemnification obligation shall be reduced in proportion to the established comparative liability of the indemnified party.

(b) To the fullest extent permitted by law (including without limitation California Civil Code Sections 2782.8), when the services to be provided under this Agreement are design professional services to be performed by a design professional, as that term is defined by said section 2782.8(c)(2) ("Design Professional") Design Professional shall indemnify, protect and hold harmless any Indemnified Party for all Liabilities regardless of nature or type that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Design Professional, or such acts or omissions of an officer, employee, agent or subcontractor of the Design Professional. Design Professional shall not have an immediate duty to defend an Indemnified Party, however, Design Professional's obligation to indemnify (including reimbursing the cost to defend) and hold the Indemnified Parties harmless applies unless it is finally determined that the liability was caused by the sole active negligence or sole willful misconduct of an Indemnified Party. If it is finally determined that liability was caused by the comparative active negligence or willful misconduct of an Indemnified Party the Design Professional's indemnification obligation shall be reduced in direct proportion to the indemnified party's proportionate percentage of fault. Within 30 days following Design Professional's receipt of a properly presented written invoice Design Professional shall satisfy its indemnification obligations and reimburse the Indemnified Party for the cost of reasonable attorney's fees and defense costs incurred by the Indemnified Party to the same extent of Design Professional's indemnity obligation herein. In no event shall the cost to defend charged to the Design Professional exceed the Design Professional's proportionate percentage of fault.

(c) The provisions of this Section are not limited by the provisions of sections relating to insurance including provisions of any worker's compensation act or similar act. Contractor expressly waives its statutory immunity under such statues or laws as to City, its employees and officials. An allegation or determination of comparative active negligence or willful misconduct by an Indemnified Party unrelated to design professional services does not relieve Contractor from its separate and distinct obligation to defend City. Contractor agrees to obtain executed indemnity agreements with provisions identical to those set forth here in this section from each and every subcontractor, sub tier contractor or any other person or entity involved by, for, with or on behalf of Contractor in the performance or subject matter of this Agreement. In the event Contractor fails to obtain such indemnity obligations from others as required here, Contractor agrees to be fully responsible according to the terms of this section. Failure of City to monitor compliance with these requirements imposes no additional obligations on City and will in no way act as a waiver of any rights hereunder.

(d) If any action or proceeding is brought against any Indemnified Party by reason of any of the matters against which the Contractor has agreed to provide an immediate defense to any Indemnified Party, as provided above, Contractor, upon notice from the City, shall defend the Indemnified Party at Contractor's expense by independent counsel reasonably acceptable to the City. Unless otherwise provided above, an Indemnified Party need not have first paid for any of the matters to which it is entitled to indemnification in order to be so defended. Contractor may submit a claim to the City for reasonable defense costs (including attorney's and expert fees) incurred in providing a defense of any Indemnified Party to the extent such defense costs arise under principals of comparative fault from the Indemnified Party's active negligence, recklessness or willful misconduct.

(e) This obligation to indemnify and defend, as set forth herein, is binding on the successors, assigns, or heirs of Contractor and shall survive the termination of this Agreement or this Section.

14. Insurance.

(a) As a condition precedent to the effectiveness of this Agreement and without limiting Contractor's indemnification of the City, Contractor agrees to obtain and maintain in full force and effect at its own expense the insurance policies set forth in Exhibit "B" "Insurance" attached hereto and made a part hereof. Contractor shall furnish the City with original certificates of insurance, executed by a person authorized by that insurer to bind coverage on its behalf, along with copies of all required endorsements. All certificates and endorsements must be received and approved by the City before any work commences. All insurance policies shall be subject to approval by the City Attorney and Risk Manager as to form and content. Specifically, such insurance shall: (1) be endorsed to protect City as an additional insured for commercial general and business auto liability; (2) provide City prior notice of cancellation; and (3) be primary with respect to City's insurance program. Contractor's insurance is not expected to respond to claims that may arise from the acts or omissions of the City.

(b) City reserves the right at any time during the term of this Agreement to change the amounts and types of insurance required herein by giving Contractor ninety days advance written notice of such change. If such change should result in substantial additional cost of the Contractor, City agrees to negotiate additional compensation proportional to the increased benefit to City.

(c) All required insurance must be submitted and approved the City Attorney and Risk Manager prior to the inception of any operations by Contractor.

(d) The required coverage and limits are subject to availability on the open market at reasonable cost as determined by the City. Non availability or non affordability must be documented by a letter from Contractor's insurance broker or agency indicating a good faith effort to place the required insurance and showing as a minimum the names of the insurance carriers and the declinations or quotations received from each. Within the foregoing constraints, Contractor's failure to procure or maintain required insurance during the entire term of this Agreement shall constitute a material breach of this Agreement under which City may immediately suspend or terminate this Agreement or, at its discretion, procure or renew such insurance to protect City's interests and pay any and all premium in connection therewith and recover all monies so paid from Contractor.

(e) By signing this Agreement, Contractor hereby certifies that it is aware of the provisions of Section 3700 *et seq*., of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provision of that Code, and that it will comply with such provisions at all such times as they may apply during the performance of the work pursuant to this Contract. Unless otherwise agreed, a waiver of subrogation in favor of the City is required.

15. **Independent Contractor**. The parties agree that Contractor, its officers, employees and agents, if any, shall be independent contractors with regard to the providing of services under this Agreement, and that Contractor's employees or agents shall not be considered to be employees or agents of the City for any purpose and will not be entitled to any of the benefits City provides for its employees. City shall make no deductions for payroll taxes or Social Security from amounts due Contractor for work or services provided under this Agreement.

This Agreement shall not constitute, and it is not intended to constitute, either party as an employer, employee, agent, partner or legal representative of the other party for any purpose, or give either party any right to supervise or direct the functions of the other party. Except as specifically provided herein, neither party shall have authority to act for or obligate the other party in any way or to extend any representation on behalf of the other party. Each party agrees to perform under this Agreement solely as an independent contractor and neither party shall have any right, power, or authority, nor shall they represent themselves as having any authority to assume, create, or incur any expense, liability or obligation, express or implied, on behalf of the other party for any purpose. Each party agrees not to permit its employees or agents to do anything that might be construed or interpreted as acts of the other party.

16. **Claims for Labor and Materials**. Contractor shall promptly pay when due all amounts payable for labor and materials furnished in the performance of this Agreement, so as to prevent any lien or other claim under any provision of law from arising against any City property (including reports, documents, and other tangible matter produced by the Contractor hereunder), against the Contractor's rights to payments hereunder, or against the City, and shall pay all amounts due under the Unemployment Insurance Act with respect to such labor.

17. **Discounts**. Contractor agrees to offer the City any discount terms that are offered to its best customers for the goods and services to be provided herein, and apply such discounts to payment made under this Agreement which meet the discount terms.

18. **Cooperation; Further Acts**. The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement.

19. **Dispute Resolution**. If any dispute arises between the parties as to proper interpretation or application of this Agreement, the parties shall first meet and confer in a good faith attempt to resolve the matter between themselves. If the dispute is not resolved by meeting and conferring, the matter shall be submitted for formal mediation to a mediator selected mutually by the parties. The expenses of such mediation shall be shared equally between the parties. If the dispute is not or cannot be resolved by

mediation, the parties may mutually agree (but only as to those issues of the matter not resolved by mediation) to submit their dispute to arbitration. Before commencement of the arbitration, the parties may elect to have the arbitration proceed on an informal basis; however, if the parties are unable so to agree, then the arbitration shall be conducted in accordance with the rules of the American Arbitration Association. The decision of the arbitrator shall be binding, unless within thirty days after issuance of the arbitrator's written decision, any party files an action in court. Venue and jurisdiction for any such action between the parties shall lie in the Superior Court for the County of Monterey.

20. Compliance with Laws.

(a) Each party's performance hereunder shall comply with all applicable laws of the United States of America, the State of California and the City including but not limited to laws regarding health and safety, labor and employment, wage and hours and licensing laws which affect employees. This Agreement shall be governed by, enforced and interpreted under the laws of the State of California. Contractor must be in good standing and registered with the California Department of Industrial Relations in accordance with California labor Code section 1725.5 and shall comply with new, amended or revised laws, regulations or procedures that apply to the performance of this Agreement.

(b) If the Project is a "public work," or prevailing wages are otherwise required, Contractor shall comply with all provision of California Labor Code section 1720 *et seq.*, as applicable, and laws dealing with prevailing wages, apprentices and hours of work.

(c) Contractor represents that it has obtained and presently holds all permits and licenses necessary for performance hereunder, including a Business License required by the City's Business License Ordinance (Title 5 of the Marina Municipal Code) for which a business license tax is prescribed and assessed at the rate of two-tenths percent of gross receipts, in accordance with the provisions therein. For the term covered by this Agreement, the Contractor shall maintain or obtain as necessary, such permits and licenses and shall not allow them to lapse, be revoked or suspended.

21. Assignment or Transfer. This Agreement or any interest herein may not be assigned, hypothecated or transferred, either directly or by operation of law, without the prior written consent of the City. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

22. Notices. All notices required or permitted to be given under this Agreement shall be in writing and shall be personally delivered, sent by facsimile ("fax") or certified mail, postage prepaid with return receipt requested, addressed as follows:

To City: City Manager
City of Marina City Hall
211 Hillcrest Avenue
Marina, California 93933
Fax: (831) 384-9148

To Contractor: Henry Ruhnke
Wald, Ruhnke, and Dost Architects, LLP

2340 Garden Road, Suite 100
Monterey, CA 93940
Fax (831) 649-3530

The parties my agree in writing to receive notice by email. Notice shall be deemed effective on the date personally delivered or transmitted by facsimile or, if mailed, three days after deposit in the custody of the U.S. Postal Service. A copy of any notice sent as provided herein shall also be delivered to the Project Administrator and Project Manager.

23. **Amendments, Changes or Modifications**. This Agreement is not subject to amendment, change or modification except by a writing signed by the authorized representatives of City and Contractor.

24. **Force Majeure**. Notwithstanding any other provisions hereof, neither Contractor nor City shall be held responsible or liable for failure to meet their respective obligations under this Agreement if such failure shall be due to causes beyond Contractor's or the City's control except that an economic downturn of any type shall not be a justifiable cause for the failure to meet their respective obligations under this Agreement. Such causes include but are not limited to: strike, fire, flood, civil disorder, act of God or of the public enemy, act of the federal government, or any unit of state of local government in either sovereign or contractual capacity, epidemic, quarantine restriction, or delay in transportation to the extent that they are not caused by the party's willful or negligent acts or omissions, and to the extent that they are beyond the party's reasonable control.

25. **Attorney's Fees**. In the event of any controversy, claim or dispute relating to this Agreement, or the breach thereof, the prevailing party shall be entitled to recover from the losing party reasonable expenses, attorney's fees and costs.

26. **Successors and Assigns**. All of the terms, conditions and provisions of this Agreement shall apply to and bind the respective heirs, executors, administrators, successors, and assigns of the parties. Nothing in this paragraph is intended to affect the limitation on assignment

27. **Authority to Enter Agreement**. Contractor has all requisite power and authority to conduct its business and to execute, deliver and perform the Agreement. Each party warrants that the individuals who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective party.

28. **Waiver**. A waiver of a default of any term of this Agreement shall not be construed as a waiver of any succeeding default or as a waiver of the provision itself. A party's performance after the other party's default shall not be construed as a waiver of that default.

29. **Severability**. Should any portion of this Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Agreement will continue as modified.

30. **Construction, References, Captions**. Since the parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against

any party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. The captions of the various sections are for convenience and ease of reference only, and do not define, limit, augment or describe the scope, content or intent of this Agreement.

31. Advice of Counsel. The parties agree that they are aware that they have the right to be advised by counsel with respect to the negotiations, terms and conditions of this Agreement, and that the decision of whether or not to seek the advice of counsel with respect to this Agreement is a decision which is the sole responsibility of each of the parties hereto. This Agreement shall not be construed in favor or against either party by reason of the extent to which each party participated in the drafting of this Agreement.

32. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

33. Time. Time is of the essence in this contract.

34. Entire Agreement. This Agreement contains the entire agreement of the parties with respect to the matters as set forth in this Agreement, and no other agreement, statement or promise made by or to any party or by or to any employee, officer or agent of any party, which is not contained in this Agreement shall be binding or valid.

IN WITNESS WHEREOF, Contractor and the City by their duly authorized representatives, have executed this Agreement, on the date first set forth above, at Marina, California.

CITY OF MARINA	**CONTRACTOR**
By: _____	By: _____
Name: _____	Name: _____
Its: _____	Its: _____
Date: _____	Date: _____

Attest: (Pursuant to Reso: 20___ - _____)

By: _____
City Clerk

Approved as to form:

By: _____
City Attorney

DRAFT

INSERT EXHIBIT A

Section 1 (a)

- SCOPE OF WORK -

[Include Work Schedule if required.]

EXHIBIT B - INSURANCE

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by Contractor, its agents, representatives, or employees.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **$1,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned), with limit no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation** insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease. (Not required if Contractor provides written verification it has no employees)
4. **Professional Liability (Errors and Omissions):** Insurance appropriates to Contractor's profession, with limit no less than **$2,000,000** per occurrence or claim, $2,000,000 aggregate.

If Contractor maintains broader coverage and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Other Insurance Provisions
The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status
City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later edition is used).

Primary Coverage
For any claims related to this contract, Contractor's insurance coverage shall be primary and non-contributory and at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of Contractor's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies.

Umbrella or Excess Policy
Contractor may use Umbrella or Excess Policies to provide the liability limits as required in this agreement. This form of insurance will be acceptable provided that all of the Primary and Umbrella or Excess Policies shall provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until Contractor's primary and excess liability policies are exhausted.

Notice of Cancellation
Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City.

Waiver of Subrogation
Contractor hereby grants to City a waiver of any right to subrogation which any insurer of said Contractor may acquire against the City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

Self-Insured Retentions
Self-insured retentions must be declared to and approved by the City. The City may require Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City. The CGL and any policies, including Excess liability policies, may not be subject to a self-insured retention (SIR) or deductible that exceeds $25,000 unless approved in writing by City. Any and all deductibles and SIRs shall be the sole responsibility of Contractor or subcontractor who procured such insurance and shall not apply to the Indemnified Additional Insured Parties. City may deduct from any amounts otherwise due Contractor to fund the SIR/deductible. Policies shall NOT contain any self-insured retention (SIR) provision that limits the satisfaction of the SIR to the City. The policy must also provide that Defense costs, including the Allocated Loss Adjustment Expenses, will satisfy the SIR or deductible. City reserves the right to obtain a copy of any policies and endorsements for verification.

Acceptability of Insurers
Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

Claims Made Policies
If any of the required policies provide claims-made coverage:

1. The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.
2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.
3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Contractor must purchase "extended reporting" coverage for a minimum of five (5) years after completion of work.

Verification of Coverage
Contractor shall furnish the City with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause and a copy of the Declarations and Endorsements Pages of the CGL and any Excess policies listing all policy endorsements. All certificates and endorsements and copies of the Declarations & Endorsements pages are to be received and approved by the City before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time. City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Subcontractors
Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors.

Duration of Coverage
CGL & Excess liability policies for any construction related work, including, but not limited to, maintenance, service, or repair work, shall continue coverage for a minimum of five (5) years for Completed Operations liability coverage. Such Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

Special Risks or Circumstances
City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

WALD RUHNKE & DOST
ARCHITECTS LLP

2340 Garden Road
Suite 100
Monterey, CA
93940-5347
T: (831) 649-4642
F: (831) 649-3530
www.wrdarch.com

May 7, 2025

Mr. Ismael Hernandez
Public Works Director,
City of Marina Public Works Department
Marina, CA 93933
Email: ihernandez@cityofmarina.org

Re: **Marina Fire Department #2, New Addition**
3260 Imjin Rd (at Marina Airport),
Marina, CA 93933
WRD Project Number: 25075.0

Dear Mr. Hernadez,

Thank you for allowing Wald, Ruhnke & Dost Architects, LLP (WRD) the opportunity to provide architectural and design services for the above referenced property. This proposal and the attached Terms and Conditions set forth our understanding of the nature and scope of the services to be performed and the fees we will charge for this service, as well as outline the responsibilities of the parties involved to ensure that WRD services are performed under mutually agreeable objectives.

PROJECT DESCRIPTION:

The Marina Fire Department facility is be enlarged for more vehicle and office space. The existing vehicle single bay is to be lengthened a minim of 43 feet. Additional office space and a new second restroom is needed. Based on preliminary discussions at the site on 4/23/25, the new addition can be of a metal building construction type, immediately adjacent to the existing vehicle bay, matching its width. The new addition can have a higher roof allowing clerestory windows in the higher connecting wall. The main building can have lower "lean to" spaces (similar to the existing vehicle bay) to provide new office and restroom space. Modifications to the existing lean-to spaces for conversion for the new restroom is also possible. The total area of the vehicle bay will be approximately 1200 square feet and the new lower areas approximately 200 square feet. No work is needed in the existing main building away from the vehicle bay and its adjacent spaces.

SCOPE OF SERVICES

1. <u>As-Built Drawings</u>:

- Site visit for measuring: for developing 'as-built' drawings for the portion of the building that will be associated with the new addtion.

2. <u>Schematic Design</u>:

- Drawings: Develop schematic design level drawings of existing building and proposed new addition consisting of Architectural Site Plan, Floor Plan and Exterior Elevations.

3. Design Development Documents:

- Drawings and Specifications: Develop design development level drawings of existing building and proposed new addition consisting of Architectural, Plumbing, Mechanical and Electrical Drawings with Outline Specifications.

3. Construction Documents for permit submittal:

- Drawings: Develop construction document level drawings of existing building and proposed new addition consisting of Architectural, Plumbing, Mechanical and Electrical Drawings with Full Specifications. Drawings will be suitable for permit submittal. Drawings and Specifications will be suitable for bidding purposes.

4. Bidding & Construction Support:

- Support:
Assist with assemblage of Project Manual for bidding. Review and respond to Bidder RFC's. Assist with contractor selection as needed. Review project submittals and respond to RFI's and issue clarifications as needed during construction. Assist with project closeout including punch list walks and review of O&M's and for final occupancy.

ASSUMPTIONS

1. Owner will provide a Topographic Survey of the area for the new addition including location of existing utilities.

2. Owner will provide a Geotechical Report.

3. Project will be Design, Bid, Build project delivery. Bidding will be a competitive Public Bid to B Licensed Prime Bidders.

4. Owner will provide "front end" bidding documents, WRD will provide supporting technical specifications.

5. The project will not create and/or replace 2500 sf or more impervious surfaces over the entire project site and is therefore exempted and not regulated under a Stormwater permit. New roof drainage is straightforward for conveyance and surface flow to existing vegetated areas and an WRD internally created Civil Grading and Grading plan indicating such drainage and minor hardscape modifications will be included in the design for the project. Standard construction phase erosion control requirements (BMP's) will also be included in the WRD created Civil Drawings.

6. Based on the scope of work, WRD recommends this addition be constructed as a cost-effective metal building system erected by a metal building contractor bidding the project. WRD will provide specifications for the metal building design including a recommended steel frame system, exterior claddings, interior finishes and a fully engineered recommended foundation design. The structural drawings and structural calculations related to the metal building above grade will be provided by the bidder and as such will be listed as a deferred submittal on the permit set.

FEE

The above services can be provided for the following fee.

WRD Architectural / Civil Design and Construction Support - Fixed Fee	$78,500
WRD Structural Consultant Design and Construction Support - Fixed Fee	$9,200
WRD Plumbing / Mechanical Consultant Design and Construction Support - Fixed Fee	$21,275
WRD Electrical Consultant Design and Construction Support - Fixed Fee (Budget)	$22,500
Total	**$131,475**

EXCLUDED ITEMS

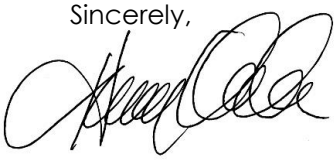
Services other than identified above
Planning department approvals
Civil Engineering if required
Environmental studies
Hazardous material testing
California Access Specialist (CASp) survey
3-D renderings
Stormwater Permit Design (assumed not required)
SWPPP preparation and monitoring (assumed not required)
Government agency fees
Reproductions
Reimbursable expenses

AGREEMENT TERMS

The following Terms and Conditions shall be incorporated into the architectural fee proposal and become effective upon proceeding with the Scope of Work.

If you have any questions, please contact Lou Bartlett at 831-649-4642.

Sincerely,



Henry Ruhnke, Principal
California Architects License C21266
Wald, Runke & Dost Architects, LLP

Approved by:

_____
Signature

_____
Print Name

_____
Date

Attachments: Terms and Conditions, Fee Schedule, Exhibit A

Effective January 1, 2025

Exhibit A
Fee Schedule

Office Personnel Hourly Rates:

Principals	$275 - 295
Project Architects/Managers	$210 - 235
Construction Managers	$210 - 235
Job Captains	$175 - 190
Interior Designers	$175 - 210
CAD Technicians	$160 - 170
Administrative Assistants	$110 - 125

Specialty Services Hourly Rates:

Expert Witness	$475

Reimbursable Expenses:

Travel

Mileage	Current Federal Rate +15%

In House Charges

B&W prints/copies - Letter/Legal	$ 0.30 per page
B&W prints/copies - Ledger	$ 0.75 per page
Color prints/copies - Letter/Legal	$ 0.90 each
Color prints/copies - Ledger	$ 1.75 each
Fax Charges	$ 0.75 per page
Comb Binding /Binders	$ 8.00 each

Printing & Plotting

Bond 24" X 36"	$ 5.50 per sheet
Bond 30" X 42"	$ 6.50 per sheet
Color 24" X 36"	$15.00 per sheet
Color 30" X 42"	$18.00 per sheet

Scanning

8½" X 11" - Letter/Legal	$ 0.75 per sheet
11" X 17" - Ledger	$ 1.00 per sheet
24" x 36"	$10.00 per sheet
30" x 42"	$15.00 per sheet

Other Charges

Consultant charges are billed at cost, plus fifteen (15%) percent.
Outside reproduction charges, government agency fees, postage, phone charges, travel, and related reimbursable expenses are billed at actual face value of the invoice, plus fifteen (15%) percent.
Staff travel time is billed at the office personnel hourly rates.

Fees subject to change

WALD, RUHNKE & DOST ARCHITECTS, LLP TERMS AND CONDITIONS

The following Terms and Conditions shall be incorporated into Wald, Ruhnke & Dost Architects, LLP's ("WR&D") Fee Proposal and become effective upon proceeding with the Scope of Work:

1. WR&D is an independent contractor and shall not be liable for the acts of Client or its agents in performing Work.
2. WR&D's services and work product for the Project are intended for the sole benefit of Client and are not intended to create any third-party rights or benefits.
3. The services shall be performed in a manner consistent with that level of skill ordinarily exercised by other professional Architects for similar projects under similar circumstances. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this Agreement or WR&D's Work Product, opinion, or otherwise. Client understands and acknowledges that each project is different, and there will always be revisions and clarifications in plans and specifications as a project proceeds which may have cost and schedule impacts.
4. Neither party may assign any portion of this Agreement or any rights hereunder without the written consent of the other.
5. All tracings, calculations, and other original documents produced by WR&D for the Project ("WR&D's Work Product") are instruments of services and shall remain the property of WR&D, except where by law or governmental requirement or prior agreement, all or some portion of WR&D's Work Product becomes property of Client. Upon payment of WR&D's fees and costs as provided in this Agreement, Client shall receive the limited right to use WR&D's Work Product solely for the specific Project covered by this Agreement.
6. In the event Client elects to reduce WR&D's scope of services, Client hereby agrees to release, hold harmless, defend, and indemnify WR&D from any and all claims, damages, losses, or costs associated with or arising out of such reduction in services.
7. Client and WR&D agree that inspection, maintenance, and normal repair are the exclusive obligations of the owner of a structure. WR&D shall have no responsibility for the inspection, maintenance, and normal repair of any portion of the Project, or for damages arising out of the failure to inspect, maintain, or repair the Project.
8. If Client fails to pay due amounts within fifty (50) calendar days of the date of the invoice, WR&D may, at any time and without waiving any other claim against Client and without incurring any liability whatsoever to Client or others, suspend or terminate this Agreement. Service charges of 1.5% per month shall accrue on all unpaid invoice amounts sixty (60) days after date of invoice unless prior arrangements have been made.
9. If Client objects to any portion of an invoice, Client shall notify WR&D in writing within ten (10) calendar days of receipt of such invoice. Client shall identify the specific cause of the disagreement and shall pay when due that portion of the invoice not in dispute. Service charges of 1.5% per month (18% annum) shall be paid by Client on all disputed invoiced amounts resolved in WR&D's favor and unpaid for more than sixty (60) calendar days after date of submission. Client may not backcharge or withhold payment from WR&D as an offset to damages or construction costs except to the extent the fees at issue were deficient. Payment is due regardless of suspension or termination of the Agreement by either party.
10. In the event legal action is necessary to enforce the payment provisions of this Agreement, WR&D shall be entitled to collect from Client, in addition to any judgment or settlement sums due, all attorneys' fees, Court costs up to a maximum of Fifty Thousand Dollars ($50,000) and expenses incurred by WR&D in connection therewith and, in addition, the reasonable value of WR&D's time and expenses spent in connection with such action, computed at WR&D's prevailing fee schedule and expense policies. All such claims shall be adjudicated in the County of Monterey, State of California.
11. Client recognizes that contractor and subcontractors will be in control of the Project site and exclusively responsible for construction means, methods, schedule, and jobsite safety. Client shall require all contractors and subcontractors to defend, indemnify, and hold harmless Client and WR&D from any and all claims, losses, suits, damages, and liabilities, including attorneys' fees and costs, arising in any way from such contractors' or subcontractors' services or work product, except to the extent caused by WR&D's sole negligence or willful misconduct. In support of this obligation, Client shall require all contractors and subcontractors to include Client and WR&D as additional insureds under its insurance policies applicable to the Project. WR&D shall not be

responsible for damages, losses, costs, or claims caused by contractors or subcontractors, except to the extent caused by WR&D's sole negligence.

12. Where Client has directly retained other consultants, Client agrees that it shall not seek to hold WR&D responsible for errors, omissions, or other wrongful acts of such other consultants except to the extent of WR&D's proportionate responsibility for such claims, damages, or losses, or to the extent subconsultants' insurance and other resources are inadequate to respond to the claim. Client shall also require all such consultants to appropriate professional and general liability insurance.
13. WR&D does not guarantee that proposals, bids, or actual costs will not vary from cost opinions, evaluations or studies prepared by WR&D.
14. When applicable per the Scope of Work, Construction Support services performed by WR&D shall be performed solely for the purpose of assisting in quality control and general conformance with contract drawing and specifications. By providing such services, WR&D does not guarantee contractor's performance. Such services are not intended to create rights of or benefits to the contractor.
15. WR&D shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the Project site including, but not limited to, asbestos, asbestos products, PCBs or other toxic substances.
16. WR&D agrees to put forth its professional efforts to perform its services in a manner consistent with the agreed-upon schedule. WR&D is not responsible for delays in Client's planning or construction schedules, failure of Client to furnish timely information or documents, or to approve or disapprove WR&D work promptly, by reason of delay or faulty performance by Client, other contractors or governmental agencies, or any other causes beyond WR&D's reasonable control.
17. In the event of suspension of work on the Project, in excess of fifty (50) days, Client will be subject to a remobilization fee to reengage team members on the Project. This remobilization fee will be equal to 20% of the remaining fee on the contract.
18. Either WR&D or Client may terminate this Agreement at any time, with or without cause, upon giving the other party ten (10) calendar days' prior written notice. Upon such termination, WR&D shall submit a request for payment for all services rendered and all costs incurred up to the date of termination. Client shall, within ten (10) days of receiving WR&D's request for payment, pay WR&D's unpaid fees and costs in accordance with the compensation provisions of the Agreement.
19. Client shall indemnify, defend and hold WR&D harmless from all claims, damages, losses and expenses (including reasonable attorneys' fees) arising from the Project, except to the extent such claim, damage, loss or expense is caused by the negligent act, omission, and/or strict liability of WR&D, anyone directly or indirectly employed by WR&D, or anyone for whose acts WR&D is liable.
20. In recognition of the relative risks, rewards and benefits of the Project to both Client and WR&D, the risks have been allocated such that Client agrees, to the fullest extent permitted by law, to limit the liability of WR&D, its employees and consultants, to Client and all others for any and all injuries, claims, losses, expenses, damages or claim expenses, including attorneys' fees and costs and expert witness fees and costs, arising out of this Agreement or the Project so that the total aggregate liability of WR&D to Client and all others shall not exceed the lesser of Fifty Thousand Dollars ($50,000) or the fee received to a maximum of Two Hundred Fifty Thousand Dollars ($250,000). It is intended that this limitation will apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law. Such causes include, but are not limited to, WR&D's negligence, errors, omissions, strict liability, breach of contract, or breach of warranty.
21. In no event shall WR&D be liable for consequential damages including, without limitation, loss of use or loss of profits incurred by Client, regardless of whether such claim is based upon alleged breach of contract, willful misconduct or negligent act or omission, whether professional or nonprofessional.
22. This Agreement contains all terms and conditions agreed on by the parties hereto, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or bind any of the parties hereto. No change, modification, or amendment to this Agreement will be valid unless agreed to by both of the parties hereto in writing.
23. Any provision or part of this Agreement held to be void or unenforceable under any law shall be deemed stricken and all remaining provisions shall continue to be binding upon the parties.

June 19, 2025 Item No. **11a**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL TO CONSIDER OPENING PUBLIC HEARING, TAKING ANY TESTIMONY FROM PUBLIC, AND CONSIDER ADOPTING RESOLUTION NO. 2025- , FORMING THE CYPRESS COVE II LANDSCAPE MAINTENANCE OVERLAY ASSESSMENT DISTRICT AND LEVYING THE ASSESSMENT FOR FY 2025-26 IN CONNECTION WITH THE OVERLAY DISTRICT AND THE EXISTING CYPRESS COVE II LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT, AND CERTIFYING CITY OF MARINA COMPLIANCE WITH STATE LAW (PROPOSITION 218) WITH RESPECT TO THE ASSESSMENT FOR THE EXISTING CYPRESS COVE II LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT FOR FISCAL YEAR 2025-2026; OR, IN THE ALTERNATIVE, ADOPTING A RESOLUTION DECLARING ITS INTENTION TO DISSOLVE THE EXISTING CYPRESS COVE II LANDSCAPE MAINTENANCE DISTRICT

REQUEST:
It is requested that the City Council consider:

1. Opening public hearing, taking any testimony from the public, and;

2. Adopting Resolution No. 2025-____ (Attachment #1 hereto), forming the Cypress Cove II Landscape Maintenance Overlay Assessment District ("Overlay Assessment District") and levying the assessment for FY 2025-26 in connection with that District and the existing Cypress Cove II Maintenance Assessment District ("existing Assessment District"); and

3. Adopting Resolution No. 2025-__ (Attachment #2 hereto) certifying City of Marina compliance with State law (Proposition 218) with respect to FY 2025-2026 assessments for the existing Cypress Cove II Landscape Maintenance Assessment Districts;

   or, in the alternative,

4. Adopting Resolution No. 2025-_____ (Attachment #3 hereto), declaring its intention to dissolve the landscape maintenance district known as Cypress Cove II Landscape Maintenance District.

BACKGROUND:
At the regular meeting of June 16, 1987, the City Council adopted Resolution 1987-23, ordering the formation of the Cypress Cove II Landscape Maintenance Assessment District pursuant to Streets and Highway Code section 22594 and the Landscaping and Lighting Act of 1972 to maintain certain improvements required of new development as a condition of the Cypress Cove II subdivision approvals.

The Landscaping and Lighting Act of 1972 requires an annual update report to be prepared, which includes the costs to maintain the improvements of the Cypress Cove II Landscape Maintenance Assessment District and what the proposed assessments will be to provide for that maintenance.

The first step in the annual update process is for the City Council to initiate the process by adopting a resolution ordering the City Engineer to prepare and file an Engineer's Report for the District. At the regular meeting of February 19, 2025, the City Council adopted Resolution No. 2025-12, ordering the City Engineer to prepare and to file a report related to maintenance of the existing Cypress Cove II Landscape Maintenance Assessment District for Fiscal Year 2025-26. The report has been included as "Exhibit A".

After initiation of the update process and preparation of the update report, the next step in the process is for the City Council to adopt a resolution of intention to set a Public Hearing. At the regular meeting of May 6, 2025, the City Council adopted Resolution No. 2025-30, receiving the Fiscal Year 2025-26 Engineer's Report for the Cypress Cove II Landscape Maintenance Assessment District and Overlay Assessment District, approving, preliminarily, the Engineer's Report as filed, declaring its intention to order the formation of the Overlay Assessment District and to levy an assessment in Fiscal Year 2025-26 in each district (the existing Assessment District and the Overlay Assessment District), and setting a public hearing and assessment ballot proceeding for July 1, 2025 or as soon thereafter as the matter may be heard. Public hearing notices and assessment ballots were mailed to all affected property owners on May 15, 2025.

ANALYSIS:

For Fiscal Year 2025/26, an increase of 186%, from $180.78 to $517.60, is proposed to the assessment rate. This rate will enable the existing Assessment District to fully fund its tree maintenance expenses and reestablish a reasonable operating reserve for unforeseen costs.

Because the existing assessment predates Proposition 218 and therefore is "grandfathered" with respect to Proposition 218's requirements, past legal counsel has advised that the $336.82 per parcel increase in the assessment be assessed through a separate "overlay" district (which would be subject to Proposition 218) rather than as an increase to the assessment levied in connection with the existing Assessment District. If approved, this structure would result in each homeowner paying a maximum total of $517.60 per year; $180.78 to the existing district and $336.82 to the new district. The property-owner approval requirement for the overlay structure is the same as it would be for an increase to the existing assessment.

As required by Proposition 218, in order to form the Overlay Assessment District and levy the overlay assessment, the City Council must hold a public hearing on the proposed overlay assessment. After the Council has heard any written and oral testimony that members of the pubic wish to present, staff will tabulate the assessment ballots returned to the City. If the number of ballots returned in support of the overly assessment is no less than the number of ballots returned in opposition to the assessment, then the City Council may proceed to form the Overlay Assessment District and levy the overlay assessment for Fiscal Year 2025-26 at $336.82 per parcel, or at any lower rate (Resolution Attachment #1). Because the proposed assessment rate is the same for every parcel, every ballot will have the same weight.

Except for the Constitutionally-limited 1% ad valorem tax, the Monterey County Auditor-Controller will not place taxes, assessments, fees or charges on the rolls unless the City Council certifies by resolution that the City is in compliance with Proposition 218, the 1996 "Right to Vote on Taxes Act" with respect to each such tax, assessment, fee and charge. Certification resolution(s) must contain hold harmless and indemnification provisions for administrative expenses of the County associated with collection of the City's taxes, assessments, fees and charges placed on the

rolls. These certifications, along with copies of the resolutions setting the tax, assessment fee and/or charge rates and certain other documentation, must be submitted to the County no later than August 1, 2025.

Should the ballot not approve the overlay assessment, the City will move to dissolve the existing Assessment District and hold a separate Public Hearing to finalize the dissolution (Resolution Attachment #3). Homeowners of properties with yards facing Abdy Way, Beach Road and Dolphin Circle will be responsible for the maintenance areas previously within the District while the City will take responsibility for maintenance areas within the City's right-of-way.

FISCAL IMPACT:

Should the City Council approve this request, the anticipated revenue for the FY 2025-26 assessment levy is $517.60 ($180.78 for the existing Assessment District and $336.82 for the Overlay Assessment District) for the purpose of the landscape maintenance districts.

CONCLUSION:

This request is submitted for City Council's approval.

Respectfully submitted,

_____

Edrie Delos Santos, PE
Engineering Division
Public Works Department

REVIEWED/CONCUR:

_____

Ismael Hernandez
Public Works Director
City of Marina

_____

Layne P. Long
City Manager
City of Marina

(ATTACHMENT #1)

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARINA CONFIRMING THE ENGINEER'S REPORT, FORMING THE CYPRESS COVE II LANDSCAPE MAINTENANCE OVERLAY ASSESSMENT DISTRICT, AND LEVYING THE ASSESSMENT FOR FY 2025-26 IN CONNECTION WITH THE OVERLAY ASSESSMENT DISTRICT AND THE CYPRESS COVE II LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT

WHEREAS, at the regular meeting of June 16, 1987, the City Council adopted Resolution 1987-23, ordering the formation of the Cypress Cove II Landscape Maintenance Assessment District pursuant to Streets and Highway Code section 22594 and the Landscaping and Lighting Act of 1972 to maintain certain improvements required of new development as a condition of the subdivision approvals; and

WHEREAS, the Interim City Engineer, on the direction of the City Council, has filed with the City Clerk the Cypress Cove II Landscape Maintenance Assessment and Overlay Assessment District Engineer's Report (the "Report") with respect to the Fiscal Year 2025-26 levy of the assessment in connection with the existing Assessment District and the proposed Overlay Assessment District; and

WHEREAS, the existing annual assessment rate of $108.78 per parcel is insufficient to fully fund the activities of the Assessment District; and

WHEREAS, the Report also describes the formation of the Cypress Cove II Landscape Maintenance Overlay Assessment District (the "Overlay Assessment District") and the Fiscal Year 2025-26 levy of an assessment in connection with the Overlay Assessment District; and

WHEREAS, the Overlay Assessment District has identical boundaries to the Assessment District, and has been designed to levy an additional $336.82 per parcel annual assessment that will fill the funding shortfall in the existing assessment for tree maintenance; and

WHEREAS, on May 6, 2025, the City Council adopted Resolution No. 2025-30 (the "Resolution of Intention"), which approved, preliminarily, the Report and declared the Council's intention to form the Overlay Assessment District and to levy assessments in connection with the Assessment District and the Overlay Assessment District for fiscal year 2025-26 as described in the Report; and;

WHEREAS, the Resolution of Intention set a public hearing on these matters for July 1, 2025; and

WHEREAS, notices of the public hearing, along with assessment ballots, were mailed to each affected property owner as required by law and a full and fair public hearing was held at the appointed time and place; and

WHEREAS, the ballots properly submitted in opposition to the assessment in the Overlay Assessment District do not outnumber the ballots properly submitted in support of that assessment; and

WHEREAS, the City Council now desires to proceed with the formation of the Overlay Assessment District and the levy of assessments in connection with the Assessment District and the Overlay Assessment District.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marina that:

1. The Report, as filed, is hereby finally approved.
2. The City Council forms the Overlay Assessment District as set forth in the Report.
3. The City Council confirms the diagram and assessment set forth in the Report for the existing Assessment District and for the Overlay Assessment District.
4. The levy and collection of the Fiscal Year 2025-26 assessment in connection with the existing Assessment District is ordered at the rate of $180.78 per parcel, as set forth in the Report.
5. The levy and collection of the Fiscal Year 2025-26 assessment in connection with the Overlay Assessment District is ordered at the rate of $336.82 per parcel, as set forth in the Report.
6. The City Council determines that a majority protest against levy of the assessment in connection with the Overlay Assessment District the increase to the assessment does not exist, and that said assessment satisfies all requirements of Article XIII D, Section 4 of the California Constitution.
7. The City Council determines that the assessment levied in connection with the existing Assessment District predates the effective date of Article XIII D, Section 4 of the California Constitution and is exempt from the requirements of that section.
8. It is the intention of the City Council that any monetary advance made by the City during any fiscal year to cover a deficit in the improvement fund of the Existing Assessment District shall be repaid from the next annual assessments levied and collected within the Existing and Overlay Assessment Districts.
9. The provisions of this resolution are severable and if any one provision is determined to be impermissible then the remainder of the resolution shall remain in full force and effect.
10. The City Clerk is hereby authorized and directed to file a certified copy of said diagram and assessments with the Monterey County Auditor prior to August 1, 2025 and staff is directed to take any actions necessary to cause the collection of the assessments on the property tax roll.

PASSED AND ADOPTED by the City Council of the City of Marina at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

(ATTACHMENT #2)

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY OF MARINA CERTIFYING
COMPLIANCE WITH STATE LAW WITH RESPECT TO
LEVYING OF SPECIAL ASSESSMENTS FOR FISCAL YEAR 2025-2026

WHEREAS, the City of Marina requests that the Monterey County Auditor-Controller enter the special assessment identified in Exhibit "A" on the property tax roll for collection and distribution by the Monterey County Treasurer-Tax Collector commencing with the property tax bills for fiscal year 2025-26 ("EXHIBIT A").

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Marina as follows:

1. The City hereby certifies that it has, without limitation, complied with all legal procedures and requirements necessary for the levying and imposition of the general or special taxes and assessments identified in **EXHIBIT A** regardless of whether those procedures and requirements are set forth in the Constitution of the State of California, in State statutes, or in the applicable decisional law of the State of California.

2. The City further certifies that, except for the sole negligence or misconduct of the County of Monterey, its officers, employees and agents, the City shall be solely liable and responsible for defending, at its sole expense, cost and risk, each and every action, suit or other proceeding brought against the County of Monterey, its officers, employees and agents for every claim, demand or challenge to the levying or imposition of the general or special taxes and assessments identified in **EXHIBIT A** and that the City shall pay or satisfy any judgment rendered against the County of Monterey, its officers, employees and agents on every such action, suit, or other proceeding, including all claims for refunds and interest thereon, legal fees, court costs and administrative expenses of the County of Monterey to correct the tax rolls.

PASSED AND ADOPTED by the City of Marina City Council at a regular meeting duly held on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

EXHIBIT A

ATTACHMENT TO RESOLUTION NO. 2025-__ OF THE CITY OF MARINA, COUNTY OF MONTEREY, CALIFORNIA, CERTIFYING COMPLIANCE WITH STATE LAW WITH RESPECT TO THE LEVYING OF SPECIAL ASSESSMENTS FOR FISCAL YEAR 2025-2026

PER-PARCEL ASSESSMENTS:

Assessment District – Operations:	
Cypress Cove II Landscape Maintenance Assessment District	$180.78
Overlay Assessment District – Operations:	
Cypress Cove II Landscape Maintenance Assessment Overlay District	$336.82

(ATTACHMENT #3)

RESOLUTION NO. 2025-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MARINA DECLARING ITS INTENTION TO DISSOLVE THE CYPRESS COVE LANDSCAPE MAINTENANCE DISTRICT

WHEREAS, at the regular meeting of June 16, 1987, the City Council adopted Resolution 1987-23, ordering the formation of the Cypress Cove II Landscape Maintenance Assessment District pursuant to Streets and Highway Code section 22594 and the Landscaping and Lighting Act of 1972 to maintain certain improvements required of new development as a condition of the subdivision approvals, and;

WHEREAS, the current maximum assessment for the Assessment District was set in 2004 and is not sufficient to fully fund the annual expenses of the Assessment District, and;

WHEREAS, to meet this shortfall, the Assessment District has been using its reserve funds, which are nearly depleted and cannot sustain the maintenance of the 68 trees in the District, and;

WHEREAS, by prior resolution, the City Council declared its intent to levy the assessment for Fiscal Year 2025-26 and proposed forming and Overlay Assessment District to levy an increased rate for the assessment in the form of a new overlay assessment; and

WHEREAS, on July 1, 2025, the City Council held a properly noticed public hearing on the Fiscal Year 2025-26 levy; and

WHEREAS, at the July 1, 2025 public hearing, it was determined that the property owners, in an assessment ballot proceeding, had rejected the proposed overlay assessment; and

WHEREAS, due to the lack of funding to maintain the landscape maintenance functions and benefits of the Assessment District the City Council now must dissolve the District; and

WHEREAS, to dissolve the District, the City Council must first declare its intention to dissolve the Assessment District and hold a public hearing at which it finally dissolves the district.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Marina, as follows:

1. The City Council declares its intention to dissolve the Assessment District.
2. A public hearing on the dissolution of the Assessment District is scheduled for August 6, 2025 at 6:30 P.M. or as soon thereafter as the matter may be heard, in the City Council Chambers located at 211 Hillcrest Avenue, City of Marina, California.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Marina, on the 1st day of July 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

CITY OF MARINA
MONTEREY COUNTY
CALIFORNIA

CYPRESS COVE II
LANDSCAPE MAINTENANCE
ASSESSMENT DISTRICT
AND
OVERLAY ASSESSMENT DISTRICT

ENGINEER'S REPORT

FY 2025-2026

Council Members:

B. DELGADO, MAYOR

B. MCCARTHY	L. VISSCHER
K. BIALA	J. MCADAMS

LAYNE LONG	City Manager
ANITA SHEPHERD-SHARP	Deputy City Clerk
RENÉ ORTEGA	City Attorney
ISMAEL HERNANDEZ	Public Works Director

Prepared By
City of Marina
Public Works Department

CYPRESS COVE II
LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT
&
CYPRESS COVE II
LANDSCAPE MAINTENANCE OVERLAY ASSESSMENT DISTRICT
FY 2025-2026

This report concerns the Cypress Cove II Landscape Maintenance Assessment District ("Original Assessment District") and the Cypress Cove II Landscape Maintenance Overlay Assessment District ("Overlay Assessment District"), collectively "the Districts".

The Districts have identical boundaries, and each consist of the Cypress Cove II Subdivision located in the westerly portion of the City of Marina just east of the Highway I and Reservation Road interchange. The subdivision is bounded on three sides by Abdy Way, Cardoza Avenue, and Beach Road, contains 110 lots, a percolation pond parcel (Parcel B), and an emergency access road (Parcel C).

The subdivision consists of 110 single family homes complete with underground utilities, water and wastewater facilities, street and drainage improvements, and landscaping. The Districts have been formed for the purpose of maintaining the exterior boundary landscaping and retaining walls, installed and paid for by the developer.

This report has been prepared pursuant to Sections 22565 through 22574 of the Streets and Highways Code (Landscaping and Lighting Act of 1972).

The improvements to be maintained which are the subject of this report, are briefly described as follows:

> All exterior landscaping elements located adjacent to the subdivision boundaries along Abdy Way, Cardoza Avenue, and Beach Road and outside the chain link fence on Parcel B are considered as the improvements included in the Assessment District. Landscaping elements consist of hydroseeded areas, groundcover, shrubs, trees, irrigation pipelines, controllers, valves, sprinklers, masonry retaining walls, and electrical service. Plans and specifications showing these existing improvements which are to be maintained are on file in the City of Marina Public Works Division.

The Original Assessment District was formed in 1987 and the rate of the assessment in connection with the Original Assessment District has not been increased since 2004. Therefore, the Original Assessment District is "grandfathered" with respect to the requirements of Proposition 218 (Articles XIII C and XIII D of the California Constitution).

The Overlay Assessment District is designed to finance the maintenance of the trees in the landscaping areas noted in the description above. The cost estimate contained in this report is a determination of the cost of the special benefit to each parcel within the Overlay Assessment District from the operation, maintenance and servicing of the landscaping that provides aesthetic benefits to the adjacent and nearby parcels.

There is no general benefit from the facilities because the assessed parcels constitute all of the residential parcels within the geographically distinct subdivision that constitutes the Overlay Assessment District. It is unlikely that persons not associated with assessed parcels will make use of the facilities because the Overlay Assessment District is an isolated residential subdivision which has no pass-through traffic. Parcels outside of the Overlay Assessment District are in a different geographically distinct area and served by different facilities. Furthermore, the landscaping is geographically disbursed within the District and each assessed parcel has essentially equal proximity to (and special benefit from) improvements regardless of the parcel's location within the Overlay Assessment District.

All residential parcels in the Overlay Assessment District receive equal special benefits from the improvements. The only non-residential parcels in the Overlay Assessment District are a percolation pond and a park. These parcels do not receive special benefit from the improvements because they are themselves public landscaped areas of a nature similar to the landscaping funded by the Overlay Assessment District.

This report includes the following attached exhibits:

EXHIBIT A - An assessment diagram and boundary map showing all of the parcels of the real property within the Assessment District. The diagram is keyed to Exhibit C by the separate "Assessment Number".

EXHIBIT B - Spreadsheet showing estimated costs for FY 2024-2025 and estimated costs for FY 2025-2026 and FY 2026-2027.

EXHIBIT C - An assessment roll showing the amount proposed to be assessed against each parcel of real property within this Assessment District. In addition to the Assessor's Parcel Number each parcel has been assigned a separate "Assessment Number" which corresponds to that parcels lot number.

EXHIBIT D - Method of determination of assessment spread.

Respectfully Submitted,

_____
Nourdin Khayata, PE
Interim City Engineer

April 2025

Boundary and Landscaped Area Map

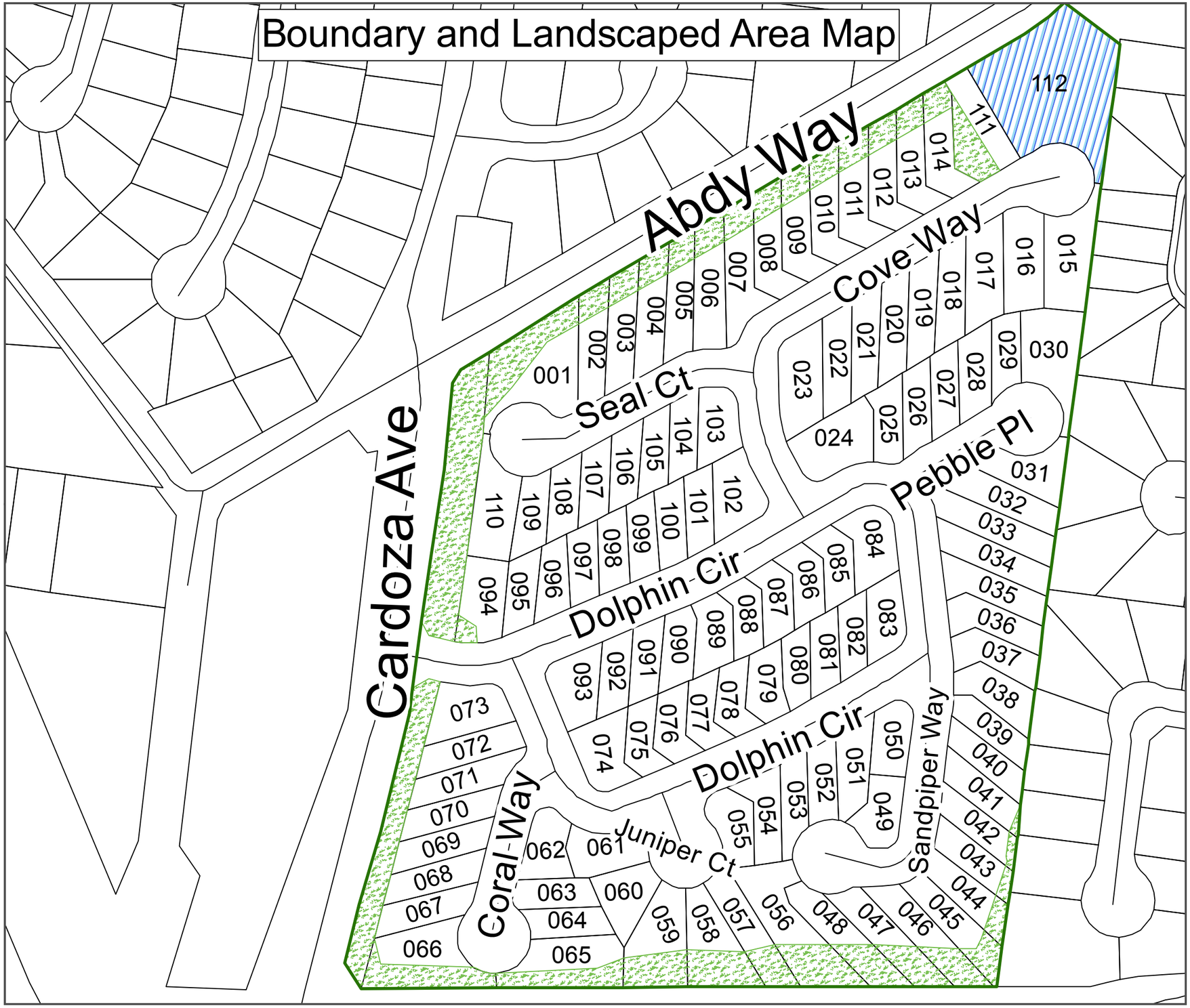
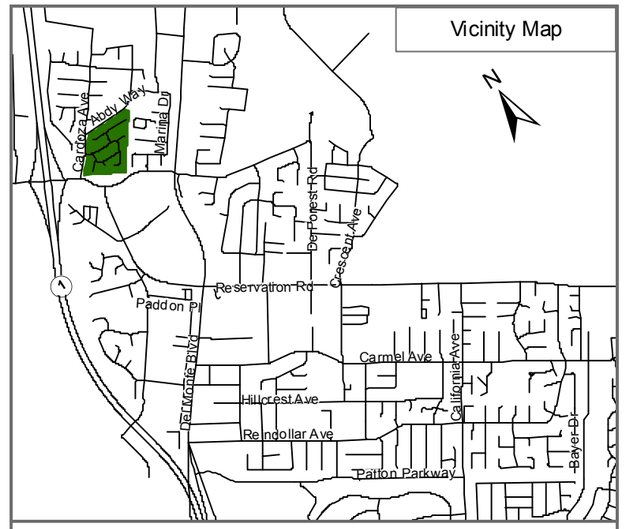


EXHIBIT A

Cypress Cove II
Landscape Maintenance District



Legend

Cypress Cove II

- Boundary
- Landscaped Area **2.00 Acres**
- Parcels
- Percolation Lot
- Roads

Date: April 15th, 2009

Notes: The City of Marina assume no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to updates/modifications and may not be complete or appropriate for all purposes. The City of Marina and Monterey County GIS should be queried for the most current information. Parcel data is of mapping grade only and does not represent reliable locations or legal boundaries.

Sources: Monterey County GIS, City of Marina CDD
Map Projection: California State Plane Zone IV, NAD 83 (Feet)

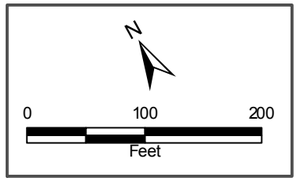


EXHIBIT B

CYPRESS COVE II LANDSCAPE MAINTENANCE DISTRICT

Summary	Estimates FY 2024-2025	Estimates FY 2025-2026	Estimates FY 2026-2027
Existing District Beginning Cash Balance, July 1st	$ 3,775	$ 393	$ 12,326
(a) Existing Assessment Revenues (110 Parcels)	$ 19,886	$ 19,886	$ 19,886
Overlay District Beginning Cash Balance, July 1st	$ -	$ -	$ -
(a) Overlay District Assessment Revenues (110 Parcels)	$ -	**$ 37,050**	**$ 37,050**
Total Available Funds	**$ 23,661**	**$ 57,330**	**$ 69,263**
Expenditures			
Contractor Services			
(b) Landscape Maintenance Contract	$ 6,439	$ 6,632	$ 6,831
Utilities	$ 644	$ 644	$ 644
Large Tree Trimming	$ -	$ 31,120	$ 37,050
Extraordinary Maintenance	$ 9,684	$ -	$ -
Tree/Plant Replacement			
Administrative Services			
Supervision	$ -	$ -	$ -
Administration (Incl. Engineers Report)	$ 3,500	$ 4,000	$ 4,000
Cost Allocation Plan Charges	$ 2,750	$ 2,750	$ 2,750
Legal Advertising	$ 250	$ 250	$ 250
Total Expenditures	**$ 23,267**	**$ 45,396**	**$ 51,525**
(c) Net Change in Fund Balance	**$ (3,381)**	**$ 11,933**	**$ 17,737**
(d) Ending Fund Balance, June 30th	**$ 393**	**$ 12,326**	**$ 30,064**

(a) The current District's Maximum Assessment per Prop 218 is $180.78 per parcel. The proposed assessment amount for FY 25/26 is $187.78 (Original District) + $336.82 (Overlay District).

(b) Maintenance Costs are shown as increasing per fiscal year by an estimated Consumer Cost Index (CPI) of 3% as allowed by the Contract Specifications.

(c) Net Change in Fund Balance equals the Total Expenditures subtracted from Total Assessment Revenue for that Fiscal Year.

(d) End Fund Balance equals the Net Change in Fund Balance plus the Beginning Cash Balance of that Fiscal Year. The FY 25/26 end fund balance will carry over to help finance the continuous work scheduled through the next 5-years.

EXHIBIT C
CYPRESS COVE II
LANDSCAPE MAINTENANCE DISTRICT
ASSESSMENT ROLL FOR
FISCAL YEAR 2025-2026

Diagram & Assessment No.	Assessor's Parcel Number	Original District Assessment	Overlay District Assessment
1	033-076-001	$ 180.78	$ 336.82
2	033-076-002	$ 180.78	$ 336.82
3	033-076-003	$ 180.78	$ 336.82
4	033-076-004	$ 180.78	$ 336.82
5	033-076-005	$ 180.78	$ 336.82
6	033-076-006	$ 180.78	$ 336.82
7	033-076-007	$ 180.78	$ 336.82
8	033-076-008	$ 180.78	$ 336.82
9	033-076-009	$ 180.78	$ 336.82
10	033-076-010	$ 180.78	$ 336.82
11	033-076-011	$ 180.78	$ 336.82
12	033-076-012	$ 180.78	$ 336.82
13	033-076-013	$ 180.78	$ 336.82
14	033-076-014	$ 180.78	$ 336.82
15	033-076-015	$ 180.78	$ 336.82
16	033-076-016	$ 180.78	$ 336.82
17	033-076-017	$ 180.78	$ 336.82
18	033-076-018	$ 180.78	$ 336.82
19	033-076-019	$ 180.78	$ 336.82
20	033-076-020	$ 180.78	$ 336.82
21	033-076-021	$ 180.78	$ 336.82
22	033-076-022	$ 180.78	$ 336.82
23	033-076-023	$ 180.78	$ 336.82
24	033-076-024	$ 180.78	$ 336.82
25	033-076-025	$ 180.78	$ 336.82
26	033-076-026	$ 180.78	$ 336.82

EXHIBIT C
CYPRESS COVE II
LANDSCAPE MAINTENANCE DISTRICT
ASSESSMENT ROLL FOR
FISCAL YEAR 2025-2026

Diagram & Assessment No.	Assessor's Parcel Number	Original District Assessment	Overlay District Assessment
27	033-076-027	$ 180.78	$ 336.82
28	033-076-028	$ 180.78	$ 336.82
29	033-076-029	$ 180.78	$ 336.82
30	033-076-030	$ 180.78	$ 336.82
31	033-076-031	$ 180.78	$ 336.82
32	033-076-032	$ 180.78	$ 336.82
33	033-076-033	$ 180.78	$ 336.82
34	033-076-034	$ 180.78	$ 336.82
35	033-076-035	$ 180.78	$ 336.82
36	033-076-036	$ 180.78	$ 336.82
37	033-076-037	$ 180.78	$ 336.82
38	033-076-038	$ 180.78	$ 336.82
39	033-076-039	$ 180.78	$ 336.82
40	033-076-040	$ 180.78	$ 336.82
41	033-076-041	$ 180.78	$ 336.82
42	033-076-042	$ 180.78	$ 336.82
43	033-076-043	$ 180.78	$ 336.82
44	033-076-044	$ 180.78	$ 336.82
45	033-076-045	$ 180.78	$ 336.82
46	033-076-046	$ 180.78	$ 336.82
47	033-076-047	$ 180.78	$ 336.82
48	033-076-048	$ 180.78	$ 336.82
49	033-076-049	$ 180.78	$ 336.82
50	033-076-050	$ 180.78	$ 336.82
51	033-076-051	$ 180.78	$ 336.82
52	033-076-052	$ 180.78	$ 336.82

EXHIBIT C
CYPRESS COVE II
LANDSCAPE MAINTENANCE DISTRICT
ASSESSMENT ROLL FOR
FISCAL YEAR 2025-2026

Diagram & Assessment No.	Assessor's Parcel Number	Original District Assessment	Overlay District Assessment
53	033-076-053	$ 180.78	$ 336.82
54	033-076-054	$ 180.78	$ 336.82
55	033-076-055	$ 180.78	$ 336.82
56	033-076-056	$ 180.78	$ 336.82
57	033-076-057	$ 180.78	$ 336.82
58	033-076-058	$ 180.78	$ 336.82
59	033-076-059	$ 180.78	$ 336.82
60	033-076-060	$ 180.78	$ 336.82
61	033-076-061	$ 180.78	$ 336.82
62	033-076-062	$ 180.78	$ 336.82
63	033-076-063	$ 180.78	$ 336.82
64	033-076-064	$ 180.78	$ 336.82
65	033-076-065	$ 180.78	$ 336.82
66	033-076-066	$ 180.78	$ 336.82
67	033-076-067	$ 180.78	$ 336.82
68	033-076-068	$ 180.78	$ 336.82
69	033-076-069	$ 180.78	$ 336.82
70	033-076-070	$ 180.78	$ 336.82
71	033-076-071	$ 180.78	$ 336.82
72	033-076-072	$ 180.78	$ 336.82
73	033-076-073	$ 180.78	$ 336.82
74	033-076-074	$ 180.78	$ 336.82
75	033-076-075	$ 180.78	$ 336.82
76	033-076-076	$ 180.78	$ 336.82
77	033-076-077	$ 180.78	$ 336.82
78	033-076-078	$ 180.78	$ 336.82

EXHIBIT C
CYPRESS COVE II
LANDSCAPE MAINTENANCE DISTRICT
ASSESSMENT ROLL FOR
FISCAL YEAR 2025-2026

Diagram & Assessment No.	Assessor's Parcel Number	Original District Assessment	Overlay District Assessment
79	033-076-079	$ 180.78	$ 336.82
80	033-076-080	$ 180.78	$ 336.82
81	033-076-081	$ 180.78	$ 336.82
82	033-076-082	$ 180.78	$ 336.82
83	033-076-083	$ 180.78	$ 336.82
84	033-076-084	$ 180.78	$ 336.82
85	033-076-085	$ 180.78	$ 336.82
86	033-076-086	$ 180.78	$ 336.82
87	033-076-087	$ 180.78	$ 336.82
88	033-076-088	$ 180.78	$ 336.82
89	033-076-089	$ 180.78	$ 336.82
90	033-076-090	$ 180.78	$ 336.82
91	033-076-091	$ 180.78	$ 336.82
92	033-076-092	$ 180.78	$ 336.82
93	033-076-093	$ 180.78	$ 336.82
94	033-076-094	$ 180.78	$ 336.82
95	033-076-095	$ 180.78	$ 336.82
96	033-076-096	$ 180.78	$ 336.82
97	033-076-097	$ 180.78	$ 336.82
98	033-076-098	$ 180.78	$ 336.82
99	033-076-099	$ 180.78	$ 336.82
100	033-076-100	$ 180.78	$ 336.82
101	033-076-101	$ 180.78	$ 336.82
102	033-076-102	$ 180.78	$ 336.82
103	033-076-103	$ 180.78	$ 336.82
104	033-076-104	$ 180.78	$ 336.82

EXHIBIT C
CYPRESS COVE II
LANDSCAPE MAINTENANCE DISTRICT
ASSESSMENT ROLL FOR
FISCAL YEAR 2025-2026

Diagram & Assessment No.	Assessor's Parcel Number	Original District Assessment	Overlay District Assessment
105	033-076-105	$ 180.78	$ 336.82
106	033-076-106	$ 180.78	$ 336.82
107	033-076-107	$ 180.78	$ 336.82
108	033-076-108	$ 180.78	$ 336.82
109	033-076-109	$ 180.78	$ 336.82
110	033-076-110	$ 180.78	$ 336.82
111		Exempt	
112		Exempt	

E X H I B I T D

METHOD OF DETERMINATION OF ASSESSMENT SPREAD

The maintenance of the subdivision exterior boundary landscaping benefits the Assessment District as a whole. Therefore, the assessment spread should be based on the number of building sites or lots contained within the district.

Assessments shall be spread over the 110 lots indicated on the Assessment Diagram (Exhibit A).

June 26, 2025 Item No. **11b**

Honorable Mayor and Members
of the Marina City Council

City Council Meeting
of July 1, 2025

CITY COUNCIL RECEIVING INFORMATIONAL PRESENTATION AND CONSIDER OPENING PUBLIC HEARING, TAKING ANY TESTIMONY FROM THE PUBLIC AND CONSIDER INTRODUCING ORDINANCE NO. 2025-, AMENDING CHAPTER 3.26 OF THE MARINA MUNICIPAL CODE REGARDING MITIGATION FEES FOR NEW DEVELOPMENT WITHIN THE CITY OF MARINA

REQUEST:

It is requested that the City Council consider:

1. Receive informational presentation on a Development Impact Fee Nexus Study; and
2. Adopt the Development Impact Fee Nexus Study; and
3. Open the public hearing and take any testimony from the public, and;
4. Consider introducing Ordinance No. 2025-, amending chapter 3.26 of the Marina Municipal Code regarding mitigation fees for new development within the City of Marina.

BACKGROUND:

The Mitigation Fee Act, Section 66000 et seq. of the California Government Code, and the Marina Municipal Code Chapter 3.26 Mitigation Fees for New Development, provide a mechanism whereby the City may impose and charge mitigation fees as a condition of approval for development projects. These mitigation or public facility impact fees (PFIF) may only be used to offset the cost of certain infrastructure attributable to development.

In 2007, the City contracted with Kimley Horn to conduct a Development Impact Fee Study. Following this study, the Council adopted public facility impact fees. In 2011, and subsequently in 2016, the Development Impact Fee Study was updated and the City Council adopted updated public facility impact fees.

California Government Code Section 66016.5(c)(8) indicates that studies shall be updated at least every eight years, from the period beginning on January 1, 2022. The City recently contracted with a consulting team to provide an update to the prior impact fee studies through a new Development Impact Fee Nexus Study (Study). To comply with the Government Code and the City's Municipal Code, the following public notifications were prepared:

- Adopted Resolution 2025-56, acknowledging the Public Hearing Notice and ratifying the setting of a Public Hearing for July 1, 2025, on the proposed intention to adopt an Impact Fee Nexus Study and to amend Chapter 3.26 of the Marina Municipal Code Regarding Mitigation Fees for New Development within the City of Marina.
- Published the notice of public hearing for July 1, 2025, on May 30, 2025, on the City's website and with the June 3, 2025, City Council agenda packet.

- Placed a public notice ten days prior to the July 1, 2025, Council Meeting in the Monterey Herald newspaper on June 20, 2025, and June 26, 2025.

- Published a copy of the new Development Impact Fee Nexus Studies, prior study, and additional related information on the City's website on June 20, 2025: Development Impact Fees Study Update | Marina, CA - Official Website.

ANALYSIS:

The City's new Development Impact Fee Nexus Study (Study) is divided into the following two reports and includes updates to the City's five (5) public facilities impact fee programs:

- City of Marina Development Impact Fee Update for General Government, Public Safety, and Parks **(ATTACHMENT A)**
  - Public building facilities
  - Public safety facilities
  - Parks
- City of Marina Traffic Impact Fee Update **(ATTACHMENT B)**
  - Roadways
  - Intersections

The Studies re-evaluate and update the fees developed from the 2016 study; incorporate projects from the City's Capital Improvement Program (CIP), and recommend additional projects. These fees are based on future infrastructure needs that are generated by new development. A list of recommended general government, public safety, and park improvements that were incorporated into the study are included in Attachment A, page 15; and traffic-related projects are included in Attachment B on pages 1-2. These projects are within the City's current General Plan boundaries; and represent a twenty-year growth and project time horizon.

In accordance with new legislation and Government 66016.5 (a)(5)(A), fees imposed on housing development projects shall be based on the square footage of the units of development. These fees were previously calculated based on the type of residential unit. To comply with this section, all fees have been converted to a square footage calculation, and when applicable on a per unit cost based on square feet. Information on the proposed new fees is included in **ATTACHMENT C.** An overview of this methodology and the legislation will be provided at the Council Meeting. An excerpt from the upcoming presentation which compares the City's existing fees to the proposed new fee schedule based on typical square footage by residential unit type is included in **EXHIBIT D.**

The proposed fees are not applicable to all developments. The City has entered into Disposition and Development Agreements (DDA) which include terms related to Development Impact Fees. The fees related to these developments will be subject to fees in accordance with such agreements. This includes the Dunes and Marina Station developments.

Government Code Section 66016.5 requires the City do all of the following when it conducts an impact fee nexus study:

- Adopt an impact fee nexus study prior to adopting new impact fees.
- When applicable, the nexus study shall identify the existing level of service for each public facility, identify the proposed new level of service, and include an explanation of why the new level of service is appropriate.

- A nexus study shall include information that supports the city's actions, as required by subdivision (a) of Section 66001.
- If a nexus study supports the increase of an existing fee, the city shall review the assumptions of the nexus study supporting the original fee and evaluate the amount of fees collected under the original fee.
- A nexus study adopted after July 1, 2022, shall calculate a fee imposed on a housing development project proportionately to the square footage of proposed units of the development.

The actions requested along with the Study are intended to satisfy these requirements.

Additionally, Chapter 3.26.070 of the Marina Municipal Code requires the adoption or increase of fees by ordinance, and in accordance with Government Code Section 66016. Ordinance 2025-XX has been provided for consideration. If Council adopts the Development Impact Fee Nexus Study and introduces Ordinance 2025-, the second reading adopting the ordinance will take place on August 6, 2025. The new fees can only become effective sixty (60) days following the adoption of the ordinance.

FISCAL IMPACT:
Adoption of the proposed development impact fees will provide revenue to fund the development driven projects.

CONCLUSION:
This request is submitted for City Council's approval.

Respectfully submitted,

_____
Tori Hannah
Finance Director
City of Marina

REVIEWED/CONCUR:

_____
Layne P. Long
City Manager
City of Marina

ORDINANCE NO. 2025-

AN ORDINANCE OF THE CITY OF MARINA AMENDING CHAPTER 3.26 OF THE MARINA MUNICIPAL CODE REGARDING MITIGATION FEES FOR NEW DEVELOPMENT

WHEREAS, the Mitigation Fee Act, at Sections 66000 and following of the California Government Code, provides authority for imposing and charging mitigation fees; and

WHEREAS, in accordance with Chapter 3.26 of the Municipal Code, the Community Development Director has caused to be prepared and has reviewed a revised version of the "Development Impact Fee Study" initially prepared by RBF Kimley Horn on, dated July 20, 2007 (the "Initial Study"), as updated by RBF Consulting on April 25, 2011, Kimley Horn & Associates, Inc. on May 18, 2016; and further updated by Kimley Horn on June 18, 2025 and Economic and Planning Systems, Inc, (EPS) on June 19, 2025 (the "Updated Study"), incorporated herein by this reference, and on file in the office of the Public Works Division and City Clerk; and

WHEREAS, the Updated Study evaluates the impacts of contemplated future development on existing public facilities, public safety, transportation (roadways and intersections), and parks (collectively "Facilities") in the City of Marina along with an analysis of the need for new Facilities and improvements required by such new development, sets forth the reasonable relationship between such needs and the impacts of the various types of development pending or anticipated for which this fee is charged and describes the estimated costs of those improvements and the continued need for those improvements; and

WHEREAS, the update to the Initial Study by Kimley Horn and EPS were necessary due to the requirements of California Government Code Section 66016.5(c)(8), changes in the City's Capital Improvement Program, and revised cost estimates which occurred or were determined subsequent to the completion of the Initial Study; and

WHEREAS, to comply with the Government Code and the City's Municipal Code, the following public notifications were undertaken:

- Adopted Resolution 2025-56, acknowledging the Public Hearing Notice and ratifying the setting of a Public Hearing for July 1, 2025 on the proposed intention to adopt an Impact Fee Nexus Study and to amend Chapter 3.26 of the Marina Municipal Code Regarding Mitigation Fees for New Development within the City of Marina; and
- Published the notice of public hearing for July 1, 2025 on May 30, 2025 on the City's website and with the June 3, 2025 City Council agenda packet; and
- Placed a public notice ten days prior to the July 1, 2025 Council Meeting in the Monterey Herald newspaper on June 20, 2025 and June 26, 2025; and
- Published a copy of the new Development Impact Fee Nexus Studies, prior study, and additional related information on the City's website on June 20, 2025: Development Impact Fees Study Update | Marina, CA - Official Website.

WHEREAS, a duly noticed public meeting regarding the mitigation fees recommended by the update to the Study was held before this Council pursuant to Section 3.26.070 (B)(1) of the Municipal Code and California Government Code Section 66016 on July 1, 2025, and the Updated Study was made available to the public at least 10 days prior to the meeting; and

WHEREAS, a duly noticed public hearing regarding the mitigation fees recommended by the Updated Study was held before this Council pursuant to Section 3.26.070(B)(4) of the Municipal Code and California Government Code Section 66018 on July 1, 2025.

THEREFORE, THE CITY COUNCIL OF THE CITY OF MARINA DOES FIND AS FOLLOWS:

a) Having reviewed and considered the Updated Study and the testimony and materials presented at the public hearing, this Council approves and adopts the Updated Study and further finds that new development in the City of Marina will generate additional population within the City and will impact the Facilities defined and analyzed in the Updated Study.

b) There is a need in the City of Marina for Facilities that have not been constructed, or have been constructed but for which new development has not contributed its fair share of facility costs, and said Facilities have been called for in or are consistent with Updated Study. The cost estimates set forth in the Updated Study are the reasonable cost estimates in 2024 dollars for constructing these Facilities, and the fees expected to be generated by new development will not exceed the total of these costs.

d) The facts and evidence presented establish that there is a reasonable relationship between the need for the described Facilities and the impacts of the types of development described herein by Exhibit A Tables 1 and 2, herein adopted and incorporated by reference as if set forth herein in their entirety, and there is a reasonable relationship between the fee's use and the type of development for which the fee is charged, as these reasonable relationships and nexus are in more detail described in the Updated Study.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MARINA INCORPORATES THE ABOVE RECITALS AND FINDINGS AS IF FULLY SET FORTH HEREIN AND DOES ORDAIN AS FOLLOWS:

1. Section 3.26.050 Amended: Section 3.26.050 of Chapter 3.26, entitled

"Payment of Fees" is hereby amended to read in its entirety as follows:

"**3.26.050 Payment of fees**.

For new development, mitigation fees shall be charged and payable as set out in Table 1 of this chapter, as set forth in the attached one (1) page, marked Exhibit "A," and incorporated herein by this reference thereto. The director shall determine, based on the type of development, the corresponding fee to be paid pursuant to this chapter. Except as otherwise provided by law or development agreement, the fees shall be paid at the time of issuance of any building permit for new development within the city.

2. Effective Date. This ordinance shall take effect and be in force sixty (60) days from and after its final passage.

3. Posting of Ordinance. Within fifteen (15) days after the passage of this ordinance, the City Clerk shall cause it to be posted in the three (3) public places designated by resolution of City Council.

4. Any fee, ordinance or resolution previously adopted in conflict with this Ordinance hereby is repealed as to any portion thereof in conflict with this Ordinance.

The foregoing ordinance was introduced at a regular meeting of the City Council of the City of Marina duly held on 1st day of July 2025, and was passed and adopted at a regular meeting duly held on the 6th day of August 2025, by the following roll call vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

Exhibit A

Table 1 - Public Facilities, Public Safety, Parks [1]

Land Use Category	per Unit	Public Facilities (General Gov.)	Public Safety	Parks	Total
Residential					
Single Family					
Units 900 SF or less	per Unit	$787	$1,907	$4,585	$7,279
Units 901-2,999 SF	per KSF	$874	$2,119	$5,094	$8,087
Units 3,000 SF or greater	per Unit	$2,622	$6,356	$15,283	$24,261
Multifamily					
Units 500 SF or less	per Unit	$807	$1,957	$4,706	$7,470
Units 501-1,599 SF	per KSF	$1,615	$3,914	$9,413	$14,942
Units 1,600 SF or greater	per Unit	$2,584	$6,263	$15,060	$23,907
Senior Homes					
Units 500 SF or less	per Unit	$682	$1,653	$3,976	$6,311
Units 501-1,599 SF	per KSF	$1,364	$3,307	$7,952	$12,623
Units 1,600 SF or greater	per Unit	$2,183	$5,291	$12,723	$20,197
Assisted Living					
Units 500 SF or less	per Unit	$341	$827	$1,988	$3,156
Units 501-1,599 SF	per KSF	$682	$1,653	$3,976	$6,311
Units 1,600 SF or greater	per Unit	$1,091	$2,645	$6,361	$10,097
Nonresidential					
Office/Research	per KSF	$998	$2,420	-	$3,418
Retail/Service	per KSF	$599	$1,452	-	$2,051
Industrial	per KSF	$200	$484	-	$684
Hotel	per KSF	$272	$660	-	$932
Church	per KSF	$200	$484	-	$684
Daycare Center	per KSF	$799	$1,936	-	$2,735
Animal Hospital/Vet Clinic	per KSF	$1,198	$2,904	-	$4,102
Medical/Dental	per KSF	$1,198	$2,904	-	$4,102

(1) SF = Square Feet, KSF = 1,000 Square Feet.

Exhibit A

Table 2 - Intersections and Roadways [(1)]

Land Use Category	per Unit	Intersections	Roadways	Total
Residential				
Single Family	per KSF	$2,239	$8,236	$10,475
Senior Homes	per Unit	$2,429	$8,932	$11,361
Assisted Living	per Unit	$1,465	$5,388	$6,853
Multifamily	per Unit	$3,798	$13,968	$17,766
Nonresidential				
Office/Research	per KSF	$6,045	$22,234	$28,279
Retail/Service	per KSF	$15,050	$55,351	$70,401
Industrial	per KSF	$2,772	$10,197	$12,969
Hotel	per KSF	$4,456	$16,388	$20,844
Church	per KSF	$4,018	$14,776	$18,794
Daycare Center	per KSF	$23,790	$87,499	$111,289
A Animal Hospital/Vet Clinic	per KSF	$12,240	$45,017	$57,257
Medical/Dental	per KSF	$20,495	$75,377	$95,872

(1) SF = Square Feet, KSF = 1,000 Square Feet.

Attachment A

Report
Fee Update and Nexus Study

City of Marina
Development Impact Fee Update for General Government, Public Safety, and Parks

The Economics of Land Use

Prepared for:
City of Marina

Prepared by:
Economic & Planning Systems, Inc.

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June 19, 2025

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1. Introduction and Results

Introduction

This Fee Update and Nexus Study (Nexus Study) provides the City of Marina with the necessary technical documentation to support adoption of updated development impact fees, including General Government (formerly Public Buildings), Public Safety, and Parks Fee programs. Economic & Planning Systems, Inc. (EPS) prepared the Nexus Study based on capital improvement planning and city growth forecasting data provided by the City of Marina. EPS conducted the analysis and reporting under a subcontract with Kimley-Horn. General Government, Public Safety, and Parks Fee Programs may be approved by the City Council and would be effective 60 days following the City's adoption of the fees.

A Development Impact Fee (DIF) is a one-time charge levied on new real estate development. DIFs are collected and used by local jurisdictions (e.g., a City or County) to find infrastructure and capital investments needed to serve new residential and commercial growth. Consistent with the Mitigation Fee Act (AB 1600/ Government Code Section 66000 et seq.) and related legislation, this Nexus Study provides a legal basis for three DIFs charged by the City of Marina. DIF program elements that may be established by a City Ordinance and implemented by Resolution.

The Nexus Study determines the relationship between city growth and capital improvements and provides associated fee calculations that identify the maximum fee levels the City may charge. As with current fees in Marina, updated fees would be collected on a citywide basis given the broad scope of capital improvements included in this study. While the City may elect to charge lower fees for specific land uses, areas of the city, or across the board, such reductions must be offset by alternative funding that supports the improvement program.

The fee program described in this Nexus Study is based on capital investments identified by the City that serve to maintain or increase citywide service levels. The fee program focuses on a roughly 20-year time frame and, as such, relies on forecasts for growth, development, and associated capital facilities needs over that period. To inform fee levels, the City identified specific capital facility project investments. Importantly, these capital projects may be altered or replaced over time with other qualifying projects as the City administers the fee program.

This Nexus Study and the technical information it contains should be maintained and reviewed periodically by the City to ensure ongoing relevancy and accuracy, and to enable the adequate programming of funding sources. To the extent that improvement requirements, costs, population, employment, visitors or development potential changes over time, the fee program will be updated.

Legal Context

The Mitigation Fee Act allows the City to adopt citywide public facilities impact fees consistent with supporting technical analysis and findings provided in this Nexus Report. In addition, the "Mitigation Fees for New Development" section of the City's Municipal Code allows the City Council to use the Resolution approach to set updated fees, and to periodically adjust the fees as may be necessary over time, without amending the enabling local ordinance.

Impact fee revenues are used to cover the cost of capital investments, including buildings, infrastructure improvements, and equipment required to serve new development and growth. DIFs must be based on a reasonable nexus, or connection, between new development and the need for capital investments and improvements. Impact fee revenue cannot be used to cover the operation and maintenance costs of these or any other facilities. In addition, impact fee revenue cannot be collected or used to cover the cost of preexisting infrastructure needs or deficiencies.

In establishing, increasing, or imposing a fee as a condition for the approval of a development project, Government Code 66001(a) and 66001(b) require a local agency to:

1. Identify the purpose of the fee;
2. Identify how the fee is to be used;
3. Determine how a reasonable relationship exists between the fee use and type of development project for which the fee is being used;
4. Determine how the need for the public facility relates to the type of development project for which the fee is imposed; and
5. Show the relationship between the fee and the cost of the public investments.

Furthermore, in September 2021, the State of California adopted Assembly Bill (AB) 602, which includes several new requirements related to the development and implementation of impact fee programs. The key provisions related to the calculations documented in this Nexus Report are summarized below.

- **Capital Improvement Plan**: AB 602 requires that jurisdictions adopt a capital improvement plan as part of the nexus study process. This adoption can occur at the same time as fee adoption. Accordingly, this Nexus Study relies on a Marina DIF Capital Improvement Plan (Marina DIF CIP) to be approved by the City Council in conjunction with the DIF Program.[1] The Marina DIF CIP presented in this Nexus

[1] The Marina DIF CIP is different from and does not replace the City's 5-year CIP budget and 10-year CIP. These separate CIP documents serve a shorter period and generally rely on more specific project parameters than the DIF CIP. However, the DIF program may provide funding to support some projects included in the 5-year and 10-year CIPs.

Study includes the capital improvements identified by the City for General Government, Public Safety, and Parks (**Table 7**).

- **Explanation of Level of Service and Fee Increase**: AB 602 requires that when applicable, the nexus study identifies the existing level of service for each public facility, identifies the proposed new level of service, and includes an explanation of why the new level of service is appropriate. This Nexus Study relies on a CIP prepared by City staff, based on City capital facilities and improvement goals for general government, public safety, and parks. **Appendix A-3**, identifies current and future level of service implied by the Marina DIF CIP. In general, service levels are expected to improve, with service quality increases still anticipated in cases where standard per capita service level metrics indicate a modest decrease. The Marina DIF CIP reflects the City's goals for citywide public services provision in the areas of general government, public safety, and parks by 2045.
- **Capital Facilities List:** The City developed a detailed list of capital facilities and equipment acquisitions planned over the next twenty years. The list includes City administrative (general government) facilities and equipment, emergency services facilities and equipment, and recreational facilities and equipment. These capital investments will serve both existing and new development. The DIF allocates a portion of the facilities and equipment costs to new development using "service population" to quantify the nexus between growth and public investments. This nexus framework is consistent with the "System Plan Method" nexus study methodology.[2]
- **Per Square Foot Residential Fees**: AB 602 notes that for fees adopted after July 1, 2022, the nexus study must "either calculate a fee levied or imposed on a housing development proportionately to the square footage of the proposed units, or make specific findings explaining why square footage is not an appropriate metric to calculate the fees." AB 602 also notes that "This bill would require that a local agency that calculates fees proportionately to the square footage of the proposed units be deemed to have used a valid method to establish a reasonable relationship between the fee charged and the burden posed by the development." This analysis relies on assumptions about the unit size for residential units developed following market research and City data. Average home sizes determine the maximum per square foot fee for each residential development type.

This Nexus Study adheres to State of California statutory requirements for DIFs, as documented in subsequent chapters. **Chapter 4** summarizes the specific findings that explain or demonstrate the nexus logic employed. If the DIF is adopted, this Nexus Study and the technical information it contains should be maintained and reviewed periodically by the City to ensure its accuracy and to enable adequate programming of funding

[2] Impact Fee Nexus Study Templates Nexus Study and Residential Feasibility Calculation Templates in fulfillment of AB 602, December 2023, Prepared for the California Department of Housing and Community Development by Terner Center for Housing Innovation at UC Berkeley.

sources. To the extent that capital improvement requirements, costs, and/or development projections change over time, the DIF levels estimated here will need to be updated. AB 602 requires the DIF to be updated at least every eight years.

Summary of Maximum Allowable Fees

Table 1 summarizes the City's maximum allowable fee schedule for the capital facility and equipment needs as evaluated in this Fee Update. The three fee categories updated in this analysis are:

- **General Government –** This fee, formerly "Public Buildings," includes the capital facilities fees for administrative and airport buildings, City vehicles, and equipment.
- **Public Safety –** This fee includes the capital facilities fees for the Police and Fire Departments of the City.
- **Parks –** This fee includes capital facilities fees for the Recreation & Culture Department of the City.

Table 1 presents per-square-foot fees for residential and commercial structures. The Nexus Study also establishes per-unit maximum and minimum residential fees levels, not shown here.

Table 1 Summary of Maximum Allowable Fee Calculations

Land Use	General Government	Public Safety	Parks	Total
Residential (per sq.ft.)				
Single Family	$0.87	$2.12	$5.09	$8.09
Multifamily	$1.61	$3.91	$9.41	$14.94
Senior Homes	$1.36	$3.31	$7.95	$12.62
Assisted Living	$0.68	$1.65	$3.98	$6.31
Nonresidential				
Office (per sq. ft.)	$1.00	$2.42	-	$3.42
Retail (per sq. ft.)	$0.60	$1.45	-	$2.05
Industrial (per sq. ft.)	$0.20	$0.48	-	$0.68
Hotel (per sq.ft.)	$0.27	$0.66	-	$0.93
Church (per sq.ft.)	$0.20	$0.48	-	$0.68
Daycare (per sq.ft.)	$0.80	$1.94	-	$2.73
Animal Hospital (per sq.ft.)	$1.20	$2.90	-	$4.10
Medical (per sq.ft.)	$1.20	$2.90	-	$4.10

Source: Economic & Planning Systems, Inc.

Fees in **Table 1** represent the maximum allowable per-square-foot amount that the City can charge based on the nexus requirements of the Mitigation Fee Act. The fees include a three percent (3.0%) charge to cover the cost of program administration. This Fee Update and Nexus Study is available to support City Council adoption of an updated fee schedule. Based on economic and fiscal considerations, the City of Marina may approve any impact fee level that falls below the maximum allowable.

Table 2 compares the maximum fees calculated in this Nexus Study to the existing fee schedule in the City of Marina. As shown, adoption of the maximum allowable fees would result in a fee increases. **Table 2** presents residential fees on a per-unit basis, for the average size dwelling unit, for comparison purposes only. The **Appendix** contains additional fee comparison detail, including presentation of minimum and maximum fees for each category.

Table 2 Summary of Maximum Fee Calculations

Land Use	General Government	Public Safety	Parks	Total	Current Fees (2025) *Excluding Roadways and Intersections*
Residential (per unit)					
Single Family	$2,098	$5,085	$12,227	$19,409	$16,848
Multifamily	$1,776	$4,306	$10,354	$16,436	$15,599
Senior Homes	$1,501	$3,637	$8,747	$13,885	$11,231
Assisted Living	$750	$1,819	$4,373	$6,942	$6,238
Nonresidential					
Office (per sq. ft.)	$1.00	$2.42		$3.42	$1.00
Retail (per sq. ft.)	$0.60	$1.45		$2.05	$0.60
Industrial (per sq. ft.)	$0.20	$0.48		$0.68	$0.20
Hotel (per sq.ft.)	$0.27	$0.66		$0.93	$0.27
Church (per sq.ft.)	$0.20	$0.48		$0.68	$0.20
Daycare (per sq.ft.)	$0.80	$1.94		$2.73	$0.80
Animal Hospital (per sq.ft.)	$1.20	$2.90		$4.10	$1.20
Medical (per sq.ft.)	$1.20	$2.90		$4.10	$1.20

Source: Economic & Planning Systems, Inc.

2. Development Impact Fee Methodology

This section provides a brief overview of the nexus methodology and key assumptions used in this Study, including demographic and land use projections underlying the fee. **Chapter 3** provides more detailed calculations for each DIF category.

Summary of Methodology

The nexus methodology employed in this study is generally consistent across fee categories. As is appropriate given the range fee programs, capital facilities, and equipment covered, the study recognizes variation in the relevant service population. For each fee category, EPS applied the following general steps to calculate the nexus-supported fee amounts:

1. EPS reviewed existing and future population and employment projections defined by the City for the Study.
2. EPS reviewed new capital facility improvements and other capital investments needed to serve both existing and future residents and employees. City staff identified long-term capital investment plans for general government, public safety, and parks.
3. EPS reviewed the cost estimates prepared by City staff for specific capital investments identified in Step 2.
4. EPS allocated the capital costs identified in Step 3 between existing and new development based on nexus apportionment. Because the CIP will serve both existing and the future populations similarly, the share of costs attributable to new development is based on the new service population (attributable to growth) relative to the total citywide service population at the end of the fee program time horizon.
5. EPS distributed costs attributable to growth to residential and commercial uses to arrive at a cost per resident and a cost per employee. The distribution reflects the service population forecast for residents versus employees, recognizing that residents and employees place different demands on City services.
6. EPS relied on estimates of household size for each residential land use category to derive a fee per unit. Commercial land use fees were determined using typical employment density factors.
7. EPS converted the residential fee to a per-square-foot fee based on average housing unit sizes and then used typical maximum and minimum home sizes to establish maximum and minimum fee levels for residential uses.

Demographic and Land Use Assumptions

This section describes the demographic and land use assumptions used in this Study:

- Existing population and employment establish a basis from which growth forecasts and service levels for specific capital improvement categories are measured.
- Future population and employment growth inform capital improvement needs and the apportionment of these costs between existing and new development.

- Estimates of population and employment density (e.g., persons per household) inform the allocation of costs between land use categories.

Population and Employment Growth Projections

The Nexus Study relies on estimated population and employment growth to the year 2045. The growth projections reflect City development capacity and development trends rather than specific real estate development projects "in the pipeline" at the local level. As summarized in **Table 3**, the projection indicates a total population of approximately 31,231 residents and total employment of approximately 9,478 by 2045. This equates to an increase of 8,895 residents and 3,318 employees, representing a 39.8 percent and 53.9 percent increase over existing conditions, respectively.

Table 3 Population and Employment Projections

Item	2024	2045	Growth	
			Amount	% Change
Resident Population	22,336	31,231	**8,895**	**39.8%**
Households	7,813	10,926	**3,113**	**39.8%**
Employment	6,160	9,478	**3,318**	**53.9%**

Sources: Kimley-Horn; Economic & Planning Systems, Inc.

Service Population Calculations

The DIF Study requires calculations that translate population and employment projections into estimates of existing and future service population. The service population is derived from assumptions that compare residents and employees based on relative service demands. The City's population and employment, presented in **Table 3**, are the basis of the service population calculations described below.

Service population can differ by municipal service category. The service population for Parks excludes local employees, a key difference associated with the Parks fee calculation. For General Government and Public Safety fee programs, service population is based on the City's existing "daytime population," derived using the City's existing residents, employees, and commute patterns for each to estimate the relative time spent within the City. This approach establishes an employee to resident equivalency factor to allocate costs between existing and new growth and between residential and commercial development. This Nexus Study calculates a citywide service population in 2024

estimated at 24,795, as shown in **Table 4**. The service population is composed of 22,336 residents and 6,160 employees, with each employee equivalent to 0.399 residents (i.e., the typical service demand of an employee is about 40 percent of a resident).

Table 4 Existing Service Population Factor Estimate

Item	Existing #	Existing %	Weight[2]	Weighted Average
Marina Residents				
Employment Status[1]	*Formula*	*a*	*b*	*= a * b*
Not in Labor Force	10,359	46.4%	100%	46.4%
Employed in the City	994	4.5%	67%	3.0%
Employed Outside of the City	10,982	49.2%	67%	33.0%
Total Residents	**22,336**	**100.0%**		**82.4%**
Marina Employees				
Place of Residence[1]	*Formula*	*b*	*c*	*= a * b*
Live in the City	1,081	9.0%	33%	3.0%
Live Outside the City	5,079	91.0%	33%	29.9%
Total Jobs	**6,160**	**100.0%**		**32.9%**
Employee to Resident Equivalency Factor[3]				**39.9%**

Service Population Calculation	Count	Weight	Service Population	Distribution
Residents	22,336	100.0%	22,336	90%
Employees	6,160	39.9%	2,459	10%
Total Service Population			**24,795**	**100%**

(1) Distribution based on data from U.S. Census (OnTheMap 2022) and Census ACS.
(2) Assumptions regarding relative demand for City Services by resident type and employees.
(3) Equals weighted average of residents divided by weighted average of employees.

Sources: LEHD OnTheMap; JobsEQ; CA DOF; Economic & Planning Systems, Inc.

The General Government and Public Safety service population is projected to reach 35,014, with new growth accounting for about 29.2 percent of the service population in 2045, as shown in **Table 5**. The Parks service population, which is limited to residents, accounts for 28.5 percent of total service population in 2045. For the General Government and Public Safety service population, service population growth is largely attributable to residential expansion, with 87.0 percent of the service population increase attributable to residential uses and 13.0 percent attributable to employment. These

proportions are used to allocate costs for General Government and Public Safety facilities and equipment included in the DIF. For Parks, cost attributable to growth is allocated entirely to residential uses since employees are not included in the parks service population.

Table 5 Forecasted Service Population Estimate

Service Population Calculation	Unweighted Count	Weight	General Government & Public Safety Service Population	Distribution	Parks Service Population	Distribution
2024 Service Population						
Residents	22,336	100.0%	22,336	90.1%	22,336	100.0%
Employees	6,160	39.9%	2,459	9.9%	0	0.0%
Total Service Population			**24,795**	**100.0%**	**22,336**	**100.0%**
2045 Service Population						
Residents	31,231	100.0%	31,231	89.2%	31,231	100.0%
Employees	9,478	39.9%	3,783	10.8%	0	0.0%
Total Service Population			**35,014**	**100.0%**	**31,231**	**100.0%**
Growth in Service Population 2024-2045						
Residents	8,895		8,895	87.0%	8,895	100.0%
Employees	3,318		1,324	13.0%	0	0.0%
Total Service Population			**10,219**	**100%**	**8,895**	**100%**
Growth Allocation Factors[1]			**29.2%**		**28.5%**	

(1) Growth allocation reflects future growth in service population as a percentage of total service population in 2045.

Population and Employment Density Assumptions

The Nexus Study uses population and employment density assumptions by land use type. DIF cost estimates per capita or per job are converted to fee rates per unit or square foot based on average persons per household or square footage per employee density factors. For residential fees, EPS first calculated all residential fees on a per unit basis (i.e., per single family and multi-family) and then converts the fee to a per-square-foot level based on typical housing unit sizes. Additional residential uses evaluated include Senior Homes and Assisted Living, which the Study assumes have equivalent size characteristics to typical multifamily units. **Table 6** summarizes key assumptions, derived from U.S.

Census Bureau, CoStar Group, and City of Marina data, as well as EPS profession judgement.

Table 6 Average Household Size and Employment Density Assumptions

Land Use Fee Categories	Assumptions for Population & Employment
Average Unit Size	
Single Family	2,400 square feet
Multifamily	1,100 square feet
Residential[1]	
Single Family	2.80 people per household
Senior Homes	2.00 people per household
Multifamily	2.37 people per household
Assisted Living	1.00 people per household
Nonresidential[2]	
Office	300 square feet per employee
Retail	500 square feet per employee
Industrial	1,500 square feet per employee
Hotel	2 rooms per employee
Church	1,500 square feet per employee
Daycare	375 square feet per employee
Animal Hospital/ Clinic	250 square feet per employee
Medical	250 square feet per employee

(1) Average single family and multifamily household size per occupied housing unit in the City of Marina based on data from the 2023 American Community Survey (5-Year Estimates), U.S. Census Bureau.

(2) Average employment density derived from previous Marina studies. Lodging assumes 0.5 employees per 550-square-foot per room (i.e., 2 rooms per employee).

Sources: U.S. Census ACS 2023 5-Year Estimates; Economic & Planning Systems, Inc.

3. Fee Calculation

This Chapter describes the technical methodology for the DIFs. Fees will cover a variety of public buildings and vehicles, including those for needed for Police, Fire, Parks, and other City department functions. It is assumed that both residential and nonresidential development will pay both the General Government and Public Safety fees, while the Parks fee will only be paid by residential uses.

Facility and Vehicle Needs and Costs

DIFs are derived from specific capital improvement projects and associated costs that are needed to maintain or grow City service levels, in part to accommodate new growth. The Nexus Study identifies capital improvements included in the fee program and associated cost estimates, as shown in **Table 7**. City staff provided the capital improvement program list and costs, drawing on internal City facilities planning and consultations with architects and facilities planners. To ensure that capital project costs included in the impact fees do not address existing deficiencies, only an appropriate portion of total costs is ultimately allocated to future growth and included in the fee program.

Cost Allocation and Fee Calculation

General Government, Public Safety, and Parks improvements are allocated to new development based on the proportion of 2045 service population attributable to new development. That is, the portion of the CIP cost allocated to the fees is based on service population growth in the City as a percentage of the City's future 2045 service population. As shown in **Table 8**, this translates to 27 percent of DIF CIP costs being allocated to new development, overall. The "growth allocation factor" for vehicles, which is lower than for building and facilities, reflects that new growth occurs over time as vehicle replacement costs are incurred (See **Appendix Table A-2** for vehicle cost allocation calculations).

Table 7 Marina DIF CIP for General Government, Public Safety, and Parks

Capital Improvement Item	Description	Cost Estimate
General Government		
City Hall	17,500 Square Feet	$14,100,000
Council Chambers	2,500 Square Feet	$2,000,000
Airport Facilities	T-Hangars and Box Hangars	$10,000,000
Corporation Yard Expansion	Additional Capacity	$4,000,000
General Government Vehicles	8 Vehicles	$1,500,000
General Government Equipment	Miscellanious	$695,000
Subtotal		*$32,295,000*
Police Department		
Police Department Buildings	15,000 Square Feet (13,000 + 2,000)	$12,750,000
Police Department Vehicles	34 Vehicles	$13,000,000
Subtotal		*$25,750,000*
Fire Department		
Fire Department Headquarters	20,200 Square Feet (12,400 + 7,800)	$17,170,000
Fire 3 Bay Substation	7,300 Square Feet (3,300+4,000)	$6,205,000
EOC/Classroom	3,500 Square Feet	$2,975,000
Fire Department Vehicles	16 Vehicles	$21,000,000
Subtotal		*$47,350,000*
Recreation & Culture Department		
Sports & Aquatic Center	74,000 Square Feet	$45,000,000
Senior Center	14,000 Square Feet	$9,100,000
Army Chapel	3800 Square Feet	$2,470,000
Youth /Community Center	5000 Square Feet	$3,250,000
Teen Center Expansion	2000 Square Feet	$1,300,000
Preston Park Ballfield Expansion	9.3 Acres	$10,550,000
Equestrian Center Redevelopment	30.5 Acres	$10,000,000
Dunes Park	17 Acres	$22,600,000
Glorya Jean Tate Park	4.2 Acres	$8,000,000
Equestrian Boarding Facility	3 Acres	$1,000,000
Disc Golf Course & Parking	1 Acre	$100,000
Locke Paddon Park		$2,000,000
Trail System Around City/FORTAG Trail		$10,000,000
Lake Court Beach Access Trail		$2,000,000
Lake Drive Park and Recreation Facility		$2,000,000
Arts Village Renovation and Access		$10,000,000
Vince DiMaggio/Locke Paddon Bridge		$4,000,000
Culture and Recreation Department Vehicles	9 Vehicles	$1,400,000
Subtotal		*$144,770,000*
Total		**$250,165,000**

Table 8 CIP Costs Attributable to Service Population Growth

Capital Improvement Item	DIF CIP Net Cost Estimate[1]	Cost Allocated to Growth	Growth Allocation Factor
General Government Departments			
City Hall	$14,100,000	$4,115,282	29%
Council Chambers	$2,000,000	$583,728	29%
Airport Facilities	$10,000,000	$2,918,640	29%
Corporation Yard Expansion	$4,000,000	$1,167,456	29%
General Government Vehicles	$1,500,000	$280,919	19%
General Government Equipment	$695,000	$202,845	29%
Fund Balance Adjustment	-$6,253,071	-$1,825,046	29%
Subtotal	*$26,041,929*	*$7,443,824*	*29%*
Public Safety			
Police Department Buildings	$12,750,000	$3,721,266	29%
Police Department Vehicles	$13,000,000	$2,415,174	19%
Fire Department Headquarters	$17,170,000	$5,011,304	29%
Fire 3 Bay Substation	$6,205,000	$1,811,016	29%
EOC/Classroom	$2,975,000	$868,295	29%
Fire Department Vehicles	$21,000,000	$4,699,010	22%
Fund Balance Adjustment	-$1,649,804	-$481,518	29%
Subtotal	*$71,450,196*	*$18,044,547*	*25%*
Recreation & Culture Department			
Sports & Aquatic Center[2]	$44,965,000	$12,806,624	28%
Senior Center	$9,100,000	$2,591,800	28%
Army Chapel	$2,470,000	$703,489	28%
Youth /Community Center	$3,250,000	$925,643	28%
Teen Center Expansion	$1,300,000	$370,257	28%
Preston Park Ballfield Expansion[2]	$10,500,000	$2,990,538	28%
Equestrian Center Redevelopment	$10,000,000	$2,848,132	28%
Dunes Park	$21,100,000	$6,009,558	28%
Glorya Jean Tate Park[2]	$7,800,000	$2,221,543	28%
Equestrian Boarding Facility[2]	$1,000,000	$284,813	28%
Disc Golf Course & Parking	$100,000	$28,481	28%
Locke Paddon Park	$2,000,000	$569,626	28%
Trail System Around City/FORTAG Trail	$10,000,000	$2,848,132	28%
Lake Court Beach Access Trail	$2,000,000	$569,626	28%
Lake Drive Park and Recreation Facility	$2,000,000	$569,626	28%
Arts Village Renovation and Access	$10,000,000	$2,848,132	28%
Vince DiMaggio/Locke Paddon Bridge	$4,000,000	$1,139,253	28%
Culture and Recreation Department Vehicles	$1,400,000	$277,693	20%
Fund Balance Adjustment	-$9,952,131	-$2,834,498	28%
Subtotal	*$133,032,869*	*$37,768,467*	*28%*
Total	**$230,524,995**	**$63,256,838**	**27%**

[1] Net cost estimate reflects cost reductions associated with funding from Fee Program allocations to projects and remaining balances through June 30, 2024.

[2] Reflects reduction for Fee Progrm funding allocation.

Table 9 illustrates the total costs included in the fee program for each fee category, along with costs that would be covered by other City funding sources (assuming maximum fee levels).

Table 9 CIP Cost Summary by Fee Program vs Other City Sources

Facilities	Fee Funded	Other City Funding	CIP Total
General Government	$7,443,824	$18,598,105	$26,041,929
Public Safety	$18,044,547	$53,405,649	$71,450,196
Recreation & Cultural Services Department	$37,768,467	$95,264,402	$133,032,869
Total	**$63,256,838**	**$167,268,157**	**$230,524,995**

Table 10 allocates costs by basic land use category, either residential or commercial, and then calculates the cost per resident and employee. These cost calculations also introduce a three percent (3.0%) administration charge for the fee programs. **Table 11** utilizes the cost per resident figure to calculate fees for each department. These fee calculations result in residential impact fees that are presented on a per-unit basis. However, AB 602 requires that residential impact fees be charged on a per square foot basis. As described and outlined in the summary of fees in **Chapter 4**, residential fees per unit have been converted into a fee per square foot based on typical housing unit sizes.

Table 10 Facilities Costs per Resident and Employee

Cost Allocation Factor	Formula	General Government	Public Safety	Recreation & Culture
CIP Costs Allocated to Fee Program		$7,443,824	$18,044,547	$37,768,467
Fee Program Administration (3%)		$223,315	$541,336	$1,133,054
Total Costs Allocated to Fee Program	a	$7,667,139	$18,585,884	$38,901,521
Cost Allocation to Land Use[1]				
Residential Development	b	87.0%	87.0%	100.0%
Nonresidential Development	c	13.0%	13.0%	0.0%
Allocated Costs by Land Use				
Residential Development	d = a * b	$6,673,567	$16,177,369	$38,901,521
Nonresidential Development	e = a * c	$993,572	$2,408,514	$0
Service Population Growth				
Residents	f	8,895	8,895	8,895
Employees (unweighted)	g	3,318	3,318	N/A
Facilities Cost per Resident	**h = d / f**	**$750**	**$1,819**	**$4,373**
Facilities Cost per Employee	**i = e / g**	**$299**	**$726**	**N/A**

[1] The cost allocation to residential and nonresidential development is based on the service population attribution calculated in Table 4.

Source: Economic & Planning Systems, Inc.

Table 11 Development Impact Fee Calculation Overview

Land Use	Density (See Table 5)	General Government	Public Safety	Parks
Facilities Cost per Resident		$750	$1,819	$4,373
Facilities Cost per Employee		$299	$726	-
Residential (per unit)	Persons / Household			
Single Family	2.80	$2,098	$5,085	$12,227
Multifamily	2.37	$1,776	$4,306	$10,354
Senior Homes	2.00	$1,501	$3,637	$8,747
Assisted Living	1.00	$750	$1,819	$4,373
Nonresidential	Average Employment Density			
Office (per sq. ft.)	300	$1.00	$2.42	-
Retail (per sq. ft.)	500	$0.60	$1.45	-
Industrial (per sq. ft.)	1,500	$0.20	$0.48	-
Hotel (per sq.ft.)	1,100	$0.27	$0.66	-
Church (per sq.ft.)	1,500	$0.20	$0.48	-
Daycare (per sq.ft.)	375	$0.80	$1.94	-
Animal Hospital/ Clinic (per sq.ft.)	250	$1.20	$2.90	-
Medical (per sq.ft.)	250	$1.20	$2.90	-

Source: City of Marina and Economic & Planning Systems, Inc.

4. Nexus Findings and Impact Fee Summary

This chapter documents the necessary findings for approval of General Government, Public Safety, and Parks DIF programs for the City of Marina, as required under Government Code Section 66000 (AB1600 Mitigation Fee Act). The discussion that follows articulates the "nexus" between new development in Marina and the infrastructure improvements needed to serve that growth. **Table 12** summarizes the maximum DIF levels, presented as per-square-foot fees. Tables that follow (**Table 13** through **Table 16**) present recommended maximum and minimum per-unit fees for each residential use type.

Nexus Findings

The maximum allowable DIFs applicable to new development are calculated based on the proportionate share of demand for Marina DIF CIP investments that each land use type generates through 2045. With this context, the following findings are made regarding the Fee Program. This section addresses the following:

- Identify the purpose of the fee;

- Identify how the fee is to be used;
- Determine how a reasonable relationship exists between the fee use and type of development project for which the fee is being used;
- Determine how the need for the public facility relates to the type of development project for which the fee is imposed; and
- Show the relationship between the fee and the cost of the public investments.

Purpose and Use of Fees

General Government

The fee will fund replacement of essential government facilities, including City Hall and the City Council Chambers, as well as new Airport facilities. The fee also will fund capital investments in City vehicles and equipment. The updated General Government fee covers new development's fair share portion of the total capital investment costs identified by the City, based on service population apportionment. General Government improvement total costs and fee program costs are documented in **Chapter 3**.

Public Safety

The fee will fund replacement and expansion of public facilities for Fire and Police department functioning, including a police station, fire department headquarters, and a fire department substation. The fee also will fund capital investments in emergency vehicles and equipment. The updated Public Safety fee covers new development's fair share portion of the total capital investment costs identified by the City, based on service population apportionment. The Public Safety improvement total costs and fee program costs are documented in **Chapter 3**.

Parks Fee

The fee will fund improvements at existing parks as well as new facilities that serve Marina residents. Parks program investments include a sports and aquatic center, a senior center, a youth center, a teen center expansion, and a range of improvements in existing parks. The fee will also fund vehicles. The updated Parks fee covers new development's fair share portion of the total capital investment costs identified by the City, based on service population apportionment. Parks improvement total costs and fee program costs are documented in **Chapter 3**.

Relationship between Use of Fees and Type of Development

New development in the City of Marina will require additional public facilities and capital investments to maintain or improve levels of service and meet the needs of new residents and employees. The DIF revenue will be used to fund the fair share cost of new facilities, improvements, and equipment based on current and projected City service populations. While some of the improvements included in the CIP will also benefit existing

land uses, the costs allocated to the DIF programs only include the proportion of cost attributable to new development.

Relationship between Need for Facility and Type of Project

The infrastructure improvements identified in this study are designed to accommodate the needs of existing and future service populations. The Marina DIF CIP presented here reflects current City goals for General Government, Public Safety, and Parks facilities and equipment, as identified by City staff. Fees will apply to land uses that generate new residents and workers and thereby increase service burden on the City. The Marina DIF CIP addresses the service needs of new populations.

Relationship between Fee Amount and Cost Facilities Attributed to Development

The fee levels calculated in this Nexus Study are based on a fair share cost allocation to new service population-generating citywide development. Overall, about 27 percent of the CIP investment costs are allocated to future development, which corresponds with growth as a percentage of future service population. The remainder of the CIP cost is attributable to existing land uses in the city and would be funded by other sources available to the City.

Summary of Impact Fees

Table 12 summarizes the Public Buildings, Public Safety, and Parks fees for residential and nonresidential uses. The maximum fee estimates include a three percent (3.0%) program administration fee. This administration cost covers expenses for preparation of the development impact fee and subsequent updates, as well as the required reporting, auditing, collection, and other annual administrative costs involved in overseeing the program.

Table 12 Summary of Maximum Per-Square-Foot Development Impact Fees

Land Use	General Government	Public Safety	Parks	Total
Residential (per sq.ft.)				
Single Family	$0.87	$2.12	$5.09	$8.09
Multifamily	$1.61	$3.91	$9.41	$14.94
Senior Homes	$1.36	$3.31	$7.95	$12.62
Assisted Living	$0.68	$1.65	$3.98	$6.31
Nonresidential				
Office (per sq. ft.)	$1.00	$2.42	-	$3.42
Retail (per sq. ft.)	$0.60	$1.45	-	$2.05
Industrial (per sq. ft.)	$0.20	$0.48	-	$0.68
Hotel (per sq.ft.)	$0.27	$0.66	-	$0.93
Church (per sq.ft.)	$0.20	$0.48	-	$0.68
Daycare (per sq.ft.)	$0.80	$1.94	-	$2.73
Animal Hospital (per sq.ft.)	$1.20	$2.90	-	$4.10
Medical (per sq.ft.)	$1.20	$2.90	-	$4.10

Source: Economic & Planning Systems, Inc.

AB 602 requires that residential impact fees be charged on a per square foot basis, as shown above. **Table 13** through **Table 16** present calculations of fee conversions into per square foot fees. EPS has also provided a recommended minimum and maximum per unit fee, based on the approximate range of typical unit sizes.

Table 13 Single Family Fee Per Square Foot Conversion

Item	Amount			Formula	Source / Assumption
	Parks	General Government	Public Safety		
Unit Size (sq.ft.)					
Average[1]		2,400		*a*	*K|H; City; Zillow*
Units equal or less than[2]		900		*b*	*EPS Assumption*
Units equal or greater than[3]		3,000		*c*	*Redfin*
Fee / Unit					
Average[4]	$12,227	$2,098	$5,085	*d*	
Minimum[5]	$4,585	$787	$1,907	*e = d * (b / a)*	
Maximum[6]	$15,283	$2,622	$6,356	*f = d * (c / a)*	
Fee Amounts					
< 900 sq.ft. (per unit)	**$4,585**	**$787**	**$1,907**		***see "e"***
900 - 3,000 sq.ft. (per sq. ft.)	**$5.09**	**$0.87**	**$2.12**	***= d / a***	
> 3,000 sq.ft. (per unit)	**$15,283**	**$2,622**	**$6,356**		***see "f"***

(1) Represents average square footage of recently built single family housing in Marina, based on Zillow sales data and City of Marina building permit applications.

(2) Minimum size has been adjusted to reflect the square footage for a 1-person household, based on the average unit size (2,373 sq. ft.) and average persons per household (2.80) in Marina.

(3) Represents high end of home size in Marina based on Redfin sales data.

(4) Based on the average development impact fee per unit as calculated in **Table 10**.

(5) Adjusts the average fee based on the ratio of minimum unit size to the average unit size.

(6) Adjusts the average fee based on the ratio of maximum unit size to the average unit size.

Table 14 Multifamily Fee Per Square Foot Conversion

Item	Amount			Formula	Source / Assumption
	Parks	General Government	Public Safety		
Unit Size (sq.ft.)					
Average[1]		1,100		*a*	*Redfin*
Units equal or less than[2]		500		*b*	*EPS Assumption*
Units equal or greater than[3]		1,600		*c*	*Redfin*
Fee / Unit					
Average[4]	$10,354	$1,776	$4,306	*d*	
Minimum[5]	$4,706	$807	$1,957	*e = d * (b / a)*	
Maximum[6]	$15,060	$2,584	$6,263	*f = d * (c / a)*	
Fee Amounts					
< 500 sq.ft. (per unit)	**$4,706**	**$807**	**$1,957**		***see "e"***
500 - 1,600 sq.ft. (per sq. ft.)	**$9.41**	**$1.61**	**$3.91**	***= d / a***	
> 1,600 sq.ft. (per unit)	**$15,060**	**$2,584**	**$6,263**		***see "f"***

(1) Represents average square footage of multifamily housing in Marina based on Redfin data.
(2) Minimum size has been adjusted to reflect the square footage for a 1-person household, based on the average unit size (1,100 sq. ft.) and average persons per household (2.37) in Marina.
(3) Represents high end of multifamily housing size in Marina based on Redfin data.
(4) Based on the average development impact fee per unit as calculated in **Table 10**.
(5) Adjusts the average fee based on the ratio of minimum unit size to the average unit size.
(6) Adjusts the average fee based on the ratio of maximum unit size to the average unit size.

Table 15 Senior Homes Multifamily Fee Per Square Foot Conversion

Item	Amount			Formula	Source / Assumption
	Parks	General Government	Public Safety		
Unit Size (sq.ft.)					
Average[1]		1,100		*a*	*Redfin*
Units equal or less than[2]		500		*b*	*EPS Assumption*
Units equal or greater than[3]		1,600		*c*	*Redfin*
Fee / Unit					
Average[4]	$8,747	$1,501	$3,637	*d*	
Minimum[5]	$3,976	$682	$1,653	*e = d * (b / a)*	
Maximum[6]	$12,723	$2,183	$5,291	*f = d * (c / a)*	
Fee Amounts					
< 500 sq.ft. (per unit)	**$3,976**	**$682**	**$1,653**		***see "e"***
500 - 1,600 sq.ft. (per sq. ft.)	**$7.95**	**$1.36**	**$3.31**	***= d / a***	
> 1,600 sq.ft. (per unit)	**$12,723**	**$2,183**	**$5,291**		***see "f"***

(1) Represents average square footage of multifamily housing in Marina based on Redfin data.
(2) Minimum size has been adjusted to reflect the square footage for a 1-person household, based on the average unit size (1,100 sq. ft.) and average persons per household (2.37) in Marina.
(3) Represents high end of multifamily housing size in Marina based on Redfin data.
(4) Based on the average development impact fee per unit as calculated in **Table 10**.
(5) Adjusts the average fee based on the ratio of minimum unit size to the average unit size.
(6) Adjusts the average fee based on the ratio of maximum unit size to the average unit size.

Table 16 Assisted Living Multifamily Fee Per Square Foot Conversion

Item	Amount			Formula	Source / Assumption
	Parks	General Government	Public Safety		
Unit Size (sq.ft.)					
Average[1]		1,100		*a*	*Redfin*
Units equal or less than[2]		500		*b*	*EPS Assumption*
Units equal or greater than[3]		1,600		*c*	*Redfin*
Fee / Unit					
Average[4]	$4,373	$750	$1,819	*d*	
Minimum[5]	$1,988	$341	$827	*e = d * (b / a)*	
Maximum[6]	$6,361	$1,091	$2,645	*f = d * (c / a)*	
Fee Amounts					
< 500 sq.ft. (per unit)	**$1,988**	**$341**	**$827**		***see "e"***
500 - 1,600 sq.ft. (per sq. ft.)	**$3.98**	**$0.68**	**$1.65**	***= d / a***	
> 1,600 sq.ft. (per unit)	**$6,361**	**$1,091**	**$2,645**		***see "f"***

(1) Represents average square footage of multifamily housing in Marina based on Redfin data.
(2) Minimum size has been adjusted to reflect the square footage for a 1-person household, based on the average unit size (1,100 sq. ft.) and average persons per household (2.37) in Marina.
(3) Represents high end of multifamily housing size in Marina based on Redfin data.
(4) Based on the average development impact fee per unit as calculated in **Table 10**.
(5) Adjusts the average fee based on the ratio of minimum unit size to the average unit size.
(6) Adjusts the average fee based on the ratio of maximum unit size to the average unit size.

Appendix

Appendix Table 1 Existing Facilities

Facility	Address	Existing Amount
General Government (Building Sq.Ft.)		
Annex Building	209 Cypress Ave.	3,420
Church Building	2801 2nd Ave.	3,816
Council Chambers	211 Hillcrest Ave.	2,304
City Hall	211 Hillcrest Ave.	6,115
Old Corp. Yard Building	3040 Lake Ct	3,800
Animal Shelter Building	3040 Lake Drive	665
Corp Yard Building	2660 Fifth Avenue	10,166
Subtotal		**30,286**
Vehicles		*7*
Fire (Building Sq.Ft.)		
Fire Station	210 8th St.	15,000
Subtotal		**15,000**
Vehicles		*14*
Police (Building Sq.Ft.)		
Public Safety Building	211 Hillcrest Ave.	12,474
Subtotal		**12,474**
Vehicles		*31*
Park Facilities (Acres)		
Tate Park Grass/Baseball/Softball:	3255 Abdy Way	3.3
Community Center Playground	211 Hillcrest Ave.	0.3
Los Arboles Sports Complex	327 Reindollar Ave.	13.3
Preston Park	3100 Preston Dr.	9.3
Vince DiMaggio Park	3200 Del Monte Ave.	4.8
Windy Hill	3240 DeForest Rd.@ Beach Rd.	1.8
Locke-Paddon Park	190 Seaside Cir.	20.1
Glorya Jean Tate Park	3254 Abdy Way	4.2
Equestrian Center	2830 5th Avenue	30.5
Dunes Park	2nd Avenue between 6th & 8th	42.0
Hilltop Park	4th Avenue at 9th Street	12.0
Subtotal Acres		**141.6**
Recreation and Culture Facilities (Building/Facilitiy Sq.Ft.)		
Library	190 Seaside Cir.	18,600
Tate Park Scout House	3254 Abdy Way	1,440
Community Center	211 Hillcrest Ave.	6,597
Teen Center	304 Hillcrest Ave.	3,552
Snack Bar and Building	327 Reindollar Ave.	910
Preston Park Building	3100 Preston Dr.	1,668
Windy Hill Park Building	3240 DeForest Rd.@ Beach Rd.	2,483
Bathrooms	190 Seaside Cir.	300
Veterinary Clinic	Building 3140	2,160
Barns	2830,2832,2834,2836,2838 Fifth Avenue	16,300
Subtotal Building/Facility Square Feet		**54,010**
Teen Center Skate Park	*304 Hillcrest Ave.*	*14,875*
Vehicles		*5*

Source: City of Marina

Appendix Table 2 Vehicle CIP Detail

Department	Existing Vehicles	New Vehicles	Average Per Vehicle Cost	Replacement Frequency	Total Cost[1]	Cost Allocated to Growth 2024-2045
General Government Vehicles	7	1	$50,000	5 Years	$1,500,000	$280,919
Police Department Vehicles	31	3	$100,000	5 Years	$13,000,000	$2,415,174
Fire Department Vehicles[2]	14	2	$700,000	10 Years	$21,000,000	$4,699,010
Recreation and Cultural Services Department Vehicles	5	4	$50,000	5 Years	$1,400,000	$277,693
Total	**57**		**$900,000**		**$36,900,000**	**$7,672,796**

[1] Assumes that new vehicles are purchased at the midpoint of the devlopment timeline (i.e., no vehicle replacement is required in the intial years of the fee program)

[2] Based on a weighted average of fire department vehicle types, including Type 1 and 3 fire engines, trucks, utility vehicles, command vehicles, and rescue vehicles.

Appendix Table 3 Level of Service Comparison

Item	Existing Inventory a	Existing Service Level[1] b = a / (24,934 / 1,000)	Existing + CIP for 2045 c	2045 Service Level[1] d = c * (44,219 / 1,000)	Units
General Government					
Building Space[2]	30,286	1,221	41,867	1,196	square feet
Vehicle Fleet	7	0.3	8	0.2	vehicles
Police Department					
Police Station[2]	12,474	503	15,000	428	square feet
Vehicle Fleet	31	1.3	34	1.0	vehicles
Fire Department					
Fire Stations	15,000	605	31,000	885	square feet
Vehicle Fleet	14	0.6	16	0.5	vehicles
Recreation and Culture					
Parkland	141.6	5.7	206.6	5.9	acres
Recreation Buildings	54,010	2,178	152,810	4,364	square feet
Teen Center Skate Park	14,875	600	14,875	425	square feet
Vehicle Fleet	5	0.2	9	0.3	vehicles

(1) Calculations reflect existing and future City facilities and equipment per 1,000 service population.
(2) See **Appendix Table A-1** table for detailed list of exiting facilities included.

Appendix Table 4 General Government Fee Comparison

	2025 Current Fee	Updated Maximum Allowable Fees		
		Per-Square-Foot Fee	Per-Unit Minimum Fee	Per-Unit Maximum Fee
Residential (per sq.ft.)				
Single Family	$4,983	$0.87	$787	$2,622
Multifamily	$4,615	$1.61	$807	$2,584
Senior Homes	$3,323	$1.36	$682	$2,183
Assisted Living	$1,845	$0.68	$341	$1,091
Nonresidential				
Office (per sq. ft.)	$0.35	$1.00		
Retail (per sq. ft.)	$0.21	$0.60		
Industrial (per sq. ft.)	$0.07	$0.20		
Hotel (per sq.ft.)	$0.09	$0.27		
Church (per sq.ft.)	$0.07	$0.20		
Daycare (per sq.ft.)	$0.28	$0.80		
Animal Hospital (per sq.ft.)	$0.42	$1.20		
Medical (per sq.ft.)	$0.42	$1.20		

Appendix Table 5 Public Safety Fee Comparison

	2025 Current Fee	Updated Maximum Allowable Fees		
		Per-Square-Foot Fee	Per-Unit Minimum Fee	Per-Unit Maximum Fee
Residential (per sq.ft.)				
Single Family	$1,074	$2.12	$1,907	$6,356
Multifamily	$993	$3.91	$1,957	$6,263
Senior Homes	$714	$3.31	$1,653	$5,291
Assisted Living	$397	$1.65	$827	$2,645
Nonresidential				
Office (per sq. ft.)	$0.65	$2.42		
Retail (per sq. ft.)	$0.39	$1.45		
Industrial (per sq. ft.)	$0.13	$0.48		
Hotel (per sq.ft.)	$0.18	$0.66		
Church (per sq.ft.)	$0.13	$0.48		
Daycare (per sq.ft.)	$0.52	$1.94		
Animal Hospital (per sq.ft.)	$0.78	$2.90		
Medical (per sq.ft.)	$0.78	$2.90		

Appendix Table 6 Parks Fee Comparison

	2025 Current Fee	Updated Maximum Allowable Fees: Per-Square-Foot Fee	Per-Unit Minimum Fee	Per-Unit Maximum Fee
Residential (per sq.ft.)				
Single Family	$10,791	$5.09	$4,585	$15,283
Multifamily	$9,991	$9.41	$4,706	$15,060
Senior Homes	$7,194	$7.95	$3,976	$12,723
Assisted Living	$3,996	$3.98	$1,988	$6,361
Nonresidential				
Office (per sq. ft.)				
Retail (per sq. ft.)				
Industrial (per sq. ft.)				
Hotel (per sq.ft.)				
Church (per sq.ft.)				
Daycare (per sq.ft.)				
Animal Hospital (per sq.ft.)				
Medical (per sq.ft.)				

Appendix Table 7 Combined Fee Comparison

	2025 Current Fee	Updated Maximum Allowable Fees: Per-Square-Foot Fee	Per-Unit Minimum Fee	Per-Unit Maximum Fee
Residential (per sq.ft.)				
Single Family	$16,848	$8.09	$7,278	$24,261
Multifamily	$15,599	$14.94	$7,471	$23,907
Senior Homes	$11,231	$12.62	$6,311	$20,196
Assisted Living	$6,238	$6.31	$3,156	$10,098
Nonresidential				
Office (per sq. ft.)	$1.00	$3.42		
Retail (per sq. ft.)	$0.60	$2.05		
Industrial (per sq. ft.)	$0.20	$0.68		
Hotel (per sq.ft.)	$0.27	$0.93		
Church (per sq.ft.)	$0.20	$0.68		
Daycare (per sq.ft.)	$0.80	$2.73		
Animal Hospital (per sq.ft.)	$1.20	$4.10		
Medical (per sq.ft.)	$1.20	$4.10		

City of Marina Traffic Impact Fee Update

Report

Prepared for:
City of Marina

June 18, 2025

Kimley»Horn

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Programmed CIP Transportation Projects

For this TIF Program update, the project team worked closely with City staff to conduct a comprehensive review of the transportation projects to be included in the program. This review identified 26 projects focused on intersection and roadway improvements, which have been included in this study. The area covered by the TIF Program and the location of projects proposed for inclusion in the fee program are shown in **Figure 1**.

Cost estimates for each project were provided by the City Staff which were updated to 2024 dollars where applicable. The project list including the 2024 dollars cost estimates is shown in **Table 1**.

Table 1 – Proposed City of Marina TIF Projects – Intersections and Roadways

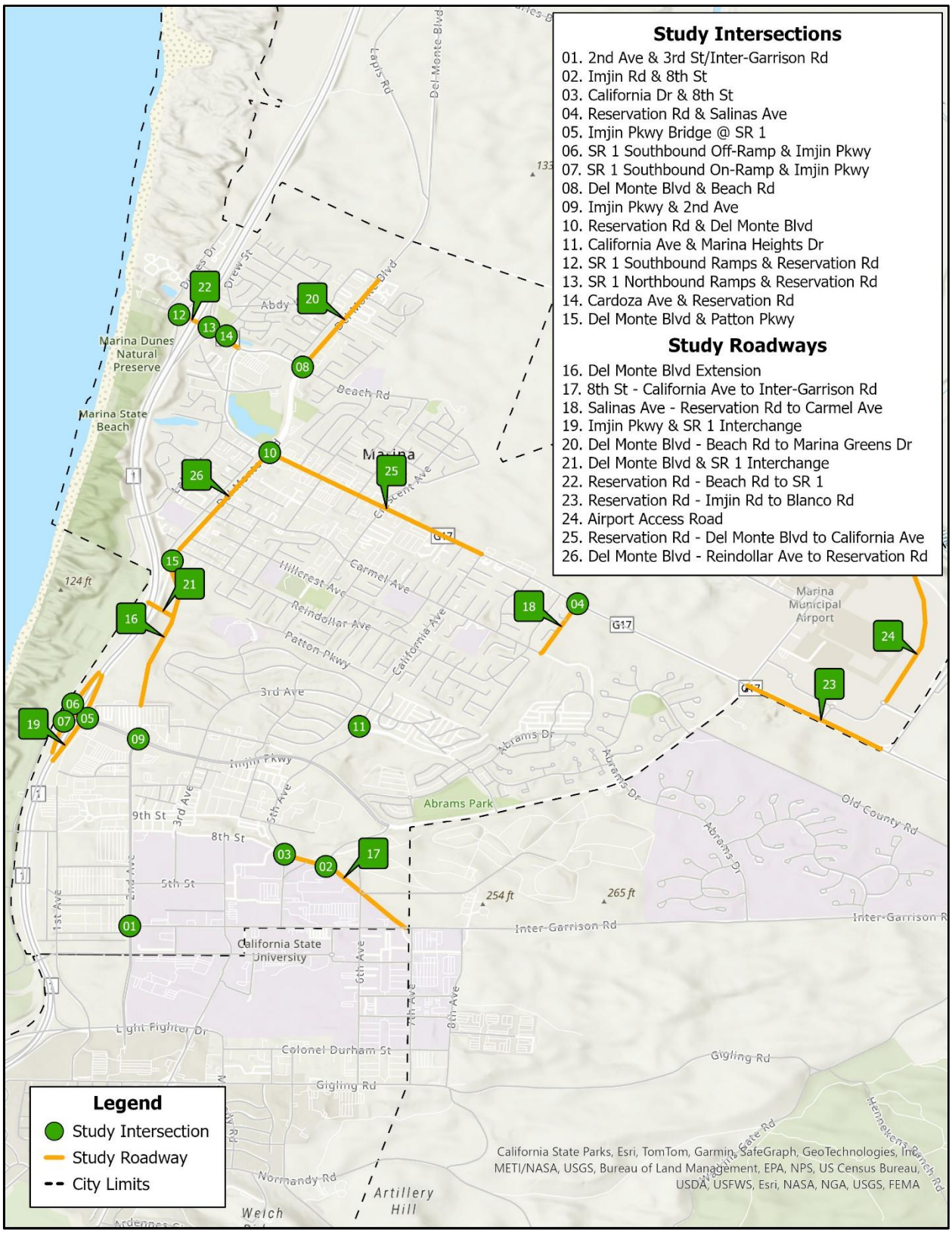
ID	Project Name	Description[1]	Estimated Cost (2024 dollars)
Intersection Improvement Projects			
1	2nd Avenue & Inter-Garrison Road	Construct a second left turn lane for the eastbound approach, additional through lane for westbound approach and right-turn pocket at southbound approach at the intersection of 2nd Avenue and Inter-Garrison Road.	$875,200
2	Imjin Road & 8th Street	Implement modern roundabout at the intersection of Imjin Road and 8th Street.	$1,800,000
3	California Drive & 8th Street	Implement modern roundabout at the intersection of California Drive and 8th Street.	$1,750,300
4	Reservation Road & Salinas Avenue	Signalize intersection of Reservation Road and Salinas Avenue.	$2,438,600
5	Imjin Parkway bridge @ SR 1[2]	Restripe lanes to accommodate two WB lanes on the Imjin Parkway bridge over SR 1.	$41,400
6	SR 1 Southbound off-ramp @ Imjin Parkway[2]	Convert the southbound off-ramp to a loop configuration at SR 1 and Imjin Parkway interchange.	$3,182,400
7	SR 1 Southbound on-ramp @ Imjin Parkway[2]	Widen the southbound on-ramp at SR 1 and Imjin Parkway interchange to accommodate two lanes.	$795,600
8	Del Monte Boulevard & Beach Road	Widen the existing roundabout at the intersection of Del Monte Boulevard and Beach Road to 2-lanes.	$3,182,400
9	Imjin Parkway & 2nd Avenue	Construct a second eastbound right turn lane and dedicated westbound right-turn lane at the intersection of Imjin Parkway and 2nd Avenue.	$6,583,200
10	Reservation Road & Del Monte Boulevard	Construct a multi lane roundabout at the intersection of Reservation Road & Del Monte Boulevard.	$4,000,000
11	California Avenue & Marina Heights Drive	Signalize intersection of California Avenue and Marina Heights Drive.	$1,384,400
12	SR1 Southbound Ramp @ Reservation Rd	Signalize intersection of SR1 Southbound Ramp and Reservation Road.	$4,000,000

Table 1 – Proposed City of Marina TIF Projects – Intersections and Roadways

ID	Project Name	Description[1]	Estimated Cost (2024 dollars)
13	SR1 Northbound Ramp @ Reservation Road	Signalize intersection of SR1 Northbound Ramp and Reservation Road.	$4,000,000
14	Cardoza Avenue & Reservation Road	Construct westbound right turn only lane from Cardoza Avenue to SR1 Northbound Ramp.	$3,500,000
15	Del Monte Boulevard and Patton Parkway Roundabout	Construct a new Roundabout intersection at Del Monte Boulevard and Patton Parkway	$6,000,000
Roadway Improvement Projects			
16	Del Monte Boulevard Extension[3]	Construct new 2-lane collector between Imjin Parkway and Reindollar Avenue.	$17,000,000
17	8th Street from California Avenue to Inter-Garrison Road[3]	Reconstruct 8th Street into 2-lane arterial with a two-way-left-turn lane between California Avenue and Inter-Garrison Road.	$9,449,700
18	Salinas Avenue - Reservation Road to Carmel Avenue[3]	Reconstruct Salinas Avenue into a 2-lane collector between Reservation Road and Carmel Avenue.	$5,200,000
19	Imjin Parkway & SR1 Interchange	Reconstruct interchange between Imjin Parkway and SR1.	$24,385,300
20	Del Monte Boulevard - Beach Road to Marina Greens Drive	Widen Del Monte Boulevard to a 4-lane arterial between Beach Road and Marina Greens Drive.	$13,411,900
21	Del Monte Boulevard & SR 1 Interchange	Reconstruct interchange between Del Monte Boulevard and SR1.	$24,385,300
22	Reservation Road – Beach Road to SR 1	Widen Reservation Road to a 4-lane divided arterial with a two-way-left-turn lane between Beach Road and SR1 Southbound Ramp.	$9,599,250
23	Reservation Road - Imjin Road to Blanco Road	Widen Reservation Road to a 6-lane expressway between Imjin Road and Blanco Road.	$13,036,400
24	Airport Access Road	Construct new access road from University Drive and Mbest Drive intersection to the existing access road connecting to Ramco Enterprises building providing additional connection to the Marina Municipal Airport.	$6,190,000
25	Reservation Road – Del Monte Boulevard to California Street	Improve Reservation Corridor from Del Monte Boulevard to California Street with six roundabout intersections, install separated bike facilities and install new sidewalks.	$31,174,100
26	Del Monte Corridor – Reindollar Avenue to Reservation Road	Improve Del Monte Corridor with two roundabout intersections at Reindollar Avenue and Palm Avenue, install separated bike facilities and sidewalks.	$16,258,700
		Total	**$213,624,150**

Notes:
1: Project 1 through 20 are intersection improvement project and Project 21 through 29 are roadway improvement projects.
2: Projects 5, 6, & 7 are considered as intersection projects and analyzed as one combined intersection improvement.

Figure 1 – Marina TIF Program Projects



Growth Projections

This chapter details the population and employment growth projections used for the TIF update. Note that these are consistent with those based on the population and employment projections from the City's most recent General Plan and Housing Element Update. Projections by land use category and trip generation by land use are discussed below.

Land Use Growth Projections

The growth projections for the approved and pending developments were determined in coordination with the City and incorporated into the Association of Monterey Bay Governments' travel demand model (AMBAG TDM) used for this study. The AMBAG TDM utilizes a base year of 2015 and a future year of 2045, representing the conditions expected when the City's General Plan and Housing Element are fully built out. As part of this study, the model's base year was revised to reflect 2024 conditions. The growth projections were converted into population, households and employments as input to the model.

The proposed land uses were distributed throughout the Traffic Analysis Zones (TAZs) that represent the proposed growth in the City and were added to the base year household and employment numbers to represent the future build out scenario. In order to estimate the number of employees for the non-residential land uses to input into the model, the ratio of daily trip generation rates listed in the Trip Generation Handbook, 11th Edition published by the Institute of Transportation Engineers (ITE) between 1,000 square-feet and employees was used. The number of daily trips produced by the size of each of the land use codes for office, retail and industrial was used to back calculate the number of employees based on each land use's equation for the number of trips that are produced by each employee.

While the AMBAG TDM uses household as its input, there is no differentiation between single-family and multi-family residential in terms of trip generation and distribution. However, the AMBAG TDM is a hybrid model as its processes follow the traditional four-step model (trip generation, trip distribution, mode choice, and trip assignment), but it also contains a population synthesis step based on socioeconomic data collected throughout the AMBAG region to produce individuals living in each household that contain their own trip making characteristics. Therefore, the population synthesis step was completed to develop the population estimates for the future growth in the City. The land use estimates for future growth are summarized in **Table 2**. The population, household and employment estimates for the base year and future year are summarized in **Table 3**. It is estimated that the growth in the impact fee area will increase the City population by approximately 8,895 people and will generate about 3,318 new jobs.

Table 2 – New Development Impact Fee Area Land Use Projections

Projects	Single Family (DU)	Multi Family (DU)	Office (KSF)	Retail (KSF)	Industrial (KSF)	Hotel (Rooms)
UCMBEST	-	-	266	34	88	150
Downtown Specific Plan	-	500	128	219	0	-
Dunes	683	-	0	35	0	300
Marina Station	709	651	144	60	652	-
Sea Haven	476	-	0	0	0	-
3298 Del Monte	-	94	0	0	0	-
Total	**1,868**	**1,245**	**537**	**348**	**740**	**450**

Table 3 – Citywide Growth Projections

Growth Category	2024 Base Year for AMBAG Model	2045 Horizon Year for AMBAG Model	2024 to 2045 Growth
Population	22,336	31,231	8.895 (40%)
Households	7,813	10,926	3.113 (40%)
Employment/Jobs	6,160	9,478	3,318 (54%)

Land Use Trip Generation

To assess the TIF across various land uses a Trip Demand Factor (TDF) is calculated, which reflects the trip generation characteristics of each land use that produces new vehicle trips on the roadway system in Marina. Each land use has unique trip generation characteristics including base trip generation rate, pass-by trip rates and time-of-day variation that are used as inputs in calculating the TDF. The daily trip generation rates have been obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* as shown in **Table 4**. The daily trip generation rates are used to be consistent with the previous TIF study.

TDFs are calculated by multiplying the daily trip rate by the new trip percentage for each land use. The new trip percentage for each land use was obtained from SANDAG's Brief Guide of Vehicular Traffic Generation Rates and accounts for the fact that some trips generated by the land uses will be pass-by or otherwise pre-existing trips. As these trips are already on the City's roadway network, they cannot be included as part of the growth used to calculate the fees for the 2024 TIF Program.

Table 4 – Trip Demand Factors

Fee Category (Development Type)	Unit	ITE Lane Use Code	Daily Trip Rate[1]	New Trip Percentage[2]	Trip Demand Factor
Residential					
Single Family	Unit	210	9.43	97%	9.15
Multifamily	Unit	220	6.74	97%	6.54
Nonresidential					
Office	KSF	710	10.84	96%	10.41
Retail	KSF	820	37.01	70%	25.91
Industrial	KSF	110	4.87	98%	4.77
Hotel	Room	310	7.99	96%	7.67

1. Reflects average number of daily trips for the unit type indicated based on data from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition).
2. This factor accounts for the fact that some trips generated by the land uses will be pass-by or otherwise pre-existing trips. Source is *Brief Guide of Vehicular Traffic Generation Rates*, SANDAG, April 2002.

The adjusted TDFs are used to calculate the total growth in adjusted daily trips generated by each land use type. The growth projected to occur in the City of Marina was taken from the City's General Plan and Housing Element and in consultation with the City, as outlined in **Table 5**. As shown in **Table 5**, the land use growth was multiplied by its respective adjusted trip rate to calculate the total daily trip generation growth in the City. These calculations resulted in an estimated adjusted daily citywide trip increase of 46,817 between 2024 and 2045.

Table 5 – Land Use Growth Converted to Adjusted Daily Trips

Land Use Type	Unit	Quantity	Adjusted Daily TDF	Adjusted Daily Trips
Single Family	DU	1,868	9.15	17,087
Multifamily	DU	3,649	6.54	8,140
Office	KSF	1,718	10.41	5,592
Retail	KSF	1,107	25.91	9,016
Industrial	KSF	1,005	4.77	3,532
Hotel	Rooms	150	7.67	3,452
Total				**46,817**

AB 602 Analysis

Assembly Bill (AB) 602 was approved on September 28, 2021, and went into effect on January 1, 2022. This legislation requires that impact fee nexus studies adopted on or after January 1, 2022, must, as appropriate, identify the existing level of service for each public facility, specify the new level of service once an improvement (project) is constructed, and include an explanation of why the new level of service is necessary. It is important to note that AB 602 does not specifically define the basis for the required level of service analyses. Consequently, the methods used to assess the level of service for various public facilities must be tailored to the type of facility being analyzed and the information available.

AB 602 also mandates that studies adopted after July 1, 2022, must calculate fees levied or imposed on housing development projects proportionate to the square footage of the proposed units, or provide specific findings explaining why square footage is not an appropriate metric for fee calculation. In essence, development impact fees must be stratified based on the size of the housing unit or be supported by findings justifying the decision not to stratify the fees. As part of this study, an AB 602 deficiency analysis and fee stratification analysis were conducted.

The AB 602 analysis evaluated 26 projects, summarized in **Table 1** earlier, which involved improvements to public facilities. The projects identified for the required level of service (LOS) analysis under AB 602 were categorized as either an intersection or roadway improvement. Projects 1 through 15 were analyzed as intersection LOS improvements, Project 16 through 24 were analyzed as roadway LOS improvements and Projects 25 and 26 were analyzed as roadway safety improvements for pedestrians and bicyclists.

Level of Service Analysis Methodology

Table 6 summarizes the methodology and MOE that was used to determine existing and future conditions depending on the type of improvement.

Table 6 – Methodology and Measure of Effectiveness

Improvement Type	Methodology	Measure of Effectiveness
Intersection	HCM	LOS (Delay)
Roadway Capacity	Roadway Volume LOS Threshold	LOS (V/C)
Roadway Ped/Bike	Roadway LTS Threshold	LOS (LTS)

Note: HCM = Highway Capacity Manual, LOS = Level of Service, Volume-to-Capacity Ratio, LTS=Level of Traffic Street

The intersection LOS analysis for AB 602 was conducted for the PM peak-hour which represents the worst traffic conditions, and roadway LOS analysis was conducted for the daily traffic.

Intersection Level of Service

Analysis of intersection level of service (LOS) is based on the Highway Capacity Manual's (HCM) concept of LOS. The HCM defines the LOS of a facility as a qualitative measure used to describe operational conditions. LOS ranges from A (free flow traffic with minimal delay) to F (heavy congestion operating near or over capacity). LOS was determined using methodologies defined in HCM 7th Edition, the current edition at the time of the analysis. The LOS criteria is summarized in **Table 7**.

Existing condition traffic counts during the AM (7 AM – 9 AM) and PM (4 PM – 6 PM) peak period were collected in September 2023. Future 2045 No Build and 2045 Build volumes were developed by adding travel demand model growth to existing counts. The travel demand model maintained by Association of Monterey Bay Area Governments (AMBAG model) was used to determine future traffic growth.

Table 7 – Methodology and Measure of Effectiveness

Level of Service (LOS)	Signalized Delay (sec/veh)	Unsignalized Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10.0 – 20.0	> 10.0 – 15.0
C	> 20.0 – 35.0	> 15.0 – 25.0
D	> 35.0 – 55.0	> 25.0 – 35.0
E	> 55.0 – 80.0	> 35.0 – 50.0
F	> 80.0	> 50.0

Source: Highway Capacity Manual, 7th Edition
Note: For All-way stop-control intersection (AWSC), LOS is defined based on average intersection delay. For two-way stop-controlled intersections (TWSC), LOS is defined based on the worst movement delay.

According to the City of Marina General Plan, the City aims to maintain LOS D or better as the standard at all intersections. Therefore, for this analysis intersections calculated to operate at LOS E or LOS F were determined to be deficient.

Roadway Capacity

Roadway improvements were evaluated based on threshold average daily traffic volumes (ADT) for various facility types. The daily volume thresholds are based on the Highway Capacity Manual 2000 and intended for preliminary planning purposes only. Existing condition volumes for the study roadway segments were collected from the Replica Big Data platform. Replica provides travel data by mode as well as by roadway segments. Future 2045 No Build and 2045 Build volumes were developed by adding model growth to existing volumes. Note that while the City aims to maintain an LOS D or better on its roadways, for the purposes of this analysis a deficient roadway is one that operates at LOS E or LOS F.

Roadway Pedestrian and Bicycle

Roadway pedestrian and Bicycle improvements analysis utilized pedestrian level of comfort (LOC) and Bicycle Level of Traffic Stress (LTS) methodology. Both of these methodologies quantify amount of discomfort pedestrian or bicyclist may experience when traveling close to vehicle traffic. The LOC or LTS methodology assigns a numerical ranking between 1-4, where 1 is very comfortable and 4 is undesirable, based on facility attributed such as speed, number of travel lanes, pathway widths, etc. This analysis utilized modified LOC and LTS methodologies from Montgomery County their methodology accounts for additional factors.

Level of Service Results

This section presents a summary of results for each project. Detailed analysis tables and outputs are included in **Appendix B**.

Intersection

Intersection LOS analysis was completed for Projects 1 through 20. **Table 8** presents a summary of the intersection LOS. Note that as discussed previously, LOS is presented in terms of the PM Peak-hour.

Project 1 evaluated the 2nd Avenue and Inter-Garrison Road intersection. It is estimated that future development will deteriorate the existing PM LOS from A to B. Under With Improvement Future conditions, Project 1 will improve operations to LOS A for PM.

Project 2 evaluated the Imjin Road and 8th Street intersection. This intersection operates at an LOS A in existing PM conditions. Under future conditions, the intersection operates at LOS C under PM conditions. Under With Improvement Future conditions, Project 2 will improve operations to LOS A for PM.

Project 3 evaluated the California Drive/5th Avenue and 8th Street intersection. This intersection operates at LOS A for existing and future PM conditions. Future development will slightly increase delay at this intersection. Project 3 will decrease the delay and keep operations to LOS A for PM.

Project 4 evaluated the Reservation Road and Salinas Avenue intersection. It is estimated that future development will slightly increase delay at this intersection. Under With Improvement Future conditions, Project 4 will improve operations to LOS A from C for PM.

Project 5, **Project 6**, and **Project 7** evaluated all Highway 1 ramps that intersect with Imjin Parkway. It is estimated that future development will deteriorate the existing PM LOS from C to E. Project 5, Project 6, and Project 7 will add geometric improvements to each intersection that will result in no delay.

Project 8 evaluated the Del Monte Boulevard and Beach Road intersection. It is estimated that future development will deteriorate the existing PM LOS from A to B. Under With Improvement Future conditions, Project 8 will improve operations to LOS A for PM.

Project 9 evaluated the Imjin Parkway and 2nd Avenue intersection. It is estimated that future development will deteriorate the existing PM LOS from B to D. Under With Improvement Future conditions, Project 9 will decrease delay, but operations remain at LOS D for PM.

Project 10 evaluated the Del Monte Boulevard and Reservation Road intersection. It is estimated that future development will slightly increase delay at this intersection. Under With Improvement Future conditions, Project 10 will slightly decrease delay, but operations remain at LOS C for PM.

Project 11 evaluated the California Avenue and Marina Heights Drive intersection. It is estimated that future development will slightly increase delay at this intersection. Under With Improvement Future conditions, Project 11 will improve operations to LOS A for PM.

Project 12 evaluated the Reservation Road and SR1 Southbound Ramp intersection. This intersection operates at an LOS F in PM in existing and future conditions, which would be considered an existing deficiency. Under With Improvement Future conditions, Project 12 will improve operations to LOS C for PM.

Project 13 evaluated the Reservation Road and SR1 Northbound Ramp intersection. It is estimated that future development will deteriorate the existing PM LOS from B to C. Under With Improvement Future conditions, Project 13 will improve operations to LOS B for PM.

Project 14 evaluated the Cardoza Avenue and Reservation Road intersection. It is estimated that future development will remain the same for PM at LOS A. Under With Improvement Future conditions, Project 14 will remain the same as baseline future conditions.

Project 15 evaluated the Del Monte Boulevard and Patton Parkway intersection. This intersection is a future project, and therefore does not have an existing or future no project LOS. Under future with project conditions, the intersection is estimated to have an LOS of A.

Table 8 – Intersection Level of Service Summary

Project #	Existing Control Type	Project Control Type	Existing		2045 No Project		2045 Project	
			Delay sec/veh	LOS	Delay sec/veh	LOS	Delay sec/veh	LOS
1. 2nd Ave. & Inter-Garrison Rd.	AWSC	Signal	9.4	A	11.1	B	7.9	A
2. Imjni Rd. & 8th St.	AWSC	RAB	9.2	A	17.7	C	6.2	A
3. California Dr./5th Ave. & 8th St.	SSSC	RAB	7.2	A	7.2	A	2.9	A
4. Reservation Rd. & Salinas Ave.	SSSC	Signal	15.8	C	20.5	C	6.1	A
5. Imjin Pkwy. Overpass at SR1	Signal	-	22.5	C	**63.2**	**E**	New Interchange with Free Flow	
6. SR1 Southbound Off-ramp & Imjin Pkwy.	Signal	-	22.5	C	**63.2**	**E**		
7. SR1 Southbound On-ramp & Imjin Pkwy.	Signal	-	22.5	C	**63.2**	**E**		
8. Del Monte Blvd. & Beach Rd.	RAB	RAB	6.6	A	11.7	**B**	6.3	A
9. Imjin Pkwy. & 2nd Ave.	Signal	Signal	16.3	B	54.9	D	54.5	D
10. Del Monte Blvd. & Reservation Rd.	Signal	Signal	24.1	C	37.7	C	36.4	C
11. California Ave. & Marina Heights Dr.	SSSC	Signal	12.1	B	13.0	B	8.4	A
12. SR1 Southbound Ramp & Reservation Rd.	SSSC	Signal	**101.3**	**F**	**563.4**	**F**	18.9	B
13. SR1 Northbound Ramp & Reservation Rd.	SSSC	Signal	14.2	B	20.6	C	11.8	B
14. Cardoza Ave. & Reservation Rd.	AWSC	Signal	9.4	A	9.5	A	9.5	A
15. Del Monte and Patton Parkway	RAB	RAB	-	-	-	-	-	A

Note:
Intersections that operate at LOS E or F are Bold.
Intersection and All-way stop-control intersection (AWSC) reported as intersection delay/LOS. Side-street stop-controlled intersections (SSSC) is reported as the worst movement's delay/LOS.
Roundabouts (RAB) report overall delay/LOS

Roadway Capacity

Roadway LOS analysis was completed for Projects 16 through 24. **Table 9** presents a summary of the roadway LOS.

Project 16 evaluated Del Monte (2nd Ave) between Reindollar Avenue and Imjin Parkway. This road segment is a future project, and therefore does not have an existing or future no project LOS. Under future with project conditions, the roadway is estimated to have an LOS of A.

Project 17 evaluated 8th Street between 3rd Avenue and Inter-Garrison Road. It is estimated that future development will deteriorate the existing LOS from A to B. Under With Improvement Future conditions, project 17 will improve roadway operations to LOS A.

Project 18 evaluated Salinas Avenue between Reservation Road and Carmel Avenue. This roadway operates at LOS A for Existing, Future, and Future with Improvement conditions.

Project 19 evaluated SR1 Interchange at Imjin Parkway. It is estimated that future development will deteriorate the existing LOS from A to F. Under With Improvement Future conditions, project 19 will improve roadway operations to LOS A.

Project 20 evaluated Del Monte Boulevard between Beach Road to Marina Greens Drive. It is estimated that future development will deteriorate the existing LOS from A to D. Under With Improvement Future conditions, project 20 will improve roadway operations to LOS A.

Project 21 evaluated SR 1 Interchange at Del Monte Boulevard. This roadway operates at LOS B for Existing, Future, and Future with Improvement conditions.

Project 22 evaluated Reservation Road between Beach Road to SR1. It is estimated that future development will deteriorate the existing LOS from A to D. Under With Improvement Future conditions, project 22 will improve roadway operations to LOS A.

Project 23 evaluated Reservation Road between Imjin Road to Blanco Road. It is estimated that future development will deteriorate the existing LOS from A to F. Under With Improvement Future conditions, project 23 will improve roadway operations to LOS C.

Project 24 evaluated new Airport Access Road from University Drive between Research Drive and Ramco access roadway. It is estimated that future development will increase the demand near the airport. Under With Improvement Future conditions, project 24 will have roadway operations at LOS A.

Table 9 – Roadway Capacity Level of Service Summary

Project #	Facility Type (# Lanes)		LOS		
	Existing	Project Improvements	Existing	Future No Project	Future With Project
16. Del Monte (2nd Ave) between Reindollar Ave. & Imjin Pkwy.	-	Collector (2)	-	-	A
17. 8th St. between 3rd Ave. & Inter-Garrison Rd.	Collector (2)	Arterial (4)	A	B	A
18. Salinas Ave. between Reservation Rd. & Carmel Ave	Collector (2)	Arterial (2)	A	A	A
19. SR 1 Interchange at Imjin Pkwy.	Collector (2)	Arterial (8)	A	**F**	A
20. Del Monte Blvd. between Beach Rd. to Marina Greens Dr.	Expressway (4)	Expressway (4)	A	D	A
21. SR 1 Interchange at Del Monte Blvd.	Arterial (2)	Arterial (4)	B	B	B
22. Reservation Rd. between Beach Rd. to SR 1	Collector (2)	Collector (2)	A	D	A
23. Reservation Rd. between Imjin Rd. to Blanco Rd.	Arterial (4)	Expressway (6)	A	**F**	C
24. New Airport Access Road between Research Dr and Ramco facility	-	Collector (2)	-	-	A

Note: Roadways that operate at LOS E or F are **Bold**.

Roadway Pedestrian and Bicycle

Roadway pedestrian and bicycle improvement analysis was conducted for Projects 25 and 26. The pedestrian level of comfort (LOC) and bicycle level of street (LTS) is summarized in **Table 10** and Table 11, respectively.

Project 25 evaluated Reservation Road corridor between Del Monte Boulevard and California Avenue. Project 25 will improve the LOC from 2 to 1 and LTS from 2 to 1 at majority of the corridor segments.

Project 26 evaluated Del Monte Boulevard between Reindollar Avenue and Reservation Road. Project 26 will improve the LOC from 2 to 1 and LTS from 2 to 1 at majority of the corridor segments.

Table 10 – Pedestrian Level of Comfort Summary

Project #	Without Project				With Project			
	Min. Pathway Width (ft)	DPL, SBL or 2SBL?	Min. Pathway Buffer (ft)	LOC	Min. Pathway Width (ft)	DPL, SBL or 2SBL?	Min. Pathway Buffer (ft)	LOC
25. Reservation Road Corridor								
Eastbound								
Del Monte Bl to Vista Del Camino Cir	8	SBL	6	2	8	SBL	≥8	1
Vista Del Camino Cir to Crescent Av	10	DPL & SBL	13	1	10	DPL & SBL	≥8	1
Crescent Av to California St	10	DPL & SBL	17	1	10	DPL & SBL	≥8	1
Westbound								
Del Monte Bl to Vista Del Camino Cir	8	DPL & SBL	13	1	8	SBL	≥8	1
Vista Del Camino Cir to Crescent Av	8	EBL	12	1	8	SBL	≥8	1
Crescent Av to California St	10	DPL & SBL	13	1	10	DPL & SBL	≥8	1
26. Del Monte Boulevard Corridor								
Northbound								
Reindollar Av to Palm Av	9	No DPL or SBL	8	2	9	SBL	≥8	1
Palm Av to Reservation Rd	9	No DPL or SBL	9	2	9	SBL	≥8	1
Southbound								
Reindollar Av to Palm Av	7	No DPL or SBL	6	3	7	SBL	≥8	1
Palm Av to Reservation Rd	7	No DPL or SBL	8	2	7	SBL	≥8	1

Note: LOC=Level of Comfort, DPL=Dedicated Parking Lane, SBL=Separated Bike Lane, 2SBL=Two-way Separated Bike Lane.

Table 11 – Bicycle Level of Stress Summary

Project #	Without Project		With Project	
	# through Lanes	LTS	# through Lanes	LTS
25. Reservation Road Corridor				
Eastbound				
Del Monte Bl to Vista Del Camino Cir	2	2	2	2
Vista Del Camino Cir to Crescent Av	2	2	1	2
Crescent Av to California St	2	2	1	2
Westbound				
Del Monte Bl to Vista Del Camino Cir	2	2	2	1
Vista Del Camino Cir to Crescent Av	2	2	1	1
Crescent Av to California St	2	2	1	1
26. Del Monte Boulevard Corridor				
Northbound				
Reindollar Av to Palm Av	2	2	2	2
Palm Av to Reservation Rd	2	2	1	2
Southbound				
Reindollar Av to Palm Av	2	2	2	1
Palm Av to Reservation Rd	2	2	1	1

Note: Assumed Separated bike lane with buffer & many driveways as project improvements.

Housing Analysis

As mentioned previously, AB 602 requires that studies either calculate a fee levied or imposed on a housing development projects proportionately to the square footage of the proposed units or make specified findings explaining why square footage is not an appropriate metric to calculate the fees. Simply, development impact fees must be stratified by the size of the housing unit or provide findings that support not stratifying the fees. In order to guide future analysis requirements and help inform the City of Marina as to how AB 602 may impact the TIF program in regard to the housing fee stratification requirement, an analysis was conducted to evaluate housing fees by housing size.

The analysis relied on cross-tabulation of the following three data sources:

- The average number vehicle trips generated by household size (i.e., number of persons in the household) derived from a Big Data platform (Replica) for a typical weekday (Thursday) in the Spring of 2023 which was the latest available data during this analysis

- The number of single-family housing units in categories of persons per household and square footage of units estimated from the 2021 US Census' American Housing Survey (AHS)
- Building permits by square footage for single family units constructed within the City of Marina and the surrounding areas between 2020 and 2023

The trip generation information was combined with the number of single-family detached units in cross-tabulated categories of persons per household and total household square footage. This resulted in estimates of vehicle trip rates and equivalent dwelling units (EDUs) for each square footage category established as a part of this analysis. This data was combined with the square footage data for single-family housing units built in the City between 2020 and 2023. The housing size data was provided by the City and verified using real estate sales data available online on Zillow. The resultant dataset was used as the basis for evaluating whether future Nexus Study updates should consider square footage in the development of the fee schedule. The major analysis processes are discussed in detail in the following sections.

Replica Data

Replica is a big data platform that provides demographic and travel data based on multiple data collection sources such as mobile location data, merchant transaction data, census data, land use data, and observed "ground-truth" mobility data. Data from Replica's Spring 2023 typical Thursday dataset for the City of Marina was used to estimate the number of vehicle trips by persons per household. **Table 12** summarizes the trip generation rates for each household category.

Table 12 – City of Marina Trip Generation Data – Replica 2023

Persons per Household	Households	Trips	Daily Home-Based Vehicle Trips
1	6,020	14,886	2.47
2	11,538	42,516	3.68
3	9,142	45,600	4.99
4	9,114	45,436	4.99
5	4,888	24,500	5.01
6	3,599	23,807	6.41
7+	3,589	25,369	7.07
Total	**47,890**	**221,394**	
		Average	**4.62**

Source: Replica Spring 2023 Thursday Dataset.

American Housing Survey

The American Housing Survey (AHS), which is conducted by the Bureau of the Census for the U.S. Department of Housing and Urban Development (HUD), collects data on the nation's housing, including data on household characteristics and demographics.

The AHS data is collected in odd numbered years only. The most recent available survey data from 2021 was used. The AHS was designed to include two samples, the National sample, and the independent

Metropolitan sample. The metropolitan areas that are surveyed and the size of the surveys have been reduced over recent years. While these measures have reduced costs, they also limit the localized data available.

As the AB 602 analysis requires trip generation to be defined by square footage, housing units were cross tabulated by three variables: structure type, square footage, and total persons in the household. This cross-tabulation requires an adequate sample size for each category. The closest available metropolitan area for the City of Marina region was the City of San Jose. However, the San Jose metropolitan area sample size limits its ability to provide information for all square-footage categories and may not be representative of housing in the City of Marina. In addition, the tools available from the Census Bureau to create cross-tabulations from the AHS for the purposes of this analysis indicate that the only sample that can provide a statistically relevant sample for the three required variables is the full national sample. Thus, it was decided that the national sample from the 2021 AHS should be used to define the number of single-family housing units by persons per household and by the square footage of the housing unit. This data is summarized in **Table 13**.

Table 13 – No. of Single-Family Unit Detached Structures by AHS Square Foot Category

Persons per Household	Total Units	<500 s.f.	500 to 749 s.f.	750 to 999 s.f.	1,000 to 1,499 s.f.	1,500 to 1,999 s.f.	2,000 to 2,499 s.f.	2,500 to 2,999 s.f.	3,000 to 3,999 s.f.	>4,000 s.f.	Size Unknown
1	16,679	218	409	1,371	4,854	4,017	2,201	1,010	730	325	1,543
2	29,676	123	321	1,435	6,315	7,451	5,237	3,156	2,838	1,320	1,478
3	13,396	0	99	623	2,825	3,241	2,683	1,229	1,254	477	941
4	12,496	0	116	360	2,182	2,906	2,260	1,553	1,565	862	650
5	5,872	0	38	186	957	1,314	1,122	639	832	406	362
6	2,317	0	0	75	436	445	423	257	288	185	182
7+	1,308	0	0	45	234	270	215	122	141	120	131
Average per Household	**2.67**	**1.36**	**2.04**	**2.26**	**2.46**	**2.62**	**2.79**	**2.86**	**3.05**	**3.20**	**2.60**

Trip Generation by Categories of Square Footage

The number of trips by household size and persons per household, as well as the estimation of the average trip generation rate for each of the AHS square footage categories, are summarized in **Table 14**. The trip generation rates were estimated using the following steps:

- Multiply the trip generation rate for a category of "persons per household" estimated from Replica's trip generation data (see **Table 12**) by the number of single-family units in each AHS square footage category for that same number of persons per household (see **Table 13**)
- Sum the number of trips generated by all households in an AHS square footage category and divide by the total number of households in that square footage category.

The differences in trip rates for each household categories shown in **Table 14**, along with data on recent housing square footages built in the City's surrounding region, were used to establish the EDU for each AHS square footage category.

Table 14 – Daily Vehicle Trips for All Households in Each AHS Square Foot Category

Persons per Household	Total Trips	<500 s.f.	500 to 749 s.f.	750 to 999 s.f.	1,000 to 1,499 s.f.	1,500 to 1,999 s.f.	2,000 to 2,499 s.f.	2,500 to 2,999 s.f.	3,000 to 3,999 s.f.	>4,000 s.f.	Size Unknown
1	41,243	539	1,011	3,390	12,003	9,933	5,443	2,497	1,805	804	3,815
2	109,352	453	1,183	5,288	23,270	27,456	19,298	11,629	10,458	4,864	5,446
3	66,819	0	494	3,108	14,091	16,166	13,383	6,130	6,255	2,379	4,694
4	62,296	0	578	1,795	10,878	14,487	11,267	7,742	7,802	4,297	3,240
5	29,432	0	190	932	4,797	6,586	5,624	3,203	4,170	2,035	1,814
6	14,863	0	0	481	2,797	2,855	2,713	1,649	1,847	1,187	1,168
7+	9,246	0	0	318	1,654	1,909	1,520	862	997	848	926
Average per Household	**4.08**	**2.91**	**3.52**	**3.74**	**3.90**	**4.04**	**4.19**	**4.23**	**4.36**	**4.44**	**3.99**

Recent Housing Built in Surrounding Region

Table 15 groups available data for 112 "non-age-restricted" single-family dwelling units built in the City of Marina between 2020 and 2023 by their square footage. The data indicates that the average size of the single-family dwelling units built in that three-year period was 2,373 square feet. Based on the analysis completed, an EDU of 1.0 was established for the "middle grouping" of single-family units between 2,000 and 2,499 square feet in size (the group in which the cumulative percentage reaches 50-percent). Setting the 1.0 EDU at this group means that housing units smaller than 2,000 square-feet were given an EDU less than 1.0 and dwelling units that are larger than 2,499 square-feet were given an EDU greater than 1.0.

Table 15 – Single-Family Units Built in City of Marina's Surrounding Region

Square Feet	Units	Percent
Less than 1,000 SF	0	0%
1,000 – 1,499 SF	5	4%
1,500 – 1,999 SF	3	32%
2,000 – 2,499 SF	28	25%
2,500 – 2,999 SF	22	20%
3,000 – 3,999 SF	21	19%
More than 4,000 SF	0	0%
Total	**112**	**100%**
Average Square Footage of Single-Family Units		**2,373 SF**

Analysis Results

Table 16 summarizes the estimated EDUs for the five recommended single-family dwelling units grouped by their square footage. Note that **Table 16** contains fewer groups than **Table 15** as the trip generation for dwelling units smaller than 1500 square-feet have similar trip generation characteristics resulting in the same EDU value. Similarly, dwelling units larger than 3000 square-feet were also grouped together because of similar EDU values.

The EDU values summarized in **Table 16** were calculated by dividing the average number of trips per household for each group by the average trips per household for the middle (2,000 to 2,499 square feet) group. **Table 16** also summarizes the calculated weighted average EDU for each of the AHS square footage categories, which is estimated by multiplying the EDU for each category by the percentage of households in that category (from the 2020 – 2023 available housing data). This calculation shows that the weighted average EDU for "non-age restricted" single-family dwelling units is 1.00. Based on the analysis completed, there is evidence that daily trips are correlated to the square footage of existing residences within the City of Marina and a stratified fee structure based on square footage was established as part of the AB 602 compliant Nexus Fee Study.

Table 16 – Estimated EDUs for Single-Family Units by Square Foot Groupings

Recommended Square Footage Categories	Average Trip per Household	EDU[1]	Weighted Average EDU
Less than 1,500 SF	3.74	0.89	0.040
1,500 – 1,999 SF	4.19	1.00	0.250
2,000 – 2,499 SF	4.25	1.01	0.199
2,500 – 2,999 SF	4.46	1.07	0.200
More than 3,000 SF	4.06	0.97	0.311
Weighted Average of All Groups			**1.000**

[1] Equals avg. trips per household for each grouping divided by the avg. trips per household for the prominent group (4.25).

Nexus Allocation and Fee Calculations

Determining Nexus is a two-step process which establishes the relationship between future needed improvements to the transportation network and future development within the same geography. First the allocation to users must be determined and second the fee based on user type is calculated. These steps identify the highest allowable fee that can be tied to the effects of development with the City.

Allocation to Users

Having previously identified the improvements needed to the transportation network, the cost of those improvements can be proportionally allocated to the users of these facilities. The AMBAG TDM and the citywide growth projections were used in determining the share of project costs that can actually be attributed to growth within the City.

The AMBAG TDM was used to identify traffic patterns within Marina and the surrounding region under both existing baseline conditions and future horizon year conditions. The traffic volume on each link of the model was captured and links associated with TIF projects were identified for further analysis. These two scenario comparisons on TIF Project links in the model allow for isolation of the anticipated growth on each link and the proportion of growth on those links relative to the overall traffic on that link was calculated.

Growth in the model encompasses trips that originate both within the City of Marina and the surrounding County. Therefore, the portion of growth attributable to local trips within the City was also isolated for each project. Local trips are those trips that have either an origin or destination (or both) within the City of Marina. Non-local trips, those trips that are just passing-through, were excluded from the fee calculations. This was done by proportionally reducing the eligible cost for inclusion in the TIF program of each TIF project to the share of trips anticipated to use the projects that are local trips. The results of this reduction in eligible cost associated with the local trips analysis is shown in **Table 17**.

The scope of this analysis is limited to applications within the fee calculation for the Marina TIF and should not be extrapolated to represent the sizing, scope, or policy related to future transportation projects. The size and scope of TIF project is established through nexus and then subsequent allocatable fees are calculated.

Table 17 – Project Costs Eligible for TIF

ID	Project	Total Cost Estimate	% of New Local Trips	Cost Eligible for TIF
1	2nd Avenue & Inter-Garrison Road	$875,200	100%	$875,200
2	Imjin Road & 8th Street	$1,800,000	31%	$552,200
3	California Drive & 8th Street	$1,750,300	92%	$1,607,500
4	Reservation Road & Salinas Avenue	$2,438,600	100%	$2,438,600
5	Imjin Parkway bridge @ SR 1	$41,400	25%	$10,400
6	SR 1 Southbound off-ramp @ Imjin Parkway	$3,182,400	25%	$797,500
7	SR 1 Southbound on-ramp @ Imjin Parkway	$795,600	25%	$199,400
8	Del Monte Boulevard & Beach Road	$3,182,400	99%	$3,165,100
9	Imjin Parkway & 2nd Avenue	$6,583,200	41%	$2,687,600
10	Reservation Road & Del Monte Boulevard	$4,000,000	100%	$4,000,000
11	California Avenue & Marina Heights Drive	$1,384,400	100%	$1,384,400
12	SR1 Southbound Ramp @ Reservation Rd	$4,000,000	16%	$648,600
13	SR1 Northbound Ramp @ Reservation Road	$4,000,000	95%	$3,802,700
14	Cardoza Avenue & Reservation Road	$3,500,000	95%	$3,320,000
15	Del Monte Boulevard & Patton Parkway	$6,000,000	30%	$1,800,000
	Total Cost for Intersection Projects	**$43,533,500**	**63%**	**$27,289,200**
16	Del Monte Boulevard Extension	$17,000,000	100%	$17,000,000
17	8th Street from California Ave to Inter-Garrison Rd	$9,449,700	53%	$4,989,200
18	Salinas Ave - Reservation Road to Carmel Ave	$5,200,000	100%	$5,200,000
19	Imjin Parkway & SR1 Interchange	$24,385,300	31%	$7,544,400
20	Del Monte Blvd - Beach Road to Marina Greens Dr	$13,411,900	100%	$13,390,600
21	Del Monte Boulevard & SR 1 Interchange	$24,385,300	100%	$24,385,300
22	Reservation Road – Beach Road to SR 1	$9,599,250	95%	$9,130,100
23	Reservation Road - Imjin Road to Blanco Road	$13,036,400	45%	$5,872,100
24	Airport Access Road	$6,190,000	30%	$1,857,000
25	Reservation Rd – Del Monte Blvd to California St	$31,174,100	30%	$9,352,300
26	Del Monte Blvd – Reindollar Ave to Reservation Rd	$16,258,700	30%	$4,877,700
	Total Cost for Roadway Projects	**$170,090,650**	**61%**	**$103,598,700**
	Total Cost for Transportation Projects:	**$213,624,150**	**61%**	**$130,887,900**

Fee Calculations

The actual fee per trip were calculated by dividing the total eligible cost for all TIF projects by the total estimated growth in Daily trips on the roadway network at buildout of the City's General Plan and Housing Element Update. These calculations also introduce a three percent (3.0%) administration charge for the fee program. **Table 18** shows this calculation results in a base fee per trip of $580.91 and $2,136.56 for intersection and roadway projects, respectively. **Table 19** then uses the adjusted daily trip demand factor to apply this fee across each land use type.

Table 18 – Calculation of Fee per Adjusted Daily Trip

Calculation	Intersections	Roadways	Total
Cost Eligible for TIF	$27,289,200	$103,598,700	$130,887,900
Administrative Fee (3% of total costs)	$818,676	$818,676	$1,637,352
Total Impact Fee Revenue Allocated[1]	-$911,115	-$4,389,789	-$5,300,904
Subtotal Impact Fee Program Funding after Contribution from Impact Fee	$27,196,761	$100,027,587	$127,224,348
Growth in Adjusted Daily Trips	46,817	46,817	46,817
Fee per Trip	$580.91	$2,136.56	$2,717.47

[1] Total revenue allocation includes fairshare of fee collected as part of the TIF as of June 30, 2024 for development projects.

Table 19 – Fee per Land Use Category

Land Use Category	Unit	Adjusted Daily Trip Demand Factor	Fee per Unit Intersections	Fee per Unit Roadways	Total Fee per Unit	Current Fee per Unit
Residential						
Single Family	DU	9.15	$5,314	$19,543	$24,857	$11,671
Senior Homes	DU	4.18	$2,429	$8,932	$11,361	$4,513
Assisted Living – Senior	DU	2.52	$1,465	$5,388	$6,853	$3,239
Multifamily	DU	6.54	$3,798	$13,968	$17,766	$8,155
Nonresidential						
Office/Research	KSF	10.41	$6,045	$22,234	$28,279	$13,292
Retail/Service	KSF	25.91	$15,050	$55,352	$70,401	$22,342
Industrial	KSF	4.77	$2,772	$10,197	$12,969	$8,399
Hotel	ROOM	7.67	$4,456	$16,388	$20,844	$9,846
Church	KSF	6.92	$4,018	$14,776	$18,794	$10,978
Day Care Center	KSF	40.95	$23,790	$87,499	$111,289	$89,257
Animal Hospital/Clinic	KSF	21.07	$12,240	$45,017	$57,257	$56,884
Medical/Dental Office	KSF	35.28	$20,495	$75,378	$95,872	$43,542

The fees presented here represent the maximum eligible fees attributable to new growth and development within the City of Marina and also serves as a ceiling to the fee schedule eventually adopted by the City Council.

As mentioned earlier, a stratified fee structure based on square footage for single family residential units was established as part of the AB 602 compliant Nexus Fee Study. **Table 20** shows the adjusted fees for the single-family residential units for roadway and intersection projects.

Table 20 – Fee for Single Family Residential Land Use by Size

Land Use Category	Unit	Adjusted Daily Trip Demand Factor	Fee per Unit Intersections	Fee per Unit Roadways	Total Fee per Unit
Single Family < 1500 SF	DU	9.43	$4,742	$17,441	$22,184
Single Family 1,500 to 1,999 SF	DU	9.43	$5,145	$18,922	$24,067
Single Family 2000 to 2,499 SF	DU	9.43	$5,314	$19,543	$24,857
Single Family 2500 to 2,999 SF	DU	9.43	$5,390	$19,825	$25,215
Single Family >=3,000 SF	DU	9.43	$5,659	$20,815	$26,474

Required Program Elements

This report has provided a detailed discussion of the elements of the Marina Transportation Impact Fee program and explained the analytical techniques used to develop this nexus study. The report addresses the fee program elements required by Government Code 66000-66025, as summarized below.

1. *Identifying the purpose of the fee*
    - The purpose of the Marina Transportation Impact Fee (TIF) program is to provide funding for public infrastructure improvements that are needed to mitigate the transportation-related impacts of new development in Marina.
2. *Identifying how the fee will be used and the facilities to be funded through the fee*
    - The fee is used to help fund capital improvement projects that will accommodate future transportation needs throughout the City of Marina. **Table 1** identifies the projects to be funded through the TIF fee.
3. *Determining a reasonable relationship between the fee's use and the type of development on which the fee is imposed*
    - As described in this report, different types of development generate traffic with different characteristics. The calculations presented in **Table 5** account for these characteristics by calculating the travel-related characteristics of different land use types. These considerations account for the difference in impacts on the local transportation system generated by different land use types.
4. *Determining a reasonable relationship between the need for the roadway and intersection improvements and the type of development on which the fee is imposed*
    - The need for the facilities listed in **Table 1** has been established through local planning processes prepared by the City of Marina and building upon the adopted General Plan and Housing Element Update.
5. *Determining a reasonable relationship between the amount of the fee and the cost of the public facility (or portion of facility) attributable to new development*
    - Fee Calculation Section of this report describes the calculations completed to determine the cost of the roadway and intersection projects that is attributable to new development in the TIF area. A reasonable effort has been made to quantitatively establish the relationship between the fees charged in the TIF program and the costs of improvements attributable to new development within the City of Marina.

Appendices

Appendix A: Level of Service Analysis Outputs

Intersection	
Intersection Delay, s/veh	35
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	11	128	20	106	695
Future Vol, veh/h	3	11	128	20	106	695
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	12	138	22	114	747
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	9.1	9	40.3
HCM LOS	A	A	E

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	20	3	11	106	695
LT Vol	0	0	3	0	106	0
Through Vol	128	0	0	0	0	695
RT Vol	0	20	0	11	0	0
Lane Flow Rate	138	22	3	12	114	747
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.202	0.027	0.007	0.02	0.163	0.963
Departure Headway (Hd)	5.29	4.585	7.28	6.066	5.139	4.638
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	681	784	494	592	692	777
Service Time	2.997	2.293	4.994	3.779	2.916	2.415
HCM Lane V/C Ratio	0.203	0.028	0.006	0.02	0.165	0.961
HCM Control Delay	9.3	7.4	10	8.9	8.9	45.1
HCM Lane LOS	A	A	A	A	A	E
HCM 95th-tile Q	0.8	0.1	0	0.1	0.6	14.9

Intersection	
Intersection Delay, s/veh	41.1
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	6	0	7	4	42	0	5	21	597	5	2
Future Vol, veh/h	11	6	0	7	4	42	0	5	21	597	5	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	6	0	8	4	45	0	5	23	642	5	2
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	9.7	9.2	8.3	46.2
HCM LOS	A	A	A	E

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%	99%	0%
Vol Thru, %	19%	0%	100%	0%	9%	1%	0%
Vol Right, %	81%	0%	0%	0%	91%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	11	6	7	46	602	2
LT Vol	0	11	0	7	0	597	0
Through Vol	5	0	6	0	4	5	0
RT Vol	21	0	0	0	42	0	2
Lane Flow Rate	28	12	6	8	49	647	2
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.039	0.023	0.012	0.015	0.08	0.953	0.002
Departure Headway (Hd)	5.079	7.017	6.509	6.951	5.794	5.3	4.103
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	701	508	548	514	616	686	877
Service Time	3.136	4.783	4.274	4.706	3.548	3	1.803
HCM Lane V/C Ratio	0.04	0.024	0.011	0.016	0.08	0.943	0.002
HCM Control Delay	8.3	9.9	9.4	9.8	9.1	46.3	6.8
HCM Lane LOS	A	A	A	A	A	E	A
HCM 95th-tile Q	0.1	0.1	0	0	0.3	13.7	0

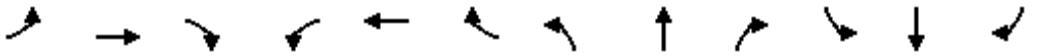
Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	1	14	0	2	6	14	0	0
Future Vol, veh/h	0	0	0	3	1	14	0	2	6	14	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	1	18	0	3	8	18	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	1	0	0	19	28	1
Stage 1	-	-	-	-	-	-	1	1	-
Stage 2	-	-	-	-	-	-	18	27	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1622	-	-	998	865	1084
Stage 1	0	-	-	-	-	-	1022	895	-
Stage 2	0	-	-	-	-	-	1005	873	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	1622	-	-	996	0	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	996	0	-
Stage 1	-	-	-	-	-	-	1022	0	-
Stage 2	-	-	-	-	-	-	1003	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	1084	-	-	1622	-	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-	-
HCM Control Delay (s)	8.4	-	-	7.2	0	-
HCM Lane LOS	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	732	0	2	872	25	0	0	0	165	0	470
Future Volume (veh/h)	135	732	0	2	872	25	0	0	0	165	0	470
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	144	779	0	2	928	27	0	0	0	176	0	500
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	1439	0	6	1094	32	0	892	0	224	10	544
Arrive On Green	0.10	0.40	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.48	0.00	0.48
Sat Flow, veh/h	1781	3647	0	1781	3526	103	0	1870	0	379	22	1139
Grp Volume(v), veh/h	144	779	0	2	468	487	0	0	0	676	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1852	0	1870	0	1541	0	0
Q Serve(g_s), s	8.3	17.5	0.0	0.1	25.8	25.8	0.0	0.0	0.0	40.2	0.0	0.0
Cycle Q Clear(g_c), s	8.3	17.5	0.0	0.1	25.8	25.8	0.0	0.0	0.0	42.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.06	0.00		0.00	0.26		0.74
Lane Grp Cap(c), veh/h	175	1439	0	6	551	574	0	892	0	778	0	0
V/C Ratio(X)	0.82	0.54	0.00	0.35	0.85	0.85	0.00	0.00	0.00	0.87	0.00	0.00
Avail Cap(c_a), veh/h	238	1596	0	102	662	690	0	1162	0	1000	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.3	23.7	0.0	52.0	33.8	33.8	0.0	0.0	0.0	25.4	0.0	0.0
Incr Delay (d2), s/veh	15.4	0.3	0.0	32.2	8.7	8.4	0.0	0.0	0.0	6.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.2	0.0	0.1	12.2	12.7	0.0	0.0	0.0	16.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	24.0	0.0	84.3	42.5	42.2	0.0	0.0	0.0	32.1	0.0	0.0
LnGrp LOS	E	C	A	F	D	D	A	A	A	C	A	A
Approach Vol, veh/h		923			957			0			676	
Approach Delay, s/veh		29.9			42.5			0.0			32.1	
Approach LOS		C			D						C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		53.9	4.3	46.4		53.9	14.3	36.5				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		65.0	6.0	47.0		65.0	14.0	39.0				
Max Q Clear Time (g_c+I1), s		0.0	2.1	19.5		44.7	10.3	27.8				
Green Ext Time (p_c), s		0.0	0.0	6.0		5.2	0.1	4.7				

Intersection Summary												
HCM 6th Ctrl Delay			35.2									
HCM 6th LOS			D									

Intersection	
Intersection Delay, s/veh	25.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	25	138	158	54	27	49	178	33	11	375	22
Future Vol, veh/h	31	25	138	158	54	27	49	178	33	11	375	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	29	160	184	63	31	57	207	38	13	436	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.6	19.3	19.3	37.6
HCM LOS	C	C	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	16%	66%	3%
Vol Thru, %	68%	13%	23%	92%
Vol Right, %	13%	71%	11%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	260	194	239	408
LT Vol	49	31	158	11
Through Vol	178	25	54	375
RT Vol	33	138	27	22
Lane Flow Rate	302	226	278	474
Geometry Grp	1	1	1	1
Degree of Util (X)	0.582	0.441	0.562	0.86
Departure Headway (Hd)	6.927	7.034	7.278	6.528
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	520	510	495	555
Service Time	4.987	5.099	5.338	4.58
HCM Lane V/C Ratio	0.581	0.443	0.562	0.854
HCM Control Delay	19.3	15.6	19.3	37.6
HCM Lane LOS	C	C	C	E
HCM 95th-tile Q	3.7	2.2	3.4	9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	871	498	392	761	0	120	0	102	0	0	0
Future Volume (veh/h)	0	871	498	392	761	0	120	0	102	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	907	519	408	793	0	125	0	106	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1701	758	588	2563	0	320	251	211	3	6	0
Arrive On Green	0.00	0.48	0.48	0.17	0.72	0.00	0.09	0.00	0.13	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1583	3456	3647	0	3456	1870	1574	1781	3647	0
Grp Volume(v), veh/h	0	907	519	408	793	0	125	0	106	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1728	1777	0	1728	1870	1574	1781	1777	0
Q Serve(g_s), s	0.0	9.9	14.1	6.1	4.4	0.0	1.9	0.0	3.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.9	14.1	6.1	4.4	0.0	1.9	0.0	3.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	1701	758	588	2563	0	320	251	211	3	6	0
V/C Ratio(X)	0.00	0.53	0.69	0.69	0.31	0.00	0.39	0.00	0.50	0.00	0.00	0.00
Avail Cap(c_a), veh/h	193	2827	1259	1437	3919	0	562	1387	1167	193	2442	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.1	11.2	21.6	2.8	0.0	23.6	0.0	22.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	1.1	1.5	0.1	0.0	0.8	0.0	1.8	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	4.2	2.4	0.7	0.0	0.7	0.0	1.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.4	12.3	23.1	2.8	0.0	24.4	0.0	24.1	0.0	0.0	0.0
LnGrp LOS	A	B	B	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		1426			1201			231			0	
Approach Delay, s/veh		11.1			9.7			24.2			0.0	
Approach LOS		B			A			C				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	11.4	13.4	30.5	9.1	2.3	0.0	43.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	41.0	23.0	44.0	9.0	38.0	6.0	61.0
Max Q Clear Time (g_c+I1), s	0.0	5.5	8.1	16.1	3.9	0.0	0.0	6.4
Green Ext Time (p_c), s	0.0	0.3	1.3	10.1	0.1	0.0	0.0	6.8

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

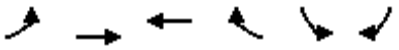
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	235	123	338	122	162	95	165	229	225	277	4
Future Volume (veh/h)	15	235	123	338	122	162	95	165	229	225	277	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	17	270	141	389	140	186	109	190	263	259	318	5
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	407	222	679	367	304	155	401	589	407	877	14
Arrive On Green	0.19	0.19	0.19	0.20	0.20	0.20	0.09	0.21	0.21	0.12	0.25	0.25
Sat Flow, veh/h	136	2176	1188	3456	1870	1549	1781	1870	2744	3456	3580	56
Grp Volume(v), veh/h	234	0	194	389	140	186	109	190	263	259	158	165
Grp Sat Flow(s),veh/h/ln	1864	0	1636	1728	1870	1549	1781	1870	1372	1728	1777	1859
Q Serve(g_s), s	6.6	0.0	6.2	5.7	3.7	6.2	3.4	5.0	4.7	4.0	4.1	4.2
Cycle Q Clear(g_c), s	6.6	0.0	6.2	5.7	3.7	6.2	3.4	5.0	4.7	4.0	4.1	4.2
Prop In Lane	0.07		0.73	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	349	0	306	679	367	304	155	401	589	407	435	456
V/C Ratio(X)	0.67	0.00	0.63	0.57	0.38	0.61	0.70	0.47	0.45	0.64	0.36	0.36
Avail Cap(c_a), veh/h	662	0	581	1841	997	825	949	997	1462	1227	1262	1321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	0.0	21.1	20.5	19.6	20.7	25.0	19.3	19.2	23.7	17.6	17.6
Incr Delay (d2), s/veh	2.2	0.0	2.2	0.8	0.6	2.0	5.7	0.9	0.5	1.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.3	2.2	1.5	2.2	1.5	2.0	1.4	1.6	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	23.3	21.2	20.3	22.6	30.6	20.2	19.7	25.4	18.1	18.1
LnGrp LOS	C	A	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h		428			715			562			582	
Approach Delay, s/veh		23.4			21.4			22.0			21.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.6	16.1		14.5	8.9	17.8		15.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	30.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	5.0	7.0		8.6	5.4	6.2		8.2
Green Ext Time (p_c), s	0.7	2.1		2.0	0.3	1.9		2.9

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	865	248	566	42	30	1327
Future Volume (veh/h)	865	248	566	42	30	1327
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	940	270	615	46	33	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1156	2806	739	626	311	
Arrive On Green	0.33	0.79	0.39	0.39	0.09	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	940	270	615	46	33	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	16.6	1.2	19.7	1.2	0.6	0.0
Cycle Q Clear(g_c), s	16.6	1.2	19.7	1.2	0.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1156	2806	739	626	311	
V/C Ratio(X)	0.81	0.10	0.83	0.07	0.11	
Avail Cap(c_a), veh/h	1973	4697	1292	1095	1765	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.2	1.6	18.2	12.5	27.8	0.0
Incr Delay (d2), s/veh	1.4	0.0	2.5	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.1	8.1	0.4	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.7	1.6	20.7	12.6	28.0	0.0
LnGrp LOS	C	A	C	B	C	
Approach Vol, veh/h		1210	661		33	
Approach Delay, s/veh		17.2	20.1		28.0	
Approach LOS		B	C		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		56.6		10.0	26.3	30.3
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		88.0		34.0	38.0	46.0
Max Q Clear Time (g_c+I1), s		3.2		2.6	18.6	21.7
Green Ext Time (p_c), s		2.0		0.1	3.7	4.6

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	115	146	17	61	616
Future Vol, veh/h	38	115	146	17	61	616
Conflicting Peds, #/hr	2	1	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	115	0	-	80	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	126	160	19	67	677

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	975	163	0	0	181	0
Stage 1	162	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	279	882	-	-	1394	-
Stage 1	867	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	264	879	-	-	1391	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	264	879	1391	-
HCM Lane V/C Ratio	-	-	0.158	0.144	0.048	-
HCM Control Delay (s)	-	-	21.2	9.8	7.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.2	-

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	12	16	83	8	19	7	87	15	14	319	0
Future Vol, veh/h	4	12	16	83	8	19	7	87	15	14	319	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	14	19	97	9	22	8	101	17	16	371	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	8.5	9.6	9.1	13.2
HCM LOS	A	A	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	12%	75%	100%	0%
Vol Thru, %	0%	85%	38%	7%	0%	100%
Vol Right, %	0%	15%	50%	17%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	102	32	110	14	319
LT Vol	7	0	4	83	14	0
Through Vol	0	87	12	8	0	319
RT Vol	0	15	16	19	0	0
Lane Flow Rate	8	119	37	128	16	371
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.013	0.172	0.053	0.188	0.025	0.524
Departure Headway (Hd)	5.838	5.23	5.133	5.304	5.59	5.087
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	610	682	692	673	638	705
Service Time	3.602	2.993	3.207	3.362	3.34	2.837
HCM Lane V/C Ratio	0.013	0.174	0.053	0.19	0.025	0.526
HCM Control Delay	8.7	9.1	8.5	9.6	8.5	13.4
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0	0.6	0.2	0.7	0.1	3.1

Intersection	
Int Delay, s/veh	47.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	36	20	328	33	0	0	0	0	193	40	10
Future Vol, veh/h	0	36	20	328	33	0	0	0	0	193	40	10
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	41	23	377	38	0	0	0	0	222	46	11

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	64	0	0	847	856	38
Stage 1	-	-	-	-	-	-	792	792	-
Stage 2	-	-	-	-	-	-	55	64	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1538	-	0	332	295	1034
Stage 1	0	-	-	-	-	0	446	401	-
Stage 2	0	-	-	-	-	0	968	842	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1538	-	-	251	0	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	0	-
Stage 1	-	-	-	-	-	-	446	0	-
Stage 2	-	-	-	-	-	-	731	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	7.4	117.6
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1538	-	261
HCM Lane V/C Ratio	-	-	0.245	-	1.07
HCM Control Delay (s)	-	-	8.1	-	117.6
HCM Lane LOS	-	-	A	-	F
HCM 95th %tile Q(veh)	-	-	1	-	11.4

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	228	0	0	335	218	11	0	108	0	0	0
Future Vol, veh/h	14	228	0	0	335	218	11	0	108	0	0	0
Conflicting Peds, #/hr	5	0	4	4	0	5	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	-	-	120	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	245	0	0	360	234	12	0	116	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	599	0	-	-	-	0	753	874	245
Stage 1	-	-	-	-	-	-	275	275	-
Stage 2	-	-	-	-	-	-	478	599	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	978	-	0	0	-	-	377	288	794
Stage 1	-	-	0	0	-	-	771	683	-
Stage 2	-	-	0	0	-	-	624	490	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	978	-	-	-	-	-	371	0	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	371	0	-
Stage 1	-	-	-	-	-	-	759	0	-
Stage 2	-	-	-	-	-	-	623	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	371	794	978	-	-	-
HCM Lane V/C Ratio	0.032	0.146	0.015	-	-	-
HCM Control Delay (s)	15	10.3	8.7	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	0.5	0	-	-	-

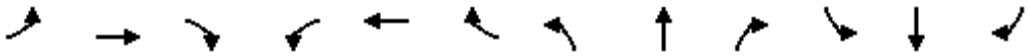
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	689	2	7	797	0	1	0	7	0	0	1
Future Vol, veh/h	1	689	2	7	797	0	1	0	7	0	0	1
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	811	2	8	938	0	1	0	8	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	938	0	0	815	0	0	1300	1769	408	1362	1771	469
Stage 1	-	-	-	-	-	-	815	815	-	954	954	-
Stage 2	-	-	-	-	-	-	485	954	-	408	817	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	726	-	-	808	-	0	119	83	593	107	82	541
Stage 1	-	-	-	-	-	0	338	389	-	278	335	-
Stage 2	-	-	-	-	-	0	532	335	-	591	388	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	726	-	-	806	-	-	117	82	592	104	81	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	117	82	-	104	81	-
Stage 1	-	-	-	-	-	-	336	387	-	277	332	-
Stage 2	-	-	-	-	-	-	526	332	-	581	386	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	14.4	11.7
HCM LOS			B	B

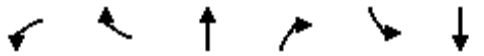
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	393	726	-	-	806	-	541
HCM Lane V/C Ratio	0.024	0.002	-	-	0.01	-	0.002
HCM Control Delay (s)	14.4	10	-	-	9.5	-	11.7
HCM Lane LOS	B	A	-	-	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	295	3	10	422	24	6	0	20	70	0	124
Future Volume (veh/h)	38	295	3	10	422	24	6	0	20	70	0	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	314	3	11	449	26	6	0	21	74	0	132
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1466	638	31	700	591	162	43	253	510	0	325
Arrive On Green	0.06	0.41	0.41	0.02	0.37	0.37	0.21	0.00	0.21	0.21	0.00	0.21
Sat Flow, veh/h	1781	3554	1546	1781	1870	1579	140	210	1225	1385	0	1574
Grp Volume(v), veh/h	40	314	3	11	449	26	27	0	0	74	0	132
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1781	1870	1579	1574	0	0	1385	0	1574
Q Serve(g_s), s	0.7	1.9	0.0	0.2	6.5	0.3	0.0	0.0	0.0	0.9	0.0	2.4
Cycle Q Clear(g_c), s	0.7	1.9	0.0	0.2	6.5	0.3	0.4	0.0	0.0	1.3	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.22		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	99	1466	638	31	700	591	459	0	0	510	0	325
V/C Ratio(X)	0.40	0.21	0.00	0.35	0.64	0.04	0.06	0.00	0.00	0.15	0.00	0.41
Avail Cap(c_a), veh/h	701	7530	3277	485	3737	3154	1911	0	0	1858	0	1858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	6.3	5.7	16.0	8.5	6.6	10.6	0.0	0.0	10.9	0.0	11.3
Incr Delay (d2), s/veh	2.6	0.1	0.0	6.7	1.0	0.0	0.1	0.0	0.0	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.1	1.9	0.1	0.1	0.0	0.0	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	6.3	5.7	22.8	9.5	6.6	10.6	0.0	0.0	11.0	0.0	12.2
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		357			486			27			206	
Approach Delay, s/veh		7.6			9.6			10.6			11.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.8	4.6	17.6		10.8	5.8	16.4				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		39.0	9.0	70.0		39.0	13.0	66.0				
Max Q Clear Time (g_c+I1), s		2.4	2.2	3.9		4.4	2.7	8.5				
Green Ext Time (p_c), s		0.1	0.0	2.3		1.1	0.0	3.3				

Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	835	0	0	0	437	33
Future Volume (vph)	835	0	0	0	437	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0					4.0
Lane Util. Factor	1.00					1.00
Frt	1.00					1.00
Flt Protected	0.95					0.96
Satd. Flow (prot)	1770					1780
Flt Permitted	0.95					0.96
Satd. Flow (perm)	1770					1780
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	938	0	0	0	491	37
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	938	0	0	0	0	528
Turn Type	Prot				pm+pt	NA
Protected Phases	8				1	6
Permitted Phases					6	
Actuated Green, G (s)	63.1					37.5
Effective Green, g (s)	63.1					37.5
Actuated g/C Ratio	0.58					0.35
Clearance Time (s)	4.0					4.0
Vehicle Extension (s)	3.0					3.0
Lane Grp Cap (vph)	1028					614
v/s Ratio Prot	c0.53					c0.30
v/s Ratio Perm						
v/c Ratio	0.91					0.86
Uniform Delay, d1	20.3					33.1
Progression Factor	1.00					1.00
Incremental Delay, d2	12.0					11.6
Delay (s)	32.3					44.7
Level of Service	C					D
Approach Delay (s)	32.3		0.0			44.7
Approach LOS	C		A			D

Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	108.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	114	46	157	336	0	0
Future Volume (Veh/h)	114	46	157	336	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	121	49	167	357	0	0
Pedestrians	12			2	7	
Lane Width (ft)	12.0			12.0	0.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			177		856	154
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			177		856	154
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		100	100
cM capacity (veh/h)			1399		286	890

Direction, Lane #	EB 1	WB 1
Volume Total	170	524
Volume Left	0	167
Volume Right	49	0
cSH	1700	1399
Volume to Capacity	0.10	0.12
Queue Length 95th (ft)	0	10
Control Delay (s)	0.0	3.3
Lane LOS		A
Approach Delay (s)	0.0	3.3
Approach LOS		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	649	241	366	781	29	30
Future Volume (vph)	649	241	366	781	29	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	0.97	0.91
Frt	0.96		1.00	1.00	0.96	0.85
Flt Protected	1.00		0.95	1.00	0.97	1.00
Satd. Flow (prot)	3396		1770	3539	3342	1441
Flt Permitted	1.00		0.95	1.00	0.97	1.00
Satd. Flow (perm)	3396		1770	3539	3342	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	690	256	389	831	31	32
RTOR Reduction (vph)	26	0	0	0	11	18
Lane Group Flow (vph)	920	0	389	831	32	2
Turn Type	NA		Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases					2	2
Actuated Green, G (s)	29.3		23.0	56.3	6.8	6.8
Effective Green, g (s)	29.3		23.0	56.3	6.8	6.8
Actuated g/C Ratio	0.41		0.32	0.79	0.10	0.10
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1399		572	2802	319	137
v/s Ratio Prot	c0.27		c0.22	0.23		
v/s Ratio Perm					c0.01	0.00
v/c Ratio	0.66		0.68	0.30	0.10	0.01
Uniform Delay, d1	16.9		20.9	2.0	29.4	29.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1		3.3	0.1	0.1	0.0
Delay (s)	18.0		24.2	2.1	29.5	29.2
Level of Service	B		C	A	C	C
Approach Delay (s)	18.0			9.1	29.4	
Approach LOS	B			A	C	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Existing 2023 AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

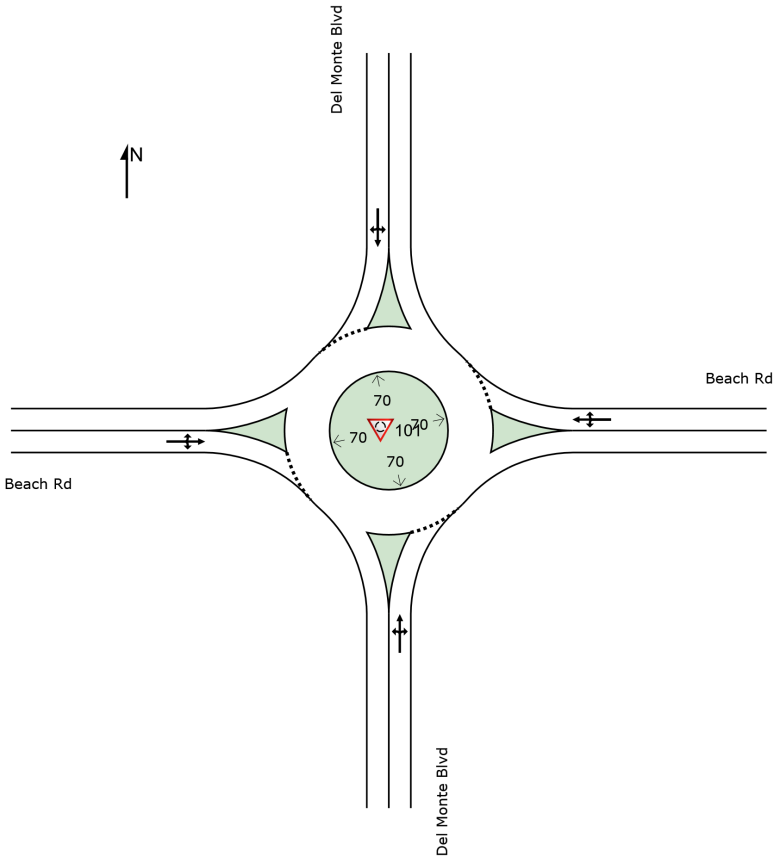
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	151	2.0	151	2.0	0.403	7.4	LOS A	2.4	60.4	0.49	0.28	0.49	31.0
8	T1	All MCs	227	2.0	227	2.0	0.403	7.4	LOS A	2.4	60.4	0.49	0.28	0.49	31.6
18	R2	All MCs	62	2.0	62	2.0	0.403	7.4	LOS A	2.4	60.4	0.49	0.28	0.49	31.4
Approach			440	2.0	440	2.0	0.403	7.4	LOS A	2.4	60.4	0.49	0.28	0.49	31.4
East: Beach Rd															
1	L2	All MCs	162	2.0	162	2.0	0.417	9.1	LOS A	2.3	59.4	0.64	0.51	0.69	30.1
6	T1	All MCs	133	2.0	133	2.0	0.417	9.1	LOS A	2.3	59.4	0.64	0.51	0.69	30.7
16	R2	All MCs	66	2.0	66	2.0	0.417	9.1	LOS A	2.3	59.4	0.64	0.51	0.69	30.4
Approach			360	2.0	360	2.0	0.417	9.1	LOS A	2.3	59.4	0.64	0.51	0.69	30.4
North: Del Monte Blvd															
7	L2	All MCs	77	2.0	77	2.0	0.654	15.0	LOS B	7.0	177.8	0.81	0.83	1.33	28.5
4	T1	All MCs	408	2.0	408	2.0	0.654	15.0	LOS B	7.0	177.8	0.81	0.83	1.33	28.9
14	R2	All MCs	67	2.0	67	2.0	0.654	15.0	LOS B	7.0	177.8	0.81	0.83	1.33	28.7
Approach			552	2.0	552	2.0	0.654	15.0	LOS B	7.0	177.8	0.81	0.83	1.33	28.8
West: Beach Rd															
5	L2	All MCs	45	2.0	45	2.0	0.374	10.2	LOS B	1.8	47.0	0.69	0.64	0.79	30.2
2	T1	All MCs	82	2.0	82	2.0	0.374	10.2	LOS B	1.8	47.0	0.69	0.64	0.79	30.7
12	R2	All MCs	127	2.0	127	2.0	0.374	10.2	LOS B	1.8	47.0	0.69	0.64	0.79	30.5
Approach			255	2.0	255	2.0	0.374	10.2	LOS B	1.8	47.0	0.69	0.64	0.79	30.5
All Vehicles			1607	2.0	1607	2.0	0.654	10.8	LOS B	7.0	177.8	0.67	0.58	0.87	30.1

SITE LAYOUT

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Existing 2023 AM)]

New Site
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	66	223	11	52	191
Future Vol, veh/h	19	66	223	11	52	191
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	67	228	11	53	195
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay	8.4	9.9	9.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	223	11	19	66	52	191
LT Vol	0	0	19	0	52	0
Through Vol	223	0	0	0	0	191
RT Vol	0	11	0	66	0	0
Lane Flow Rate	228	11	19	67	53	195
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.315	0.013	0.033	0.093	0.08	0.268
Departure Headway (Hd)	4.977	4.274	6.196	4.989	5.459	4.956
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	724	837	578	718	657	725
Service Time	2.703	2	3.931	2.723	3.185	2.683
HCM Lane V/C Ratio	0.315	0.013	0.033	0.093	0.081	0.269
HCM Control Delay	10	7.1	9.1	8.2	8.7	9.5
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	1.3	0	0.1	0.3	0.3	1.1

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	9	1	28	1	194	0	28	32	106	24	3
Future Vol, veh/h	0	9	1	28	1	194	0	28	32	106	24	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	1	32	1	223	0	32	37	122	28	3
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	8.2	8.9	8.6	10
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	100%	0%	82%	0%
Vol Thru, %	47%	100%	90%	0%	1%	18%	0%
Vol Right, %	53%	0%	10%	0%	99%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	0	10	28	195	130	3
LT Vol	0	0	0	28	0	106	0
Through Vol	28	0	9	0	1	24	0
RT Vol	32	0	1	0	194	0	3
Lane Flow Rate	69	0	11	32	224	149	3
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.097	0	0.017	0.051	0.278	0.234	0.004
Departure Headway (Hd)	5.048	5.391	5.321	5.659	4.458	5.632	4.519
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	708	0	672	634	807	637	790
Service Time	3.091	3.133	3.062	3.384	2.182	3.372	2.258
HCM Lane V/C Ratio	0.097	0	0.016	0.05	0.278	0.234	0.004
HCM Control Delay	8.6	8.1	8.2	8.7	8.9	10.1	7.3
HCM Lane LOS	A	N	A	A	A	B	A
HCM 95th-tile Q	0.3	0	0.1	0.2	1.1	0.9	0

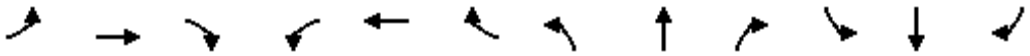
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	2	0	2	0	1	0	10	1	1
Future Vol, veh/h	1	0	0	2	0	2	0	1	0	10	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	3	0	3	0	1	0	13	1	1

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	3	0	0	0	0	0	11	11	0
Stage 1	-	-	-	-	-	-	2	2	-
Stage 2	-	-	-	-	-	-	9	9	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1619	-	-	-	-	-	1009	884	-
Stage 1	-	-	-	-	-	-	1021	894	-
Stage 2	-	-	-	-	-	-	1014	888	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1619	-	-	-	-	-	1007	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	1007	0	-
Stage 1	-	-	-	-	-	-	1020	0	-
Stage 2	-	-	-	-	-	-	1013	0	-

Approach	EB	WB	NB
HCM Control Delay, s	7.2		
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	1619	-	-	-	-	-
HCM Lane V/C Ratio	-	0.001	-	-	-	-	-
HCM Control Delay (s)	-	7.2	-	-	-	-	-
HCM Lane LOS	-	A	-	-	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	289	1122	0	1	870	60	0	0	0	27	0	210
Future Volume (veh/h)	289	1122	0	1	870	60	0	0	0	27	0	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	295	1145	0	1	888	61	0	0	0	28	0	214
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	2072	0	3	1281	88	0	392	0	90	17	293
Arrive On Green	0.21	0.58	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.21	0.00	0.21
Sat Flow, veh/h	1781	3647	0	1781	3373	232	0	1870	0	103	80	1400
Grp Volume(v), veh/h	295	1145	0	1	468	481	0	0	0	242	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1828	0	1870	0	1583	0	0
Q Serve(g_s), s	9.2	11.6	0.0	0.0	12.9	12.9	0.0	0.0	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	9.2	11.6	0.0	0.0	12.9	12.9	0.0	0.0	0.0	8.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.13	0.00		0.00	0.12		0.88
Lane Grp Cap(c), veh/h	365	2072	0	3	675	694	0	392	0	401	0	0
V/C Ratio(X)	0.81	0.55	0.00	0.33	0.69	0.69	0.00	0.00	0.00	0.60	0.00	0.00
Avail Cap(c_a), veh/h	1038	4505	0	183	1400	1440	0	1218	0	1090	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	22.1	7.5	0.0	29.1	15.2	15.2	0.0	0.0	0.0	21.5	0.0	0.0
Incr Delay (d2), s/veh	4.3	0.2	0.0	52.9	1.3	1.3	0.0	0.0	0.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.3	0.0	0.1	4.8	4.9	0.0	0.0	0.0	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	7.7	0.0	82.0	16.5	16.5	0.0	0.0	0.0	22.9	0.0	0.0
LnGrp LOS	C	A	A	F	B	B	A	A	A	C	A	A
Approach Vol, veh/h		1440			950			0			242	
Approach Delay, s/veh		11.5			16.6			0.0			22.9	
Approach LOS		B			B						C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.2	4.1	38.0		16.2	16.0	26.2				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		38.0	6.0	74.0		38.0	34.0	46.0				
Max Q Clear Time (g_c+I1), s		0.0	2.0	13.6		10.3	11.2	14.9				
Green Ext Time (p_c), s		0.0	0.0	11.8		1.6	0.9	7.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	43	36	56	19	26	58	185	123	36	164	42
Future Vol, veh/h	32	43	36	56	19	26	58	185	123	36	164	42
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	47	40	62	21	29	64	203	135	40	180	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.1	10.1	13.4	11.2
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	29%	55%	15%
Vol Thru, %	51%	39%	19%	68%
Vol Right, %	34%	32%	26%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	366	111	101	242
LT Vol	58	32	56	36
Through Vol	185	43	19	164
RT Vol	123	36	26	42
Lane Flow Rate	402	122	111	266
Geometry Grp	1	1	1	1
Degree of Util (X)	0.542	0.192	0.178	0.376
Departure Headway (Hd)	4.85	5.661	5.774	5.084
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	748	633	620	707
Service Time	2.85	3.708	3.823	3.117
HCM Lane V/C Ratio	0.537	0.193	0.179	0.376
HCM Control Delay	13.4	10.1	10.1	11.2
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	3.3	0.7	0.6	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1138	400	240	877	0	418	0	283	0	0	0
Future Volume (veh/h)	0	1138	400	240	877	0	418	0	283	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1185	417	250	914	0	435	0	295	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1697	755	357	2272	0	572	455	384	3	67	0
Arrive On Green	0.00	0.48	0.48	0.10	0.64	0.00	0.17	0.00	0.24	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1582	3456	3647	0	3456	1870	1577	1781	3647	0
Grp Volume(v), veh/h	0	1185	417	250	914	0	435	0	295	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1582	1728	1777	0	1728	1870	1577	1781	1777	0
Q Serve(g_s), s	0.0	17.8	12.7	4.8	8.5	0.0	8.2	0.0	11.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.8	12.7	4.8	8.5	0.0	8.2	0.0	11.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	1697	755	357	2272	0	572	455	384	3	67	0
V/C Ratio(X)	0.00	0.70	0.55	0.70	0.40	0.00	0.76	0.00	0.77	0.00	0.00	0.00
Avail Cap(c_a), veh/h	157	2453	1092	558	2713	0	964	1373	1158	157	1931	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.9	12.6	29.5	6.0	0.0	27.1	0.0	24.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.6	2.5	0.1	0.0	2.1	0.0	3.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	4.1	2.0	2.5	0.0	3.4	0.0	4.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	14.5	13.3	32.0	6.1	0.0	29.2	0.0	27.3	0.0	0.0	0.0
LnGrp LOS	A	B	B	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		1602			1164			730			0	
Approach Delay, s/veh		14.2			11.7			28.4			0.0	
Approach LOS		B			B			C				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	20.6	11.0	36.5	15.3	5.3	0.0	47.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	50.0	11.0	47.0	19.0	37.0	6.0	52.0
Max Q Clear Time (g_c+I1), s	1.0	13.9	6.8	19.8	10.2	0.0	0.0	10.5
Green Ext Time (p_c), s	0.0	1.1	0.3	12.4	1.1	0.0	0.0	8.1

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

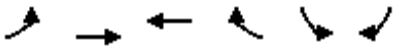
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	189	83	303	222	209	112	226	566	224	119	3
Future Volume (veh/h)	15	189	83	303	222	209	112	226	566	224	119	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	199	87	319	234	220	118	238	596	236	125	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	311	139	749	405	328	157	543	780	364	1090	26
Arrive On Green	0.14	0.14	0.14	0.22	0.22	0.22	0.09	0.29	0.29	0.11	0.31	0.31
Sat Flow, veh/h	182	2285	1024	3456	1870	1512	1781	1870	2689	3456	3544	85
Grp Volume(v), veh/h	164	0	138	319	234	220	118	238	596	236	62	66
Grp Sat Flow(s),veh/h/ln	1861	0	1630	1728	1870	1512	1781	1870	1344	1728	1777	1852
Q Serve(g_s), s	5.3	0.0	5.1	5.1	7.1	8.5	4.1	6.6	12.8	4.2	1.6	1.6
Cycle Q Clear(g_c), s	5.3	0.0	5.1	5.1	7.1	8.5	4.1	6.6	12.8	4.2	1.6	1.6
Prop In Lane	0.10		0.63	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	253	0	222	749	405	328	157	543	780	364	546	569
V/C Ratio(X)	0.65	0.00	0.62	0.43	0.58	0.67	0.75	0.44	0.76	0.65	0.11	0.12
Avail Cap(c_a), veh/h	586	0	513	1631	883	714	841	883	1269	1088	1118	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	25.9	21.5	22.3	22.8	28.3	18.3	20.6	27.3	15.8	15.8
Incr Delay (d2), s/veh	2.8	0.0	2.9	0.4	1.3	2.4	7.1	0.6	1.6	1.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.1	2.0	3.1	3.0	2.0	2.7	3.8	1.7	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	28.8	21.9	23.6	25.2	35.4	18.9	22.2	29.2	15.9	15.9
LnGrp LOS	C	A	C	C	C	C	D	B	C	C	B	B
Approach Vol, veh/h		302			773			952			364	
Approach Delay, s/veh		28.8			23.3			23.0			24.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	22.4		12.6	9.6	23.5		17.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	30.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	6.2	14.8		7.3	6.1	3.6		10.5
Green Ext Time (p_c), s	0.6	3.6		1.4	0.3	0.7		3.3

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1101	538	323	28	38	956
Future Volume (veh/h)	1101	538	323	28	38	956
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1159	566	340	29	40	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1459	2638	461	391	382	
Arrive On Green	0.42	0.74	0.25	0.25	0.11	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	1159	566	340	29	40	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	15.8	2.7	9.1	0.8	0.6	0.0
Cycle Q Clear(g_c), s	15.8	2.7	9.1	0.8	0.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1459	2638	461	391	382	
V/C Ratio(X)	0.79	0.21	0.74	0.07	0.10	
Avail Cap(c_a), veh/h	2609	5758	1481	1255	2163	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.6	2.1	18.8	15.7	21.7	0.0
Incr Delay (d2), s/veh	1.0	0.0	2.3	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.3	3.8	0.3	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	2.2	21.2	15.8	21.9	0.0
LnGrp LOS	B	A	C	B	C	
Approach Vol, veh/h		1725	369		40	
Approach Delay, s/veh		10.6	20.7		21.9	
Approach LOS		B	C		C	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		44.3		10.0	26.9	17.4
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		88.0		34.0	41.0	43.0
Max Q Clear Time (g_c+I1), s		4.7		2.6	17.8	11.1
Green Ext Time (p_c), s		4.5		0.1	5.1	2.3

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	63	318	33	64	197
Future Vol, veh/h	29	63	318	33	64	197
Conflicting Peds, #/hr	3	1	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	115	0	-	80	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	67	338	35	68	210

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	690	342	0	0	376	0
Stage 1	341	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	411	701	-	-	1182	-
Stage 1	720	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	385	698	-	-	1179	-
Mov Cap-2 Maneuver	385	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	385	698	1179	-
HCM Lane V/C Ratio	-	-	0.08	0.096	0.058	-
HCM Control Delay (s)	-	-	15.2	10.7	8.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.2	-

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	11	4	53	23	100	11	144	26	9	102	4
Future Vol, veh/h	3	11	4	53	23	100	11	144	26	9	102	4
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	14	5	66	29	125	14	180	33	11	128	5
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	8.3	9.5	10.1	9.3
HCM LOS	A	A	B	A

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	17%	30%	100%	0%
Vol Thru, %	0%	85%	61%	13%	0%	96%
Vol Right, %	0%	15%	22%	57%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	170	18	176	9	106
LT Vol	11	0	3	53	9	0
Through Vol	0	144	11	23	0	102
RT Vol	0	26	4	100	0	4
Lane Flow Rate	14	212	22	220	11	132
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.022	0.304	0.032	0.282	0.018	0.196
Departure Headway (Hd)	5.762	5.15	5.062	4.618	5.843	5.312
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	619	695	702	777	610	672
Service Time	3.519	2.907	3.127	2.66	3.605	3.074
HCM Lane V/C Ratio	0.023	0.305	0.031	0.283	0.018	0.196
HCM Control Delay	8.6	10.2	8.3	9.5	8.7	9.4
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.1	1.3	0.1	1.2	0.1	0.7

Intersection	
Int Delay, s/veh	42.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	85	35	214	94	0	0	0	0	244	0	40
Future Vol, veh/h	0	85	35	214	94	0	0	0	0	244	0	40
Conflicting Peds, #/hr	2	0	1	1	0	2	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	105	43	264	116	0	0	0	0	301	0	49

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	149	0	0	772	793	116
Stage 1	-	-	-	-	-	-	644	644	-
Stage 2	-	-	-	-	-	-	128	149	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1432	-	0	368	321	936
Stage 1	0	-	-	-	-	0	523	468	-
Stage 2	0	-	-	-	-	0	898	774	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1432	-	-	~ 300	0	936
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 300	0	-
Stage 1	-	-	-	-	-	-	523	0	-
Stage 2	-	-	-	-	-	-	733	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.6	101.3
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1432	-	332
HCM Lane V/C Ratio	-	-	0.184	-	1.056
HCM Control Delay (s)	-	-	8.1	-	101.3
HCM Lane LOS	-	-	A	-	F
HCM 95th %tile Q(veh)	-	-	0.7	-	12.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	296	0	0	304	253	39	0	331	0	0	0
Future Vol, veh/h	27	296	0	0	304	253	39	0	331	0	0	0
Conflicting Peds, #/hr	2	0	10	10	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	-	-	120	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	302	0	0	310	258	40	0	338	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	570	0	-	-	-	0	797	928	302
Stage 1	-	-	-	-	-	-	358	358	-
Stage 2	-	-	-	-	-	-	439	570	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1002	-	0	0	-	-	356	268	738
Stage 1	-	-	0	0	-	-	707	628	-
Stage 2	-	-	0	0	-	-	650	505	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1002	-	-	-	-	-	346	0	738
Mov Cap-2 Maneuver	-	-	-	-	-	-	346	0	-
Stage 1	-	-	-	-	-	-	687	0	-
Stage 2	-	-	-	-	-	-	650	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.7	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	346	738	1002	-	-	-
HCM Lane V/C Ratio	0.115	0.458	0.027	-	-	-
HCM Control Delay (s)	16.8	13.9	8.7	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q(veh)	0.4	2.4	0.1	-	-	-

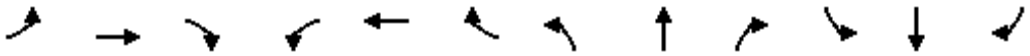
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑			↕			↕	
Traffic Vol, veh/h	1	770	8	8	678	0	3	0	10	0	0	5
Future Vol, veh/h	1	770	8	8	678	0	3	0	10	0	0	5
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	802	8	8	706	0	3	0	10	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	706	0	0	811	0	0	1174	1527	402	1125	1535	353
Stage 1	-	-	-	-	-	-	805	805	-	722	722	-
Stage 2	-	-	-	-	-	-	369	722	-	403	813	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	888	-	-	811	-	0	147	116	598	160	115	643
Stage 1	-	-	-	-	-	0	342	393	-	384	429	-
Stage 2	-	-	-	-	-	0	623	429	-	595	390	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	888	-	-	810	-	-	144	114	597	156	114	643
Mov Cap-2 Maneuver	-	-	-	-	-	-	144	114	-	156	114	-
Stage 1	-	-	-	-	-	-	341	392	-	383	425	-
Stage 2	-	-	-	-	-	-	612	425	-	583	389	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	15.8	10.6
HCM LOS			C	B

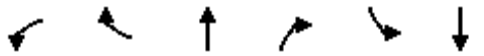
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	346	888	-	-	810	-	643
HCM Lane V/C Ratio	0.039	0.001	-	-	0.01	-	0.008
HCM Control Delay (s)	15.8	9.1	-	-	9.5	-	10.6
HCM Lane LOS	C	A	-	-	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	498	15	17	480	79	10	1	11	58	1	66
Future Volume (veh/h)	104	498	15	17	480	79	10	1	11	58	1	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	503	15	17	485	80	10	1	11	59	1	67
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	1753	772	46	773	646	212	54	128	425	4	259
Arrive On Green	0.11	0.49	0.49	0.03	0.41	0.41	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1781	3554	1566	1781	1870	1562	451	323	773	1400	23	1561
Grp Volume(v), veh/h	105	503	15	17	485	80	22	0	0	59	0	68
Grp Sat Flow(s),veh/h/ln	1781	1777	1566	1781	1870	1562	1546	0	0	1400	0	1584
Q Serve(g_s), s	2.1	3.2	0.2	0.4	7.8	1.2	0.0	0.0	0.0	0.9	0.0	1.4
Cycle Q Clear(g_c), s	2.1	3.2	0.2	0.4	7.8	1.2	0.4	0.0	0.0	1.3	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.50	1.00		0.99
Lane Grp Cap(c), veh/h	188	1753	772	46	773	646	394	0	0	425	0	263
V/C Ratio(X)	0.56	0.29	0.02	0.37	0.63	0.12	0.06	0.00	0.00	0.14	0.00	0.26
Avail Cap(c_a), veh/h	888	6622	2918	374	2945	2460	1651	0	0	1626	0	1621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	5.7	4.9	18.3	8.8	6.9	13.4	0.0	0.0	13.8	0.0	13.8
Incr Delay (d2), s/veh	2.6	0.1	0.0	4.8	0.8	0.1	0.1	0.0	0.0	0.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.7	0.0	0.2	2.4	0.3	0.1	0.0	0.0	0.4	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	5.8	5.0	23.1	9.7	7.0	13.5	0.0	0.0	13.9	0.0	14.4
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	B
Approach Vol, veh/h		623			582			22			127	
Approach Delay, s/veh		8.0			9.7			13.5			14.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.3	5.0	22.8		10.3	8.0	19.8				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		39.0	8.0	71.0		39.0	19.0	60.0				
Max Q Clear Time (g_c+I1), s		2.4	2.4	5.2		3.4	4.1	9.8				
Green Ext Time (p_c), s		0.1	0.0	3.9		0.6	0.2	3.8				

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	865	0	0	0	318	1
Future Volume (vph)	865	0	0	0	318	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0					4.0
Lane Util. Factor	1.00					1.00
Frt	1.00					1.00
Flt Protected	0.95					0.95
Satd. Flow (prot)	1770					1774
Flt Permitted	0.95					0.95
Satd. Flow (perm)	1770					1774
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	940	0	0	0	346	1
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	940	0	0	0	0	347
Turn Type	Prot				pm+pt	NA
Protected Phases	8				1	6
Permitted Phases					6	
Actuated Green, G (s)	52.6					23.7
Effective Green, g (s)	52.6					23.7
Actuated g/C Ratio	0.62					0.28
Clearance Time (s)	4.0					4.0
Vehicle Extension (s)	3.0					3.0
Lane Grp Cap (vph)	1104					498
v/s Ratio Prot	c0.53					
v/s Ratio Perm						0.20
v/c Ratio	0.85					0.70
Uniform Delay, d1	12.7					27.1
Progression Factor	1.00					1.00
Incremental Delay, d2	6.5					4.2
Delay (s)	19.2					31.3
Level of Service	B					C
Approach Delay (s)	19.2		0.0			31.3
Approach LOS	B		A			C

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	84.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	240	41	75	139	0	0
Future Volume (Veh/h)	240	41	75	139	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	267	46	83	154	0	0
Pedestrians	19			5	21	
Lane Width (ft)	12.0			12.0	0.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	2			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			334		650	316
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			334		650	316
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		100	100
cM capacity (veh/h)			1225		397	721

Direction, Lane #	EB 1	WB 1
Volume Total	313	237
Volume Left	0	83
Volume Right	46	0
cSH	1700	1225
Volume to Capacity	0.18	0.07
Queue Length 95th (ft)	0	5
Control Delay (s)	0.0	3.2
Lane LOS		A
Approach Delay (s)	0.0	3.2
Approach LOS		

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1009	60	54	747	128	80
Future Volume (vph)	1009	60	54	747	128	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	4.5
Lane Util. Factor	0.95		1.00	0.95	0.97	0.91
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	0.98	0.85
Flt Protected	1.00		0.95	1.00	0.96	1.00
Satd. Flow (prot)	3509		1770	3539	3399	1441
Flt Permitted	1.00		0.95	1.00	0.96	1.00
Satd. Flow (perm)	3509		1770	3539	3399	1441
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1085	65	58	803	138	86
RTOR Reduction (vph)	3	0	0	0	8	57
Lane Group Flow (vph)	1147	0	58	803	146	13
Confl. Peds. (#/hr)					2	
Turn Type	NA		Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases					2	2
Actuated Green, G (s)	32.2		4.7	41.4	12.0	12.0
Effective Green, g (s)	32.2		4.7	41.4	12.0	12.0
Actuated g/C Ratio	0.52		0.08	0.66	0.19	0.19
Clearance Time (s)	4.5		4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1810		133	2347	653	277
v/s Ratio Prot	c0.33		0.03	c0.23		
v/s Ratio Perm					c0.04	0.01
v/c Ratio	0.63		0.44	0.34	0.22	0.05
Uniform Delay, d1	10.9		27.6	4.6	21.3	20.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7		2.3	0.1	0.2	0.1
Delay (s)	11.6		29.9	4.7	21.4	20.6
Level of Service	B		C	A	C	C
Approach Delay (s)	11.6			6.4	21.2	
Approach LOS	B			A	C	

Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Existing 2023 PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

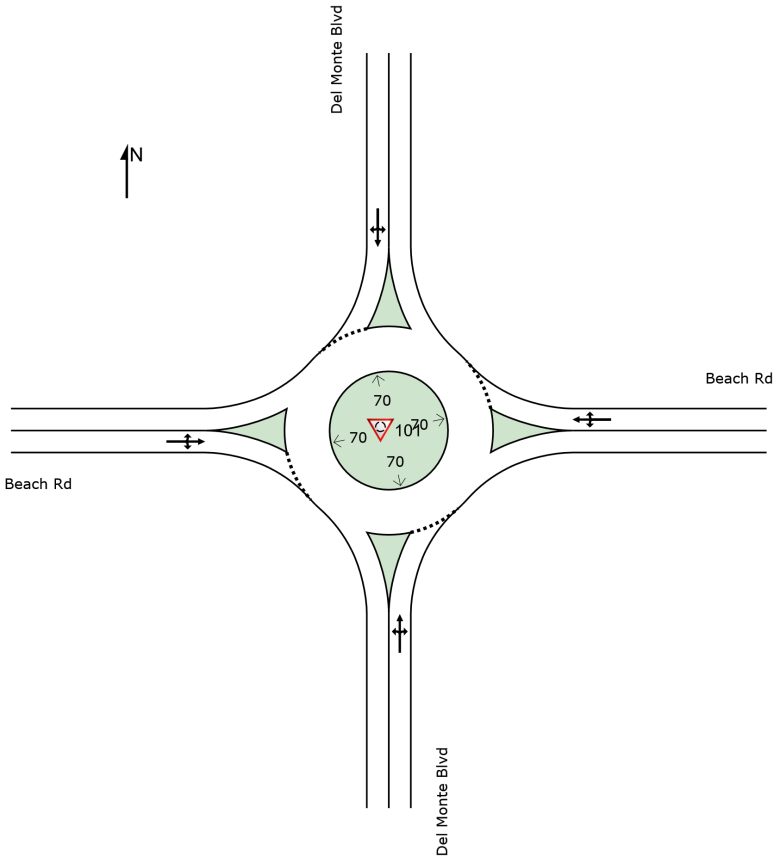
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	173	2.0	173	2.0	0.418	7.6	LOS A	2.5	64.1	0.49	0.28	0.49	30.9
8	T1	All MCs	230	2.0	230	2.0	0.418	7.6	LOS A	2.5	64.1	0.49	0.28	0.49	31.4
18	R2	All MCs	57	2.0	57	2.0	0.418	7.6	LOS A	2.5	64.1	0.49	0.28	0.49	31.2
Approach			460	2.0	460	2.0	0.418	7.6	LOS A	2.5	64.1	0.49	0.28	0.49	31.2
East: Beach Rd															
1	L2	All MCs	21	2.0	21	2.0	0.157	6.0	LOS A	0.7	16.7	0.54	0.43	0.54	32.0
6	T1	All MCs	68	2.0	68	2.0	0.157	6.0	LOS A	0.7	16.7	0.54	0.43	0.54	32.6
16	R2	All MCs	40	2.0	40	2.0	0.157	6.0	LOS A	0.7	16.7	0.54	0.43	0.54	32.4
Approach			129	2.0	129	2.0	0.157	6.0	LOS A	0.7	16.7	0.54	0.43	0.54	32.5
North: Del Monte Blvd															
7	L2	All MCs	44	2.0	44	2.0	0.263	6.0	LOS A	1.3	32.9	0.47	0.30	0.47	32.0
4	T1	All MCs	167	2.0	167	2.0	0.263	6.0	LOS A	1.3	32.9	0.47	0.30	0.47	32.6
14	R2	All MCs	59	2.0	59	2.0	0.263	6.0	LOS A	1.3	32.9	0.47	0.30	0.47	32.3
Approach			270	2.0	270	2.0	0.263	6.0	LOS A	1.3	32.9	0.47	0.30	0.47	32.4
West: Beach Rd															
5	L2	All MCs	67	2.0	67	2.0	0.280	6.1	LOS A	1.4	36.1	0.45	0.27	0.45	31.9
2	T1	All MCs	85	2.0	85	2.0	0.280	6.1	LOS A	1.4	36.1	0.45	0.27	0.45	32.4
12	R2	All MCs	145	2.0	145	2.0	0.280	6.1	LOS A	1.4	36.1	0.45	0.27	0.45	32.2
Approach			297	2.0	297	2.0	0.280	6.1	LOS A	1.4	36.1	0.45	0.27	0.45	32.2
All Vehicles			1156	2.0	1156	2.0	0.418	6.6	LOS A	2.5	64.1	0.48	0.30	0.48	31.9

SITE LAYOUT

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Existing 2023 PM)]

New Site
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



Intersection	
Intersection Delay, s/veh	129.9
Intersection LOS	F

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	15	161	95	180	939
Future Vol, veh/h	12	15	161	95	180	939
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	16	173	102	194	1010
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	10.3	9.9	160.2
HCM LOS	B	A	F

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	95	12	15	180	939
LT Vol	0	0	12	0	180	0
Through Vol	161	0	0	0	0	939
RT Vol	0	95	0	15	0	0
Lane Flow Rate	173	102	13	16	194	1010
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.263	0.136	0.027	0.028	0.289	1.366
Departure Headway (Hd)	5.804	5.098	8.119	6.896	5.373	4.872
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	623	708	444	522	672	747
Service Time	3.504	2.798	5.819	4.596	3.089	2.587
HCM Lane V/C Ratio	0.278	0.144	0.029	0.031	0.289	1.352
HCM Control Delay, s/veh	10.6	8.6	11	9.8	10.3	188.9
HCM Lane LOS	B	A	B	A	B	F
HCM 95th-tile Q	1.1	0.5	0.1	0.1	1.2	42.6

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Intersection	
Intersection Delay, s/veh	42.1
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	8	0	1	36	24	0	19	9	608	11	527
Future Vol, veh/h	97	8	0	1	36	24	0	19	9	608	11	527
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	9	0	1	39	26	0	20	10	654	12	567
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	12.5	10.8	9.4	47.3
HCM LOS	B	B	A	E

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%	98%	0%
Vol Thru, %	68%	0%	100%	0%	60%	2%	0%
Vol Right, %	32%	0%	0%	0%	40%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	97	8	1	60	619	527
LT Vol	0	97	0	1	0	608	0
Through Vol	19	0	8	0	36	11	0
RT Vol	9	0	0	0	24	0	527
Lane Flow Rate	30	104	9	1	65	666	567
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.05	0.222	0.017	0.002	0.125	1.049	0.705
Departure Headway (Hd)	6.054	7.78	7.271	7.885	7.088	5.674	4.478
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	595	464	495	457	509	639	799
Service Time	4.054	5.48	4.971	5.585	4.788	3.446	2.249
HCM Lane V/C Ratio	0.05	0.224	0.018	0.002	0.128	1.042	0.71
HCM Control Delay, s/veh	9.4	12.7	10.1	10.6	10.8	72.7	17.4
HCM Lane LOS	A	B	B	B	B	F	C
HCM 95th-tile Q	0.2	0.8	0.1	0	0.4	17.7	6

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Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	206	17	0	0	8	12	0	0
Future Vol, veh/h	0	0	0	3	206	17	0	0	8	12	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	268	22	0	0	10	16	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	1	0	0	288	299	1
Stage 1	-	-	-	-	-	-	1	1	-
Stage 2	-	-	-	-	-	-	287	298	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1622	-	-	702	613	1084
Stage 1	0	-	-	-	-	-	1022	895	-
Stage 2	0	-	-	-	-	-	762	667	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	1622	-	-	700	0	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	700	0	-
Stage 1	-	-	-	-	-	-	1022	0	-
Stage 2	-	-	-	-	-	-	760	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	1084	-	-	1622	-	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-	-
HCM Control Delay (s/veh)	8.4	-	-	7.2	0	-
HCM Lane LOS	A	-	-	A	A	-
HCM 95th %tile Q (veh)	0	-	-	0	-	-

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	828	0	2	1638	54	0	0	0	197	0	439
Future Volume (veh/h)	126	828	0	2	1638	54	0	0	0	197	0	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	881	0	2	1743	57	0	0	0	210	0	467
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	1496	0	6	1172	38	0	885	0	260	5	499
Arrive On Green	0.09	0.42	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.47	0.00	0.47
Sat Flow, veh/h	1781	3647	0	1781	3512	114	0	1870	0	464	10	1055
Grp Volume(v), veh/h	134	881	0	2	878	922	0	0	0	677	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1850	0	1870	0	1529	0	0
Q Serve(g_s), s	8.6	22.3	0.0	0.1	39.0	39.0	0.0	0.0	0.0	47.8	0.0	0.0
Cycle Q Clear(g_c), s	8.6	22.3	0.0	0.1	39.0	39.0	0.0	0.0	0.0	48.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.06	0.00		0.00	0.31		0.69
Lane Grp Cap(c), veh/h	162	1496	0	6	593	617	0	885	0	764	0	0
V/C Ratio(X)	0.83	0.59	0.00	0.35	1.48	1.49	0.00	0.00	0.00	0.89	0.00	0.00
Avail Cap(c_a), veh/h	213	1496	0	91	593	617	0	1040	0	890	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	52.3	26.0	0.0	58.1	39.0	39.0	0.0	0.0	0.0	29.1	0.0	0.0
Incr Delay (d2), s/veh	18.3	0.6	0.0	32.5	225.8	230.7	0.0	0.0	0.0	9.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	9.4	0.0	0.1	53.9	56.9	0.0	0.0	0.0	19.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.5	26.7	0.0	90.6	264.7	269.6	0.0	0.0	0.0	38.8	0.0	0.0
LnGrp LOS	E	C		F	F	F				D		
Approach Vol, veh/h		1015			1802			0			677	
Approach Delay, s/veh		32.4			267.0			0.0			38.8	
Approach LOS		C			F						D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		59.3	4.4	53.2		59.3	14.6	43.0				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		65.0	6.0	47.0		65.0	14.0	39.0				
Max Q Clear Time (g_c+I1), s		0.0	2.1	24.3		50.9	10.6	41.0				
Green Ext Time (p_c), s		0.0	0.0	6.6		4.4	0.1	0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			154.7									
HCM 6th LOS			F									

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Intersection	
Intersection Delay, s/veh	26.3
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	25	137	162	56	29	50	177	34	13	372	24
Future Vol, veh/h	32	25	137	162	56	29	50	177	34	13	372	24
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	29	159	188	65	34	58	206	40	15	433	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	15.8	20.2	19.7	39.3
HCM LOS	C	C	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	16%	66%	3%
Vol Thru, %	68%	13%	23%	91%
Vol Right, %	13%	71%	12%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	261	194	247	409
LT Vol	50	32	162	13
Through Vol	177	25	56	372
RT Vol	34	137	29	24
Lane Flow Rate	303	226	287	476
Geometry Grp	1	1	1	1
Degree of Util (X)	0.59	0.446	0.584	0.871
Departure Headway (Hd)	7	7.116	7.317	6.592
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	513	505	491	547
Service Time	5.067	5.186	5.382	4.648
HCM Lane V/C Ratio	0.591	0.448	0.585	0.87
HCM Control Delay, s/veh	19.7	15.8	20.2	39.3
HCM Lane LOS	C	C	C	E
HCM 95th-tile Q	3.8	2.3	3.7	9.6

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	947	560	500	1267	0	206	0	133	0	0	0
Future Volume (veh/h)	0	947	560	500	1267	0	206	0	133	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	986	583	521	1320	0	215	0	139	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1719	766	675	2624	0	315	268	225	3	5	0
Arrive On Green	0.00	0.48	0.48	0.20	0.74	0.00	0.09	0.00	0.14	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1583	3456	3647	0	3456	1870	1575	1781	3647	0
Grp Volume(v), veh/h	0	986	583	521	1320	0	215	0	139	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1583	1728	1777	0	1728	1870	1575	1781	1777	0
Q Serve(g_s), s	0.0	13.4	20.3	9.6	10.4	0.0	4.1	0.0	5.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.4	20.3	9.6	10.4	0.0	4.1	0.0	5.6	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	1719	766	675	2624	0	315	268	225	3	5	0
V/C Ratio(X)	0.00	0.57	0.76	0.77	0.50	0.00	0.68	0.00	0.62	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	2316	1032	1177	3211	0	461	1136	957	158	2001	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	14.2	25.7	3.7	0.0	29.7	0.0	27.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	2.3	1.9	0.1	0.0	2.6	0.0	2.7	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	6.8	3.9	2.2	0.0	1.7	0.0	2.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.8	16.6	27.6	3.8	0.0	32.3	0.0	29.9	0.0	0.0	0.0
LnGrp LOS		B	B	C	A		C		C			
Approach Vol, veh/h		1569			1841			354			0	
Approach Delay, s/veh		14.2			10.6			31.4			0.0	
Approach LOS		B			B			C				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	13.7	17.2	36.7	10.2	3.5	0.0	53.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	41.0	23.0	44.0	9.0	38.0	6.0	61.0
Max Q Clear Time (g_c+I1), s	0.0	7.6	11.6	22.3	6.1	0.0	0.0	12.4
Green Ext Time (p_c), s	0.0	0.4	1.5	10.2	0.2	0.0	0.0	14.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.0
HCM 6th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	237	106	224	166	232	146	268	206	579	595	21
Future Volume (veh/h)	30	237	106	224	166	232	146	268	206	579	595	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	272	122	257	191	267	168	308	237	666	684	24
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	360	169	754	408	339	211	390	573	756	1083	38
Arrive On Green	0.16	0.16	0.16	0.22	0.22	0.22	0.12	0.21	0.21	0.22	0.31	0.31
Sat Flow, veh/h	272	2211	1037	3456	1870	1552	1781	1870	2743	3456	3501	123
Grp Volume(v), veh/h	232	0	196	257	191	267	168	308	237	666	347	361
Grp Sat Flow(s),veh/h/ln	1857	0	1663	1728	1870	1552	1781	1870	1371	1728	1777	1847
Q Serve(g_s), s	10.0	0.0	9.3	5.2	7.4	13.6	7.7	13.0	6.3	15.6	14.0	14.0
Cycle Q Clear(g_c), s	10.0	0.0	9.3	5.2	7.4	13.6	7.7	13.0	6.3	15.6	14.0	14.0
Prop In Lane	0.15		0.62	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	302	0	271	754	408	339	211	390	573	756	550	571
V/C Ratio(X)	0.77	0.00	0.72	0.34	0.47	0.79	0.80	0.79	0.41	0.88	0.63	0.63
Avail Cap(c_a), veh/h	444	0	398	1240	671	557	639	671	984	827	850	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	33.2	27.6	28.4	30.8	35.9	31.3	28.6	31.6	24.8	24.8
Incr Delay (d2), s/veh	4.8	0.0	3.6	0.3	0.8	4.1	6.8	3.6	0.5	10.2	1.2	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	3.9	2.1	3.3	5.3	3.6	6.0	2.0	7.3	5.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.3	0.0	36.9	27.9	29.3	34.9	42.6	34.9	29.1	41.8	26.0	25.9
LnGrp LOS	D		D	C	C	C	D	C	C	D	C	C
Approach Vol, veh/h		428			715			713			1374	
Approach Delay, s/veh		37.6			30.9			34.8			33.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.3	21.4		17.6	13.9	29.9		22.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	30.0	30.0		20.0	30.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	17.6	15.0		12.0	9.7	16.0		15.6
Green Ext Time (p_c), s	0.7	2.4		1.6	0.4	4.4		2.7

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		33.8
HCM 6th LOS		C

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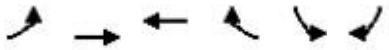

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1156	251	1788	127	27	1502
Future Volume (veh/h)	1156	251	1788	127	27	1502
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1257	273	1943	138	29	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1287	3066	843	715	203	
Arrive On Green	0.37	0.86	0.45	0.45	0.06	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	1257	273	1943	138	29	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	36.6	1.2	46.0	5.3	0.8	0.0
Cycle Q Clear(g_c), s	36.6	1.2	46.0	5.3	0.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1287	3066	843	715	203	
V/C Ratio(X)	0.98	0.09	2.30	0.19	0.14	
Avail Cap(c_a), veh/h	1287	3066	843	715	1152	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.6	1.0	28.0	16.8	45.6	0.0
Incr Delay (d2), s/veh	19.6	0.0	590.3	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	0.1	157.8	1.9	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.1	1.1	618.3	17.0	45.9	0.0
LnGrp LOS	D	A	F	B	D	
Approach Vol, veh/h		1530	2081		29	
Approach Delay, s/veh		42.2	578.4		45.9	
Approach LOS		D	F		D	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		92.0		10.0	42.0	50.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		88.0		34.0	38.0	46.0
Max Q Clear Time (g_c+I1), s		3.2		2.8	38.6	48.0
Green Ext Time (p_c), s		2.0		0.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	348.8
HCM 6th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

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Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	127	145	27	57	620
Future Vol, veh/h	61	127	145	27	57	620
Conflicting Peds, #/hr	2	1	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	115	0	-	80	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	140	159	30	63	681

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	970	162	0	0	191	0
Stage 1	161	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	281	883	-	-	1383	-
Stage 1	868	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	880	-	-	1380	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	417	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	14.1	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	267	880	1380	-
HCM Lane V/C Ratio	-	-	0.251	0.159	0.045	-
HCM Control Delay (s/veh)	-	-	22.9	9.9	7.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q (veh)	-	-	1	0.6	0.1	-

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Intersection	
Intersection Delay, s/veh	130.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	9	18	175	12	58	4	98	10	22	730	0
Future Vol, veh/h	6	9	18	175	12	58	4	98	10	22	730	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	10	21	203	14	67	5	114	12	26	849	0
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	10.9	16.3	11.5	190.6
HCM LOS	B	C	B	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	18%	71%	100%	0%
Vol Thru, %	0%	91%	27%	5%	0%	100%
Vol Right, %	0%	9%	55%	24%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	108	33	245	22	730
LT Vol	4	0	6	175	22	0
Through Vol	0	98	9	12	0	730
RT Vol	0	10	18	58	0	0
Lane Flow Rate	5	126	38	285	26	849
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.009	0.224	0.07	0.486	0.045	1.374
Departure Headway (Hd)	7.459	6.879	7.386	6.909	6.335	5.828
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	483	525	488	524	568	628
Service Time	5.159	4.579	5.386	4.909	4.042	3.535
HCM Lane V/C Ratio	0.01	0.24	0.078	0.544	0.046	1.352
HCM Control Delay, s/veh	10.2	11.6	10.9	16.3	9.3	196.1
HCM Lane LOS	B	B	B	C	A	F
HCM 95th-tile Q	0	0.9	0.2	2.6	0.1	37.4

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Intersection	
Int Delay, s/veh	43.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	45	28	319	41	0	0	0	0	184	43	16
Future Vol, veh/h	0	45	28	319	41	0	0	0	0	184	43	16
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	2	2	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	52	32	367	47	0	0	0	0	211	49	18

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	84	0	0	851	865	47
Stage 1	-	-	-	-	-	-	781	781	-
Stage 2	-	-	-	-	-	-	70	84	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1513	-	0	330	292	1022
Stage 1	0	-	-	-	-	0	451	405	-
Stage 2	0	-	-	-	-	0	953	825	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1513	-	-	250	0	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	250	0	-
Stage 1	-	-	-	-	-	-	451	0	-
Stage 2	-	-	-	-	-	-	721	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	7.2	110.6
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1513	-	266
HCM Lane V/C Ratio	-	-	0.242	-	1.05
HCM Control Delay (s/veh)	-	-	8.1	-	110.6
HCM Lane LOS	-	-	A	-	F
HCM 95th %tile Q (veh)	-	-	1	-	11.1

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Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	73	180	0	0	289	340	57	0	156	0	0	0
Future Vol, veh/h	73	180	0	0	289	340	57	0	156	0	0	0
Conflicting Peds, #/hr	5	0	4	4	0	5	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	-	-	120	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	194	0	0	311	366	61	0	168	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	682	0	-	-	-	0	845	1032	194
Stage 1	-	-	-	-	-	-	350	350	-
Stage 2	-	-	-	-	-	-	495	682	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	911	-	0	0	-	-	333	233	847
Stage 1	-	-	0	0	-	-	713	633	-
Stage 2	-	-	0	0	-	-	613	450	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	911	-	-	-	-	-	304	0	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	304	0	-
Stage 1	-	-	-	-	-	-	652	0	-
Stage 2	-	-	-	-	-	-	612	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	2.7	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	304	847	911	-	-	-
HCM Lane V/C Ratio	0.202	0.198	0.086	-	-	-
HCM Control Delay (s/veh)	19.8	10.3	9.3	-	-	-
HCM Lane LOS	C	B	A	-	-	-
HCM 95th %tile Q (veh)	0.7	0.7	0.3	-	-	-

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Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱	↰	↑↑			↕			↕	
Traffic Vol, veh/h	1	971	11	25	795	0	3	0	20	0	0	1
Future Vol, veh/h	1	971	11	25	795	0	3	0	20	0	0	1
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1142	13	29	935	0	4	0	24	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	935	0	0	1157	0	0	1672	2139	573	1566	2152	468
Stage 1	-	-	-	-	-	-	1146	1146	-	993	993	-
Stage 2	-	-	-	-	-	-	526	993	-	573	1159	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	728	-	-	600	-	0	63	48	463	75	47	542
Stage 1	-	-	-	-	-	0	212	272	-	263	322	-
Stage 2	-	-	-	-	-	0	503	322	-	472	268	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	728	-	-	599	-	-	60	45	462	68	44	542
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	45	-	68	44	-
Stage 1	-	-	-	-	-	-	211	270	-	262	307	-
Stage 2	-	-	-	-	-	-	478	307	-	446	266	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.3	21.4	11.7
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	247	728	-	-	599	-	542
HCM Lane V/C Ratio	0.11	0.002	-	-	0.049	-	0.002
HCM Control Delay (s/veh)	21.4	10	-	-	11.3	-	11.7
HCM Lane LOS	C	A	-	-	B	-	B
HCM 95th %tile Q (veh)	0.4	0	-	-	0.2	-	0

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	289	7	6	432	23	7	0	19	77	0	159
Future Volume (veh/h)	39	289	7	6	432	23	7	0	19	77	0	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	307	7	6	460	24	7	0	20	82	0	169
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	1507	656	17	705	595	172	48	247	513	0	337
Arrive On Green	0.06	0.42	0.42	0.01	0.38	0.38	0.21	0.00	0.21	0.21	0.00	0.21
Sat Flow, veh/h	1781	3554	1546	1781	1870	1579	181	222	1154	1387	0	1574
Grp Volume(v), veh/h	41	307	7	6	460	24	27	0	0	82	0	169
Grp Sat Flow(s),veh/h/ln	1781	1777	1546	1781	1870	1579	1558	0	0	1387	0	1574
Q Serve(g_s), s	0.8	1.9	0.1	0.1	6.9	0.3	0.0	0.0	0.0	1.1	0.0	3.2
Cycle Q Clear(g_c), s	0.8	1.9	0.1	0.1	6.9	0.3	0.4	0.0	0.0	1.6	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	0.26		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	101	1507	656	17	705	595	466	0	0	513	0	337
V/C Ratio(X)	0.41	0.20	0.01	0.35	0.65	0.04	0.06	0.00	0.00	0.16	0.00	0.50
Avail Cap(c_a), veh/h	680	7304	3179	471	3625	3059	1829	0	0	1804	0	1802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	6.2	5.7	16.8	8.8	6.7	10.7	0.0	0.0	11.1	0.0	11.8
Incr Delay (d2), s/veh	2.6	0.1	0.0	11.5	1.0	0.0	0.1	0.0	0.0	0.1	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.1	2.0	0.1	0.1	0.0	0.0	0.4	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.1	6.2	5.7	28.2	9.8	6.7	10.8	0.0	0.0	11.2	0.0	13.0
LnGrp LOS	B	A	A	C	A	A	B			B		B
Approach Vol, veh/h		355			490			27			251	
Approach Delay, s/veh		7.6			9.9			10.8			12.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	11.3	4.3	18.4	11.3	5.9	16.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	39.0	9.0	70.0	39.0	13.0	66.0
Max Q Clear Time (g_c+I1), s	2.4	2.1	3.9	5.2	2.8	8.9
Green Ext Time (p_c), s	0.1	0.0	2.3	1.4	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	9.7
HCM 6th LOS	A

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Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1356	0	0	0	437	33
Future Volume (vph)	1356	0	0	0	437	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0					4.0
Lane Util. Factor	1.00					1.00
Frt	1.00					1.00
Flt Protected	0.95					0.96
Satd. Flow (prot)	1770					1780
Flt Permitted	0.95					0.96
Satd. Flow (perm)	1770					1780
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1524	0	0	0	491	37
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1524	0	0	0	0	528
Turn Type	Prot				pm+pt	NA
Protected Phases	8				1	6
Permitted Phases					6	
Actuated Green, G (s)	77.2					40.4
Effective Green, g (s)	77.2					40.4
Actuated g/C Ratio	0.61					0.32
Clearance Time (s)	4.0					4.0
Vehicle Extension (s)	3.0					3.0
Lane Grp Cap (vph)	1087					572
v/s Ratio Prot	c0.86					c0.30
v/s Ratio Perm						
v/c Ratio	1.40					0.92
Uniform Delay, d1	24.2					41.1
Progression Factor	1.00					1.00
Incremental Delay, d2	186.5					20.6
Delay (s)	210.7					61.7
Level of Service	F					E
Approach Delay (s/veh)	210.7		0.0			61.7
Approach LOS	F		A			E

Intersection Summary			
HCM 2000 Control Delay (s/veh)	172.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	125.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	148	57	146	691	0	0
Future Volume (Veh/h)	148	57	146	691	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	157	61	155	735	0	0
Pedestrians	12			2	7	
Lane Width (ft)	12.0			12.0	0.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			225		1252	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			225		1252	197
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		100	100
cM capacity (veh/h)			1344		166	843

Direction, Lane #	EB 1	WB 1
Volume Total	218	890
Volume Left	0	155
Volume Right	61	0
cSH	1700	1344
Volume to Capacity	0.13	0.12
Queue Length 95th (ft)	0	10
Control Delay (s/veh)	0.0	2.7
Lane LOS		A
Approach Delay (s/veh)	0.0	2.7
Approach LOS		

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	742	213	1263	1524	56	121
Future Volume (vph)	742	213	1263	1524	56	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	0.97	0.91
Frt	0.97		1.00	1.00	0.92	0.85
Flt Protected	1.00		0.95	1.00	0.98	1.00
Satd. Flow (prot)	3421		1770	3539	3254	1441
Flt Permitted	1.00		0.95	1.00	0.98	1.00
Satd. Flow (perm)	3421		1770	3539	3254	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	789	227	1344	1621	60	129
RTOR Reduction (vph)	19	0	0	0	60	59
Lane Group Flow (vph)	997	0	1344	1621	65	5
Turn Type	NA		Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases					2	2
Actuated Green, G (s)	35.9		40.3	80.2	7.5	7.5
Effective Green, g (s)	35.9		40.3	80.2	7.5	7.5
Actuated g/C Ratio	0.38		0.42	0.84	0.08	0.08
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1283		745	2965	255	112
v/s Ratio Prot	c0.29		c0.76	0.46		
v/s Ratio Perm					c0.02	0.00
v/c Ratio	0.78		1.80	0.55	0.26	0.04
Uniform Delay, d1	26.4		27.7	2.3	41.5	40.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0		367.2	0.2	0.5	0.2
Delay (s)	29.4		394.9	2.5	42.0	41.0
Level of Service	C		F	A	D	D
Approach Delay (s/veh)	29.4			180.4	41.6	
Approach LOS	C			F	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	137.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	95.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

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MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Future 2045 No Improvements AM)]

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New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	165	2.0	165	2.0	0.496	8.8	LOS A	3.3	83.6	0.56	0.33	0.56	30.5
8	T1	All MCs	308	2.0	308	2.0	0.496	8.8	LOS A	3.3	83.6	0.56	0.33	0.56	31.1
18	R2	All MCs	67	2.0	67	2.0	0.496	8.8	LOS A	3.3	83.6	0.56	0.33	0.56	30.8
Approach			540	2.0	540	2.0	0.496	8.8	LOS A	3.3	83.6	0.56	0.33	0.56	30.9
East: Beach Rd															
1	L2	All MCs	180	2.0	180	2.0	0.403	9.7	LOS A	2.2	55.8	0.67	0.59	0.78	29.7
6	T1	All MCs	79	2.0	79	2.0	0.403	9.7	LOS A	2.2	55.8	0.67	0.59	0.78	30.2
16	R2	All MCs	52	2.0	52	2.0	0.403	9.7	LOS A	2.2	55.8	0.67	0.59	0.78	30.0
Approach			311	2.0	311	2.0	0.403	9.7	LOS A	2.2	55.8	0.67	0.59	0.78	29.8
North: Del Monte Blvd															
7	L2	All MCs	96	2.0	96	2.0	1.367	184.4	LOS F	117.1	2975.0	1.00	4.39	9.57	9.1
4	T1	All MCs	998	2.0	998	2.0	1.367	184.4	LOS F	117.1	2975.0	1.00	4.39	9.57	9.1
14	R2	All MCs	87	2.0	87	2.0	1.367	184.4	LOS F	117.1	2975.0	1.00	4.39	9.57	9.1
Approach			1181	2.0	1181	2.0	1.367	184.4	LOS F	117.1	2975.0	1.00	4.39	9.57	9.1
West: Beach Rd															
5	L2	All MCs	62	2.0	62	2.0	0.824	37.5	LOS E	6.8	171.5	0.91	1.20	1.90	22.1
2	T1	All MCs	81	2.0	81	2.0	0.824	37.5	LOS E	6.8	171.5	0.91	1.20	1.90	22.4
12	R2	All MCs	249	2.0	249	2.0	0.824	37.5	LOS E	6.8	171.5	0.91	1.20	1.90	22.2
Approach			393	2.0	393	2.0	0.824	37.5	LOS E	6.8	171.5	0.91	1.20	1.90	22.2
All Vehicles			2425	2.0	2425	2.0	1.367	99.1	LOS F	117.1	2975.0	0.85	2.48	5.20	13.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	63	101	259	27	73	294
Future Vol, veh/h	63	101	259	27	73	294
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	103	264	28	74	300
Number of Lanes	1	1	1	1	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	2	0
HCM Control Delay, s/veh	9.6	11.3	11.6
HCM LOS	A	B	B

Lane	NBLn1	NBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	100%	0%	100%	0%
Vol Thru, %	100%	0%	0%	0%	0%	100%
Vol Right, %	0%	100%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	259	27	63	101	73	294
LT Vol	0	0	63	0	73	0
Through Vol	259	0	0	0	0	294
RT Vol	0	27	0	101	0	0
Lane Flow Rate	264	28	64	103	74	300
Geometry Grp	5	5	5	5	5	5
Degree of Util (X)	0.396	0.036	0.118	0.155	0.12	0.441
Departure Headway (Hd)	5.388	4.682	6.628	5.416	5.794	5.29
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	663	757	537	655	615	675
Service Time	3.162	2.455	4.418	3.205	3.565	3.06
HCM Lane V/C Ratio	0.398	0.037	0.119	0.157	0.12	0.444
HCM Control Delay, s/veh	11.7	7.6	10.3	9.2	9.4	12.2
HCM Lane LOS	B	A	B	A	A	B
HCM 95th-tile Q	1.9	0.1	0.4	0.5	0.4	2.3

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Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	44	0	0	486	0	130	0	10	9	80
Future Vol, veh/h	0	144	44	0	0	486	0	130	0	10	9	80
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	166	51	0	0	559	0	149	0	11	10	92
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	11.9	22.9	12.6	10.1
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	0%	53%	0%
Vol Thru, %	100%	100%	77%	100%	0%	47%	0%
Vol Right, %	0%	0%	23%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	0	188	0	486	19	80
LT Vol	0	0	0	0	0	10	0
Through Vol	130	0	144	0	0	9	0
RT Vol	0	0	44	0	486	0	80
Lane Flow Rate	149	0	216	0	559	22	92
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.284	0	0.355	0	0.776	0.044	0.158
Departure Headway (Hd)	6.832	6.078	5.912	5.709	5.002	7.172	6.188
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	524	0	605	0	721	497	577
Service Time	4.9	3.839	3.672	3.456	2.748	4.944	3.959
HCM Lane V/C Ratio	0.284	0	0.357	0	0.775	0.044	0.159
HCM Control Delay, s/veh	12.6	8.8	11.9	8.5	22.9	10.3	10.1
HCM Lane LOS	B	N	B	N	C	B	B
HCM 95th-tile Q	1.2	0	1.6	0	7.5	0.1	0.6

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Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	0	12	0	1	0	9	0	21	4	9
Future Vol, veh/h	7	0	0	12	0	1	0	9	0	21	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	0	16	0	1	0	12	0	28	5	12

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1	0	0	0	0	0	52	51	0
Stage 1	-	-	-	-	-	-	18	18	-
Stage 2	-	-	-	-	-	-	34	33	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	-	-	-	957	840	-
Stage 1	-	-	-	-	-	-	1005	880	-
Stage 2	-	-	-	-	-	-	988	868	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1622	-	-	-	-	-	950	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	950	0	-
Stage 1	-	-	-	-	-	-	999	0	-
Stage 2	-	-	-	-	-	-	987	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	7.2		
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	1622	-	-	-	-	-
HCM Lane V/C Ratio	-	0.006	-	-	-	-	-
HCM Control Delay (s/veh)	-	7.2	-	-	-	-	-
HCM Lane LOS	-	A	-	-	-	-	-
HCM 95th %tile Q (veh)	-	0	-	-	-	-	-

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	1867	0	13	1268	62	0	0	0	30	0	223
Future Volume (veh/h)	324	1867	0	13	1268	62	0	0	0	30	0	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	331	1905	0	13	1294	63	0	0	0	31	0	228
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	375	2326	0	33	1594	77	0	373	0	67	14	277
Arrive On Green	0.21	0.65	0.00	0.02	0.46	0.46	0.00	0.00	0.00	0.20	0.00	0.20
Sat Flow, veh/h	1781	3647	0	1781	3449	168	0	1870	0	119	70	1390
Grp Volume(v), veh/h	331	1905	0	13	666	691	0	0	0	259	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	0	1781	1777	1840	0	1870	0	1579	0	0
Q Serve(g_s), s	16.9	37.5	0.0	0.7	30.3	30.4	0.0	0.0	0.0	7.9	0.0	0.0
Cycle Q Clear(g_c), s	16.9	37.5	0.0	0.7	30.3	30.4	0.0	0.0	0.0	14.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.09	0.00		0.00	0.12		0.88
Lane Grp Cap(c), veh/h	375	2326	0	33	821	850	0	373	0	358	0	0
V/C Ratio(X)	0.88	0.82	0.00	0.40	0.81	0.81	0.00	0.00	0.00	0.72	0.00	0.00
Avail Cap(c_a), veh/h	645	2801	0	114	871	901	0	757	0	678	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.9	12.1	0.0	45.6	21.7	21.8	0.0	0.0	0.0	35.9	0.0	0.0
Incr Delay (d2), s/veh	7.4	1.7	0.0	7.6	5.6	5.5	0.0	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	13.1	0.0	0.4	13.1	13.6	0.0	0.0	0.0	5.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.3	13.8	0.0	53.2	27.3	27.2	0.0	0.0	0.0	38.7	0.0	0.0
LnGrp LOS	D	B		D	C	C				D		
Approach Vol, veh/h		2236			1370			0			259	
Approach Delay, s/veh		18.2			27.5			0.0			38.7	
Approach LOS		B			C						D	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		22.7	5.7	65.4		22.7	23.8	47.4				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		38.0	6.0	74.0		38.0	34.0	46.0				
Max Q Clear Time (g_c+I1), s		0.0	2.7	39.5		16.7	18.9	32.4				
Green Ext Time (p_c), s		0.0	0.0	22.0		1.6	0.9	7.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			22.9									
HCM 6th LOS			C									

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Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	44	36	58	21	28	60	183	126	40	162	40
Future Vol, veh/h	32	44	36	58	21	28	60	183	126	40	162	40
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	48	40	64	23	31	66	201	138	44	178	44
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.1	10.2	13.6	11.3
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	29%	54%	17%
Vol Thru, %	50%	39%	20%	67%
Vol Right, %	34%	32%	26%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	369	112	107	242
LT Vol	60	32	58	40
Through Vol	183	44	21	162
RT Vol	126	36	28	40
Lane Flow Rate	405	123	118	266
Geometry Grp	1	1	1	1
Degree of Util (X)	0.546	0.195	0.189	0.379
Departure Headway (Hd)	4.85	5.694	5.792	5.127
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	742	629	618	702
Service Time	2.88	3.738	3.835	3.16
HCM Lane V/C Ratio	0.546	0.196	0.191	0.379
HCM Control Delay, s/veh	13.6	10.1	10.2	11.3
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	3.3	0.7	0.7	1.8

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1810	457	343	1217	0	419	0	407	0	0	0
Future Volume (veh/h)	0	1810	457	343	1217	0	419	0	407	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1885	476	357	1268	0	436	0	424	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	1669	743	380	2202	0	519	562	474	2	393	0
Arrive On Green	0.00	0.47	0.47	0.11	0.62	0.00	0.15	0.00	0.30	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	1582	3456	3647	0	3456	1870	1579	1781	3647	0
Grp Volume(v), veh/h	0	1885	476	357	1268	0	436	0	424	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1582	1728	1777	0	1728	1870	1579	1781	1777	0
Q Serve(g_s), s	0.0	47.0	22.8	10.3	21.1	0.0	12.3	0.0	25.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	47.0	22.8	10.3	21.1	0.0	12.3	0.0	25.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	2	1669	743	380	2202	0	519	562	474	2	393	0
V/C Ratio(X)	0.00	1.13	0.64	0.94	0.58	0.00	0.84	0.00	0.89	0.00	0.00	0.00
Avail Cap(c_a), veh/h	107	1669	743	380	2202	0	656	935	789	107	1314	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.5	20.1	44.2	11.3	0.0	41.4	0.0	33.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	66.5	1.9	31.2	0.4	0.0	7.8	0.0	7.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	34.1	8.4	6.0	7.7	0.0	5.7	0.0	10.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	93.0	22.0	75.4	11.6	0.0	49.2	0.0	41.1	0.0	0.0	0.0
LnGrp LOS		F	C	E	B		D		D			
Approach Vol, veh/h		2361			1625			860			0	
Approach Delay, s/veh		78.7			25.6			45.2			0.0	
Approach LOS		E			C			D				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	34.1	15.0	51.0	19.0	15.1	0.0	66.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	11.0	47.0	19.0	37.0	6.0	52.0
Max Q Clear Time (g_c+I1), s	0.0	27.7	12.3	49.0	14.3	0.0	0.0	23.1
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.7	0.0	0.0	11.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	54.9
HCM 6th LOS	D

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	231	162	385	295	355	155	393	460	289	248	9
Future Volume (veh/h)	41	231	162	385	295	355	155	393	460	289	248	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	243	171	405	311	374	163	414	484	304	261	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	301	221	977	529	432	202	493	706	397	927	32
Arrive On Green	0.17	0.17	0.17	0.28	0.28	0.28	0.11	0.26	0.26	0.11	0.26	0.26
Sat Flow, veh/h	315	1795	1320	3456	1870	1529	1781	1870	2679	3456	3500	120
Grp Volume(v), veh/h	253	0	204	405	311	374	163	414	484	304	132	138
Grp Sat Flow(s),veh/h/ln	1855	0	1575	1728	1870	1529	1781	1870	1339	1728	1777	1843
Q Serve(g_s), s	12.3	0.0	11.6	8.9	13.4	21.7	8.3	19.5	15.2	8.0	5.5	5.6
Cycle Q Clear(g_c), s	12.3	0.0	11.6	8.9	13.4	21.7	8.3	19.5	15.2	8.0	5.5	5.6
Prop In Lane	0.17		0.84	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	311	0	264	977	529	432	202	493	706	397	471	488
V/C Ratio(X)	0.81	0.00	0.77	0.41	0.59	0.87	0.81	0.84	0.69	0.77	0.28	0.28
Avail Cap(c_a), veh/h	397	0	337	1110	601	491	572	601	861	740	761	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	37.2	27.2	28.8	31.8	40.4	32.5	30.9	40.1	27.2	27.3
Incr Delay (d2), s/veh	9.7	0.0	8.2	0.3	1.2	13.6	7.5	8.8	1.7	3.1	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	5.0	3.6	6.0	9.4	4.0	9.7	4.9	3.5	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.2	0.0	45.3	27.5	30.0	45.4	47.9	41.3	32.6	43.2	27.6	27.6
LnGrp LOS	D		D	C	C	D	D	D	C	D	C	C
Approach Vol, veh/h		457			1090			1061			574	
Approach Delay, s/veh		46.4			34.4			38.3			35.9	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.7	28.6		19.7	14.6	28.7		30.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	30.0		20.0	30.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	10.7	21.5		14.3	10.3	7.6		23.7
Green Ext Time (p_c), s	0.7	3.1		1.4	0.4	1.5		2.7

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		37.7
HCM 6th LOS		D

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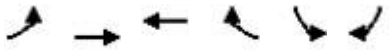

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1200	1431	761	55	86	1129
Future Volume (veh/h)	1200	1431	761	55	86	1129
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1263	1506	801	58	91	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1352	3057	803	680	207	
Arrive On Green	0.39	0.86	0.43	0.43	0.06	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	1263	1506	801	58	91	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	35.1	10.3	42.8	2.2	2.5	0.0
Cycle Q Clear(g_c), s	35.1	10.3	42.8	2.2	2.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1352	3057	803	680	207	
V/C Ratio(X)	0.93	0.49	1.00	0.09	0.44	
Avail Cap(c_a), veh/h	1414	3121	803	680	1173	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.3	1.7	28.6	16.9	45.5	0.0
Incr Delay (d2), s/veh	11.4	0.1	31.2	0.1	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.2	1.3	25.2	0.8	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	40.6	1.8	59.8	17.0	46.9	0.0
LnGrp LOS	D	A	E	B	D	
Approach Vol, veh/h		2769	859		91	
Approach Delay, s/veh		19.5	56.9		46.9	
Approach LOS		B	E		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			90.2		10.0	43.2	47.0
Change Period (Y+Rc), s			4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s			88.0		34.0	41.0	43.0
Max Q Clear Time (g_c+I1), s			12.3		4.5	37.1	44.8
Green Ext Time (p_c), s			19.9		0.3	2.1	0.0

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		28.8
HCM 6th LOS		C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

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Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	59	332	56	62	199
Future Vol, veh/h	46	59	332	56	62	199
Conflicting Peds, #/hr	3	1	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	115	0	-	80	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	63	353	60	66	212

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	703	357	0	0	416	0
Stage 1	356	-	-	-	-	-
Stage 2	347	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	404	687	-	-	1143	-
Stage 1	709	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	378	684	-	-	1140	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	672	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13	0	2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	684	1140	-
HCM Lane V/C Ratio	-	-	0.129	0.092	0.058	-
HCM Control Delay (s/veh)	-	-	15.9	10.8	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q (veh)	-	-	0.4	0.3	0.2	-

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Intersection	
Intersection Delay, s/veh	25.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	12	10	33	15	131	18	439	23	12	116	10
Future Vol, veh/h	13	12	10	33	15	131	18	439	23	12	116	10
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	15	13	41	19	164	23	549	29	15	145	13
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay, s/veh	10.1	11.9	36.1	10.9
HCM LOS	B	B	E	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	37%	18%	100%	0%
Vol Thru, %	0%	95%	34%	8%	0%	92%
Vol Right, %	0%	5%	29%	73%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	462	35	179	12	126
LT Vol	18	0	13	33	12	0
Through Vol	0	439	12	15	0	116
RT Vol	0	23	10	131	0	10
Lane Flow Rate	23	578	44	224	15	158
Geometry Grp	5	5	2	2	5	5
Degree of Util (X)	0.038	0.891	0.078	0.354	0.028	0.265
Departure Headway (Hd)	6.098	5.557	6.438	5.699	6.626	6.061
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	653	553	629	540	592
Service Time	3.829	3.288	4.51	3.753	4.374	3.808
HCM Lane V/C Ratio	0.039	0.885	0.08	0.356	0.028	0.267
HCM Control Delay, s/veh	9.1	37.1	10.1	11.9	9.6	11
HCM Lane LOS	A	E	B	B	A	B
HCM 95th-tile Q	0.1	10.9	0.3	1.6	0.1	1.1

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Intersection	
Int Delay, s/veh	298.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	103	32	231	95	0	0	0	0	457	0	55
Future Vol, veh/h	0	103	32	231	95	0	0	0	0	457	0	55
Conflicting Peds, #/hr	2	0	1	1	0	2	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	250	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	127	40	285	117	0	0	0	0	564	0	68

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	168	0	0	835	855	117
Stage 1	-	-	-	-	-	-	687	687	-
Stage 2	-	-	-	-	-	-	148	168	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1410	-	0	~ 338	296	935
Stage 1	0	-	-	-	-	0	~ 499	447	-
Stage 2	0	-	-	-	-	0	880	759	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1410	-	-	~ 270	0	935
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 270	0	-
Stage 1	-	-	-	-	-	-	~ 499	0	-
Stage 2	-	-	-	-	-	-	702	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	5.8	$ 563.4
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1410	-	292
HCM Lane V/C Ratio	-	-	0.202	-	2.165
HCM Control Delay (s/veh)	-	-	8.2	-	$ 563.4
HCM Lane LOS	-	-	A	-	F
HCM 95th %tile Q (veh)	-	-	0.8	-	47.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

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Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	485	0	0	337	387	44	0	326	0	0	0
Future Vol, veh/h	67	485	0	0	337	387	44	0	326	0	0	0
Conflicting Peds, #/hr	2	0	10	10	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	225	-	-	-	-	120	-	-	25	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	495	0	0	344	395	45	0	333	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	741	0	-	-	-	0	1173	1372	495
Stage 1	-	-	-	-	-	-	631	631	-
Stage 2	-	-	-	-	-	-	542	741	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	866	-	0	0	-	-	212	146	575
Stage 1	-	-	0	0	-	-	530	474	-
Stage 2	-	-	0	0	-	-	583	423	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	866	-	-	-	-	-	195	0	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	0	-
Stage 1	-	-	-	-	-	-	488	0	-
Stage 2	-	-	-	-	-	-	583	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	1.2	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	195	575	866	-	-	-
HCM Lane V/C Ratio	0.23	0.579	0.079	-	-	-
HCM Control Delay (s/veh)	28.9	19.5	9.5	-	-	-
HCM Lane LOS	D	C	A	-	-	-
HCM 95th %tile Q (veh)	0.9	3.7	0.3	-	-	-

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Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	808	13	20	999	0	8	0	27	0	0	5
Future Vol, veh/h	1	808	13	20	999	0	8	0	27	0	0	5
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	842	14	21	1041	0	8	0	28	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1041	0	0	857	0	0	1408	1928	422	1506	1942	521
Stage 1	-	-	-	-	-	-	845	845	-	1083	1083	-
Stage 2	-	-	-	-	-	-	563	1083	-	423	859	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	664	-	-	779	-	0	99	66	580	83	64	500
Stage 1	-	-	-	-	-	0	324	377	-	232	292	-
Stage 2	-	-	-	-	-	0	478	292	-	579	371	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	664	-	-	778	-	-	96	64	579	77	62	500
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	64	-	77	62	-
Stage 1	-	-	-	-	-	-	323	375	-	231	284	-
Stage 2	-	-	-	-	-	-	460	284	-	549	370	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.2	20.5	12.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	269	664	-	-	778	-	500
HCM Lane V/C Ratio	0.136	0.002	-	-	0.027	-	0.01
HCM Control Delay (s/veh)	20.5	10.4	-	-	9.8	-	12.3
HCM Lane LOS	C	B	-	-	A	-	B
HCM 95th %tile Q (veh)	0.5	0	-	-	0.1	-	0

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	646	17	16	646	81	10	1	11	58	1	67
Future Volume (veh/h)	102	646	17	16	646	81	10	1	11	58	1	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	653	17	16	653	82	10	1	11	59	1	68
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	1985	876	43	907	759	184	46	112	370	3	226
Arrive On Green	0.10	0.56	0.56	0.02	0.49	0.49	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1568	1781	1870	1565	451	321	773	1400	23	1560
Grp Volume(v), veh/h	103	653	17	16	653	82	22	0	0	59	0	69
Grp Sat Flow(s),veh/h/ln	1781	1777	1568	1781	1870	1565	1545	0	0	1400	0	1583
Q Serve(g_s), s	2.4	4.4	0.2	0.4	12.2	1.3	0.0	0.0	0.0	1.0	0.0	1.7
Cycle Q Clear(g_c), s	2.4	4.4	0.2	0.4	12.2	1.3	0.5	0.0	0.0	1.5	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.50	1.00		0.99
Lane Grp Cap(c), veh/h	174	1985	876	43	907	759	343	0	0	370	0	229
V/C Ratio(X)	0.59	0.33	0.02	0.37	0.72	0.11	0.06	0.00	0.00	0.16	0.00	0.30
Avail Cap(c_a), veh/h	769	5731	2529	324	2549	2133	1428	0	0	1408	0	1402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	5.3	4.3	21.1	9.0	6.2	16.3	0.0	0.0	16.7	0.0	16.8
Incr Delay (d2), s/veh	3.2	0.1	0.0	5.2	1.1	0.1	0.1	0.0	0.0	0.2	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	0.0	0.2	3.7	0.3	0.2	0.0	0.0	0.5	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	5.4	4.3	26.4	10.1	6.2	16.4	0.0	0.0	16.9	0.0	17.6
LnGrp LOS	C	A	A	C	B	A	B			B		B
Approach Vol, veh/h		773			751			22			128	
Approach Delay, s/veh		7.6			10.0			16.4			17.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		10.4	5.1	28.6		10.4	8.3	25.4				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		39.0	8.0	71.0		39.0	19.0	60.0				
Max Q Clear Time (g_c+I1), s		2.5	2.4	6.4		3.7	4.4	14.2				
Green Ext Time (p_c), s		0.1	0.0	5.4		0.6	0.2	5.6				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	9.5
HCM 6th LOS	A

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Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1222	0	0	0	318	1
Future Volume (vph)	1222	0	0	0	318	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0					4.0
Lane Util. Factor	1.00					1.00
Frt	1.00					1.00
Flt Protected	0.95					0.95
Satd. Flow (prot)	1770					1774
Flt Permitted	0.95					0.95
Satd. Flow (perm)	1770					1774
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1328	0	0	0	346	1
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1328	0	0	0	0	347
Turn Type	Prot				pm+pt	NA
Protected Phases	8				1	6
Permitted Phases					6	
Actuated Green, G (s)	85.2					28.2
Effective Green, g (s)	85.2					28.2
Actuated g/C Ratio	0.70					0.23
Clearance Time (s)	4.0					4.0
Vehicle Extension (s)	3.0					3.0
Lane Grp Cap (vph)	1242					412
v/s Ratio Prot	c0.75					
v/s Ratio Perm						0.20
v/c Ratio	1.07					0.84
Uniform Delay, d1	18.1					44.5
Progression Factor	1.00					1.00
Incremental Delay, d2	46.2					14.4
Delay (s)	64.3					58.9
Level of Service	E					E
Approach Delay (s/veh)	64.3		0.0			58.9
Approach LOS	E		A			E

Intersection Summary			
HCM 2000 Control Delay (s/veh)	63.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	121.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	644	56	60	165	0	0
Future Volume (Veh/h)	644	56	60	165	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	716	62	67	183	0	0
Pedestrians	19			5	21	
Lane Width (ft)	12.0			12.0	0.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	2			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			799		1104	773
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			799		1104	773
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			92		100	100
cM capacity (veh/h)			824		211	397

Direction, Lane #	EB 1	WB 1
Volume Total	778	250
Volume Left	0	67
Volume Right	62	0
cSH	1700	824
Volume to Capacity	0.46	0.08
Queue Length 95th (ft)	0	7
Control Delay (s/veh)	0.0	3.3
Lane LOS		A
Approach Delay (s/veh)	0.0	3.3
Approach LOS		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1810	62	166	1090	187	442
Future Volume (vph)	1810	62	166	1090	187	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	4.5
Lane Util. Factor	0.95		1.00	0.95	0.97	0.91
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	1.00	0.92	0.85
Flt Protected	1.00		0.95	1.00	0.98	1.00
Satd. Flow (prot)	3522		1770	3539	3241	1441
Flt Permitted	1.00		0.95	1.00	0.98	1.00
Satd. Flow (perm)	3522		1770	3539	3241	1441
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1946	67	178	1172	201	475
RTOR Reduction (vph)	2	0	0	0	150	150
Lane Group Flow (vph)	2011	0	178	1172	289	87
Confl. Peds. (#/hr)					2	
Turn Type	NA		Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases					2	2
Actuated Green, G (s)	66.9		12.6	84.0	16.8	16.8
Effective Green, g (s)	66.9		12.6	84.0	16.8	16.8
Actuated g/C Ratio	0.61		0.11	0.77	0.15	0.15
Clearance Time (s)	4.5		4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2145		203	2707	495	220
v/s Ratio Prot	c0.57		c0.10	0.33		
v/s Ratio Perm					c0.09	0.06
v/c Ratio	0.94		0.88	0.43	0.58	0.40
Uniform Delay, d1	19.6		47.8	4.5	43.2	41.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6		31.8	0.1	1.8	1.2
Delay (s)	28.1		79.6	4.6	45.0	43.1
Level of Service	C		E	A	D	D
Approach Delay (s/veh)	28.1			14.5	44.3	
Approach LOS	C			B	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

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MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Future 2045 No Improvements PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	262	2.0	262	2.0	0.727	14.4	LOS B	12.2	309.8	0.78	0.59	1.06	28.4
8	T1	All MCs	441	2.0	441	2.0	0.727	14.4	LOS B	12.2	309.8	0.78	0.59	1.06	28.8
18	R2	All MCs	105	2.0	105	2.0	0.727	14.4	LOS B	12.2	309.8	0.78	0.59	1.06	28.6
Approach			808	2.0	808	2.0	0.727	14.4	LOS B	12.2	309.8	0.78	0.59	1.06	28.6
East: Beach Rd															
1	L2	All MCs	42	2.0	42	2.0	0.303	10.0	LOS B	1.3	32.6	0.69	0.64	0.71	30.2
6	T1	All MCs	78	2.0	78	2.0	0.303	10.0	LOS B	1.3	32.6	0.69	0.64	0.71	30.7
16	R2	All MCs	62	2.0	62	2.0	0.303	10.0	LOS B	1.3	32.6	0.69	0.64	0.71	30.5
Approach			182	2.0	182	2.0	0.303	10.0	LOS B	1.3	32.6	0.69	0.64	0.71	30.5
North: Del Monte Blvd															
7	L2	All MCs	58	2.0	58	2.0	0.485	10.0	LOS B	3.4	85.3	0.66	0.54	0.80	30.4
4	T1	All MCs	313	2.0	313	2.0	0.485	10.0	LOS B	3.4	85.3	0.66	0.54	0.80	30.9
14	R2	All MCs	67	2.0	67	2.0	0.485	10.0	LOS B	3.4	85.3	0.66	0.54	0.80	30.7
Approach			438	2.0	438	2.0	0.485	10.0	LOS B	3.4	85.3	0.66	0.54	0.80	30.8
West: Beach Rd															
5	L2	All MCs	60	2.0	60	2.0	0.343	7.9	LOS A	1.7	43.0	0.60	0.45	0.60	31.1
2	T1	All MCs	69	2.0	69	2.0	0.343	7.9	LOS A	1.7	43.0	0.60	0.45	0.60	31.6
12	R2	All MCs	171	2.0	171	2.0	0.343	7.9	LOS A	1.7	43.0	0.60	0.45	0.60	31.4
Approach			300	2.0	300	2.0	0.343	7.9	LOS A	1.7	43.0	0.60	0.45	0.60	31.4
All Vehicles			1729	2.0	1729	2.0	0.727	11.7	LOS B	12.2	309.8	0.71	0.56	0.88	29.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	12	0	15	0	161	95	180	939	0
Future Volume (veh/h)	0	0	0	12	0	15	0	161	95	180	939	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	13	0	16	0	173	102	194	1010	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	39	33	76	0	301	6	598	332	277	1978	0
Arrive On Green	0.00	0.00	0.00	0.04	0.00	0.19	0.00	0.27	0.27	0.16	0.56	0.00
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	2178	1209	1781	3647	0
Grp Volume(v), veh/h	0	0	0	13	0	16	0	139	136	194	1010	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1611	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.3	0.0	1.9	2.1	3.3	5.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.2	0.0	0.3	0.0	1.9	2.1	3.3	5.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	6	39	33	76	0	301	6	488	442	277	1978	0
V/C Ratio(X)	0.00	0.00	0.00	0.17	0.00	0.05	0.00	0.29	0.31	0.70	0.51	0.00
Avail Cap(c_a), veh/h	339	1659	1406	564	0	1607	339	2533	2296	1749	7880	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	14.6	0.0	10.5	0.0	9.0	9.1	12.6	4.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.1	0.0	0.3	0.4	3.2	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.6	0.6	1.2	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	15.6	0.0	10.5	0.0	9.3	9.5	15.9	4.5	0.0
LnGrp LOS				B		B		A	A	B	A	
Approach Vol, veh/h		0			29			275			1204	
Approach Delay, s/veh		0.0			12.8			9.4			6.4	
Approach LOS					B			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	12.7	5.3	4.7	0.0	21.6	0.0	10.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	45.0	10.0	28.0	6.0	70.0	6.0	32.0
Max Q Clear Time (g_c+I1), s	5.3	4.1	2.2	0.0	0.0	7.6	0.0	2.3
Green Ext Time (p_c), s	0.5	1.8	0.0	0.0	0.0	9.7	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.0
HCM 7th LOS	A

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Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	8	0	1	36	24	0	19	9	608	11	527
Future Vol, veh/h	97	8	0	1	36	24	0	19	9	608	11	527
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	9	0	1	39	26	0	20	10	654	12	567
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	12.5	10.8	9.4	47.3
HCM LOS	B	B	A	E

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	100%	0%	100%	0%	98%	0%
Vol Thru, %	68%	0%	100%	0%	60%	2%	0%
Vol Right, %	32%	0%	0%	0%	40%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	28	97	8	1	60	619	527
LT Vol	0	97	0	1	0	608	0
Through Vol	19	0	8	0	36	11	0
RT Vol	9	0	0	0	24	0	527
Lane Flow Rate	30	104	9	1	65	666	567
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.05	0.222	0.017	0.002	0.125	1.049	0.705
Departure Headway (Hd)	6.054	7.78	7.271	7.885	7.088	5.674	4.478
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	595	464	495	457	509	639	799
Service Time	4.054	5.48	4.971	5.585	4.788	3.446	2.249
HCM Lane V/C Ratio	0.05	0.224	0.018	0.002	0.128	1.042	0.71
HCM Control Delay, s/veh	9.4	12.7	10.1	10.6	10.8	72.7	17.4
HCM Lane LOS	A	B	B	B	B	F	C
HCM 95th-tile Q	0.2	0.8	0.1	0	0.4	17.7	6

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Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	3	206	17	0	0	8	12	0	0
Future Vol, veh/h	0	0	0	3	206	17	0	0	8	12	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	4	268	22	0	0	10	16	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	-	0	0	1	0	0	277	299	1
Stage 1	-	-	-	-	-	-	1	1	-
Stage 2	-	-	-	-	-	-	275	297	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1621	-	-	713	613	1083
Stage 1	0	-	-	-	-	-	1022	895	-
Stage 2	0	-	-	-	-	-	771	667	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	-	-	-	1621	-	-	711	0	1083
Mov Cap-2 Maneuver	-	-	-	-	-	-	711	0	-
Stage 1	-	-	-	-	-	-	1022	0	-
Stage 2	-	-	-	-	-	-	769	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	8.36
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	1083	-	-	24	-	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-	-
HCM Control Delay (s/veh)	8.4	-	-	7.2	0	-
HCM Lane LOS	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	828	0	2	1638	54	0	0	0	197	0	439
Future Volume (veh/h)	126	828	0	2	1638	54	0	0	0	197	0	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	881	0	2	1743	57	0	0	0	210	0	467
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	1926	859	6	1604	714	2	268	0	248	609	515
Arrive On Green	0.09	0.54	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.14	0.00	0.33
Sat Flow, veh/h	1781	3554	1585	1781	3554	1583	1781	1870	0	1781	1870	1581
Grp Volume(v), veh/h	134	881	0	2	1743	57	0	0	0	210	0	467
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1583	1781	1870	0	1781	1870	1581
Q Serve(g_s), s	6.9	14.1	0.0	0.1	42.0	1.9	0.0	0.0	0.0	10.7	0.0	26.3
Cycle Q Clear(g_c), s	6.9	14.1	0.0	0.1	42.0	1.9	0.0	0.0	0.0	10.7	0.0	26.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	1926	859	6	1604	714	2	268	0	248	609	515
V/C Ratio(X)	0.80	0.46	0.00	0.35	1.09	0.08	0.00	0.00	0.00	0.85	0.00	0.91
Avail Cap(c_a), veh/h	306	1985	886	115	1604	714	124	723	0	383	995	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.3	13.0	0.0	46.3	25.5	14.5	0.0	0.0	0.0	39.1	0.0	30.0
Incr Delay (d2), s/veh	8.5	0.2	0.0	32.0	50.1	0.0	0.0	0.0	0.0	10.1	0.0	8.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	5.3	0.0	0.1	27.7	0.7	0.0	0.0	0.0	5.3	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.8	13.1	0.0	78.3	75.6	14.6	0.0	0.0	0.0	49.2	0.0	38.6
LnGrp LOS	D	B		E	F	B				D		D
Approach Vol, veh/h		1015			1802			0			677	
Approach Delay, s/veh		18.0			73.7			0.0			41.9	
Approach LOS		B			E						D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	17.3	4.3	54.4	0.0	34.3	12.8	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	36.0	6.0	52.0	6.5	49.5	16.0	42.0
Max Q Clear Time (g_c+I1), s	12.7	0.0	2.1	16.1	0.0	28.3	8.9	44.0
Green Ext Time (p_c), s	0.3	0.0	0.0	7.5	0.0	1.7	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	51.3
HCM 7th LOS	D

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	25	137	162	56	29	50	177	34	13	372	24
Future Volume (veh/h)	32	25	137	162	56	29	50	177	34	13	372	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	29	159	188	65	34	58	206	40	15	433	28
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	109	372	480	153	58	214	516	89	132	684	43
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	135	328	1114	844	460	175	178	1289	222	21	1707	108
Grp Volume(v), veh/h	225	0	0	287	0	0	304	0	0	476	0	0
Grp Sat Flow(s),veh/h/l	1577	0	0	1479	0	0	1689	0	0	1836	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	0.0	4.1	0.0	0.0	3.6	0.0	0.0	6.3	0.0	0.0
Prop In Lane	0.16		0.71	0.66		0.12	0.19		0.13	0.03		0.06
Lane Grp Cap(c), veh/h	665	0	0	691	0	0	819	0	0	859	0	0
V/C Ratio(X)	0.34	0.00	0.00	0.42	0.00	0.00	0.37	0.00	0.00	0.55	0.00	0.00
Avail Cap(c_a), veh/h	3253	0	0	2937	0	0	3316	0	0	3806	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.8	0.0	0.0	8.0	0.0	0.0	6.5	0.0	0.0	7.3	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.1	0.0	0.0	8.4	0.0	0.0	6.8	0.0	0.0	7.8	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h		225			287			304			476	
Approach Delay, s/veh		8.1			8.4			6.8			7.8	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	16.1	14.0	16.1	14.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	61.0	61.0	61.0	61.0
Max Q Clear Time (g_c+I1), s	5.6	5.2	8.3	6.1
Green Ext Time (p_c), s	2.3	1.6	3.5	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	947	560	500	1267	0	206	0	133	0	0	0
Future Volume (veh/h)	0	947	560	500	1267	0	206	0	133	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	986	583	521	1320	0	215	0	139	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	1597	1251	698	2552	1138	337	277	233	3	6	0
Arrive On Green	0.00	0.45	0.45	0.20	0.72	0.00	0.10	0.00	0.15	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	2783	3456	3554	1585	3456	1870	1575	1781	3647	0
Grp Volume(v), veh/h	0	986	583	521	1320	0	215	0	139	0	0	0
Grp Sat Flow(s),veh/h/l	1781	1777	1392	1728	1777	1585	1728	1870	1575	1781	1777	0
Q Serve(g_s), s	0.0	12.6	8.7	8.5	10.0	0.0	3.6	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.6	8.7	8.5	10.0	0.0	3.6	0.0	4.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	1597	1251	698	2552	1138	337	277	233	3	6	0
V/C Ratio(X)	0.00	0.62	0.47	0.75	0.52	0.00	0.64	0.00	0.60	0.00	0.00	0.00
Avail Cap(c_a), veh/h	179	2615	2048	1329	3625	1617	520	1282	1080	179	2258	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.5	11.5	22.4	3.8	0.0	26.0	0.0	23.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.3	1.6	0.2	0.0	2.0	0.0	2.4	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.4	2.3	3.3	1.9	0.0	1.5	0.0	1.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	12.9	11.7	24.0	3.9	0.0	28.0	0.0	26.2	0.0	0.0	0.0
LnGrp LOS		B	B	C	A		C		C			
Approach Vol, veh/h		1569			1841			354			0	
Approach Delay, s/veh		12.5			9.6			27.3			0.0	
Approach LOS		B			A			C				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	12.8	16.1	30.9	9.8	3.0	0.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	41.0	23.0	44.0	9.0	38.0	6.0	61.0
Max Q Clear Time (g_c+I1), s	10.0	6.9	10.5	14.6	5.6	0.0	0.0	12.0
Green Ext Time (p_c), s	0.0	0.5	1.6	11.9	0.2	0.0	0.0	14.5

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	237	106	224	166	232	146	268	206	579	595	21
Future Volume (veh/h)	30	237	106	224	166	232	146	268	206	579	595	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	272	122	257	191	267	168	308	237	666	684	24
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	374	163	758	410	341	211	392	575	760	1089	38
Arrive On Green	0.16	0.16	0.16	0.22	0.22	0.22	0.12	0.21	0.21	0.22	0.31	0.31
Sat Flow, veh/h	1781	2395	1043	3456	1870	1553	1781	1870	2743	3456	3501	123
Grp Volume(v), veh/h	34	200	194	257	191	267	168	308	237	666	347	361
Grp Sat Flow(s),veh/h/ln	1781	1777	1661	1728	1870	1553	1781	1870	1372	1728	1777	1847
Q Serve(g_s), s	1.3	8.8	9.2	5.1	7.3	13.3	7.5	12.8	6.1	15.3	13.7	13.7
Cycle Q Clear(g_c), s	1.3	8.8	9.2	5.1	7.3	13.3	7.5	12.8	6.1	15.3	13.7	13.7
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	278	277	259	758	410	341	211	392	575	760	553	575
V/C Ratio(X)	0.12	0.72	0.75	0.34	0.47	0.78	0.80	0.79	0.41	0.88	0.63	0.63
Avail Cap(c_a), veh/h	434	433	405	1263	684	567	651	684	1003	842	866	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	32.9	33.1	27.0	27.9	30.2	35.2	30.7	28.1	30.9	24.2	24.2
Incr Delay (d2), s/veh	0.2	3.5	4.3	0.3	0.8	4.0	6.7	3.5	0.5	9.6	1.2	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.9	3.9	2.1	3.3	5.2	3.5	5.9	2.0	7.1	5.6	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.0	36.5	37.4	27.3	28.7	34.2	41.9	34.2	28.5	40.5	25.4	25.3
LnGrp LOS	C	D	D	C	C	C	D	C	C	D	C	C
Approach Vol, veh/h		428			715			713			1374	
Approach Delay, s/veh		36.4			30.2			34.1			32.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	21.2		16.8	13.7	29.5		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	20.0	30.0		20.0	30.0	40.0		30.0
Max Q Clear Time (g_c+I1), s	11.3	14.8		11.2	9.5	15.7		15.3
Green Ext Time (p_c), s	0.8	2.4		1.6	0.4	4.4		2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C

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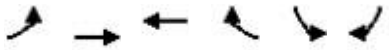

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1156	251	1788	127	27	1502
Future Volume (veh/h)	1156	251	1788	127	27	1502
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1257	273	1943	138	29	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1287	3066	843	715	203	
Arrive On Green	0.37	0.86	0.45	0.45	0.06	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	1257	273	1943	138	29	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	36.6	1.2	46.0	5.3	0.8	0.0
Cycle Q Clear(g_c), s	36.6	1.2	46.0	5.3	0.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1287	3066	843	715	203	
V/C Ratio(X)	0.98	0.09	2.30	0.19	0.14	
Avail Cap(c_a), veh/h	1287	3066	843	715	1152	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.6	1.0	28.0	16.8	45.6	0.0
Incr Delay (d2), s/veh	19.6	0.0	590.3	0.1	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	0.1	157.8	1.9	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	51.1	1.1	618.3	17.0	45.9	0.0
LnGrp LOS	D	A	F	B	D	
Approach Vol, veh/h		1530	2081		29	
Approach Delay, s/veh		42.2	578.4		45.9	
Approach LOS		D	F		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			92.0		10.0	42.0	50.0
Change Period (Y+Rc), s			4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s			88.0		34.0	38.0	46.0
Max Q Clear Time (g_c+I1), s			3.2		2.8	38.6	48.0
Green Ext Time (p_c), s			2.0		0.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	348.8
HCM 7th LOS	F

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

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Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	127	145	27	57	620
Future Volume (veh/h)	61	127	145	27	57	620
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	140	159	30	63	681
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	359	319	587	496	146	991
Arrive On Green	0.20	0.20	0.31	0.31	0.08	0.53
Sat Flow, veh/h	1781	1585	1870	1580	1781	1870
Grp Volume(v), veh/h	67	140	159	30	63	681
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1580	1781	1870
Q Serve(g_s), s	0.9	2.3	1.9	0.4	1.0	8.0
Cycle Q Clear(g_c), s	0.9	2.3	1.9	0.4	1.0	8.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	359	319	587	496	146	991
V/C Ratio(X)	0.19	0.44	0.27	0.06	0.43	0.69
Avail Cap(c_a), veh/h	1914	1703	4521	3819	837	5651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	10.4	7.7	7.1	13.0	5.2
Incr Delay (d2), s/veh	0.2	0.9	0.2	0.1	2.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	0.5	0.1	0.4	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.1	11.4	7.9	7.2	15.0	6.0
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	207		189			744
Approach Delay, s/veh	11.0		7.8			6.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.4	13.4			19.8	10.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	14.0	72.0			90.0	32.0
Max Q Clear Time (g_c+I1), s	3.0	3.9			10.0	4.3
Green Ext Time (p_c), s	0.1	1.1			5.8	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	7.7
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	9	18	175	12	58	4	98	10	22	730	0
Future Volume (veh/h)	6	9	18	175	12	58	4	98	10	22	730	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.98		0.95	0.97		0.95	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	10	21	203	14	67	5	114	12	26	849	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	155	254	363	30	93	14	844	89	61	1001	0
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.01	0.51	0.51	0.03	0.54	0.00
Sat Flow, veh/h	182	557	913	975	108	334	1781	1659	175	1781	1870	0
Grp Volume(v), veh/h	38	0	0	284	0	0	5	0	126	26	849	0
Grp Sat Flow(s),veh/h/ln	1652	0	0	1417	0	0	1781	0	1834	1781	1870	0
Q Serve(g_s), s	0.0	0.0	0.0	10.9	0.0	0.0	0.2	0.0	2.4	1.0	25.9	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	12.0	0.0	0.0	0.2	0.0	2.4	1.0	25.9	0.0
Prop In Lane	0.18		0.55	0.71		0.24	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	523	0	0	486	0	0	14	0	933	61	1001	0
V/C Ratio(X)	0.07	0.00	0.00	0.58	0.00	0.00	0.35	0.00	0.14	0.43	0.85	0.00
Avail Cap(c_a), veh/h	1034	0	0	949	0	0	265	0	1803	292	1866	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	21.7	0.0	0.0	33.1	0.0	8.7	31.8	13.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.1	0.0	0.0	14.3	0.0	0.1	4.6	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	3.9	0.0	0.0	0.1	0.0	0.9	0.5	9.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.0	0.0	0.0	22.8	0.0	0.0	47.4	0.0	8.8	36.4	15.4	0.0
LnGrp LOS	B			C			D		A	D	B	
Approach Vol, veh/h		38			284			131			875	
Approach Delay, s/veh		18.0			22.8			10.2			16.0	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	38.2		22.7	4.5	39.9		22.7				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	66.0		41.0	10.0	67.0		41.0				
Max Q Clear Time (g_c+I1), s	3.1	4.4		3.1	2.2	27.9		14.0				
Green Ext Time (p_c), s	0.0	0.8		0.2	0.0	8.0		1.9				

Intersection Summary		
HCM 7th Control Delay, s/veh	17.0	
HCM 7th LOS	B	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	45	28	319	41	0	0	0	0	184	43	16
Future Volume (veh/h)	0	45	28	319	41	0	0	0	0	184	43	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	52	32	367	47	0				211	49	18
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	174	107	479	1007	0				333	77	28
Arrive On Green	0.00	0.16	0.16	0.27	0.54	0.00				0.25	0.25	0.25
Sat Flow, veh/h	0	1073	660	1781	1870	0				1352	314	115
Grp Volume(v), veh/h	0	0	84	367	47	0				278	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1734	1781	1870	0				1781	0	0
Q Serve(g_s), s	0.0	0.0	1.6	7.0	0.4	0.0				5.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	1.6	7.0	0.4	0.0				5.2	0.0	0.0
Prop In Lane	0.00		0.38	1.00		0.00				0.76		0.06
Lane Grp Cap(c), veh/h	0	0	280	479	1007	0				438	0	0
V/C Ratio(X)	0.00	0.00	0.30	0.77	0.05	0.00				0.63	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1448	2304	4183	0				1872	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	13.7	12.5	4.1	0.0				12.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	2.6	0.0	0.0				1.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.6	2.5	0.1	0.0				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	14.3	15.1	4.1	0.0				14.0	0.0	0.0
LnGrp LOS			B	B	A					B		
Approach Vol, veh/h		84			414						278	
Approach Delay, s/veh		14.3			13.8						14.0	
Approach LOS		B			B						B	

Timer - Assigned Phs	3	4		6		8
Phs Duration (G+Y+Rc), s	14.0	10.0		13.1		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s	48.0	31.0		39.0		83.0
Max Q Clear Time (g_c+I1), s	9.0	3.6		7.2		2.4
Green Ext Time (p_c), s	1.2	0.4		1.8		0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	180	0	0	289	340	57	0	156	0	0	0
Future Volume (veh/h)	73	180	0	0	289	340	57	0	156	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	78	194	0	0	311	366	61	0	168			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	159	1059	0	0	689	580	388	0	345			
Arrive On Green	0.09	0.57	0.00	0.00	0.37	0.37	0.22	0.00	0.22			
Sat Flow, veh/h	1781	1870	0	0	1870	1574	1781	0	1583			
Grp Volume(v), veh/h	78	194	0	0	311	366	61	0	168			
Grp Sat Flow(s),veh/h/l	1781	1870	0	0	1870	1574	1781	0	1583			
Q Serve(g_s), s	1.5	1.9	0.0	0.0	4.7	7.1	1.0	0.0	3.4			
Cycle Q Clear(g_c), s	1.5	1.9	0.0	0.0	4.7	7.1	1.0	0.0	3.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	159	1059	0	0	689	580	388	0	345			
V/C Ratio(X)	0.49	0.18	0.00	0.00	0.45	0.63	0.16	0.00	0.49			
Avail Cap(c_a), veh/h	577	4241	0	0	3433	2890	1827	0	1624			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	16.1	3.9	0.0	0.0	8.9	9.6	11.7	0.0	12.7			
Incr Delay (d2), s/veh	2.3	0.1	0.0	0.0	0.5	1.1	0.2	0.0	1.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.0	0.0	1.4	1.9	0.3	0.0	1.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.4	4.0	0.0	0.0	9.3	10.8	11.9	0.0	13.7			
LnGrp LOS	B	A			A	B	B		B			
Approach Vol, veh/h		272			677			229				
Approach Delay, s/veh		8.1			10.1			13.2				
Approach LOS		A			B			B				

Timer - Assigned Phs	2	4		7	8
Phs Duration (G+Y+Rc), s	12.1	25.0		7.3	17.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0
Max Green Setting (Gmax), s	38.0	84.0		12.0	68.0
Max Q Clear Time (g_c+I1), s	5.4	3.9		3.5	9.1
Green Ext Time (p_c), s	0.9	1.2		0.1	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	10.3
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	971	11	25	795	0	3	0	20	0	0	1
Future Volume (veh/h)	1	971	11	25	795	0	3	0	20	0	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	1142	13	29	935	0	4	0	24	0	0	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	1841	835	73	2363	0	113	18	196	0	0	228
Arrive On Green	0.53	0.53	0.53	0.04	0.66	0.00	0.14	0.00	0.14	0.00	0.00	0.14
Sat Flow, veh/h	0	3486	1582	1781	3647	0	100	127	1365	0	0	1585
Grp Volume(v), veh/h	613	530	13	29	935	0	28	0	0	0	0	1
Grp Sat Flow(s),veh/h/l	1870	1617	1582	1781	1777	0	1592	0	0	0	0	1585
Q Serve(g_s), s	0.0	9.6	0.2	0.7	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.6	9.6	0.2	0.7	5.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	0.14		0.86	0.00		1.00
Lane Grp Cap(c), veh/h	1074	854	835	73	2363	0	327	0	0	0	0	228
V/C Ratio(X)	0.57	0.62	0.02	0.40	0.40	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	3302	2787	2727	384	7230	0	1484	0	0	0	0	1404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	6.9	4.7	19.5	3.2	0.0	15.6	0.0	0.0	0.0	0.0	15.3
Incr Delay (d2), s/veh	0.5	0.7	0.0	3.5	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/l	0.5	2.2	0.0	0.3	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.4	7.7	4.7	23.0	3.3	0.0	15.7	0.0	0.0	0.0	0.0	15.3
LnGrp LOS	A	A	A	C	A		B					B
Approach Vol, veh/h		1156			964			28			1	
Approach Delay, s/veh		7.5			3.9			15.7			15.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	8
Phs Duration (G+Y+Rc), s	10.0	5.7	26.1	10.0	31.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	37.0	9.0	72.0	37.0	85.0
Max Q Clear Time (g_c+I1), s	2.6	2.7	11.6	2.0	7.0
Green Ext Time (p_c), s	0.1	0.0	10.4	0.0	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	289	7	6	432	23	7	0	19	77	0	159
Future Volume (veh/h)	39	289	7	6	432	23	7	0	19	77	0	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	307	7	6	460	24	7	0	20	82	0	169
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	1507	656	17	706	596	172	48	247	513	0	337
Arrive On Green	0.06	0.42	0.42	0.01	0.38	0.38	0.21	0.00	0.21	0.21	0.00	0.21
Sat Flow, veh/h	1781	3554	1546	1781	1870	1579	181	223	1154	1387	0	1578
Grp Volume(v), veh/h	41	307	7	6	460	24	27	0	0	82	0	169
Grp Sat Flow(s),veh/h/l	1781	1777	1546	1781	1870	1579	1558	0	0	1387	0	1578
Q Serve(g_s), s	0.8	1.9	0.1	0.1	6.9	0.3	0.0	0.0	0.0	1.1	0.0	3.2
Cycle Q Clear(g_c), s	0.8	1.9	0.1	0.1	6.9	0.3	0.4	0.0	0.0	1.5	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	0.26		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	101	1507	656	17	706	596	466	0	0	513	0	337
V/C Ratio(X)	0.41	0.20	0.01	0.35	0.65	0.04	0.06	0.00	0.00	0.16	0.00	0.50
Avail Cap(c_a), veh/h	680	7308	3180	471	3627	3061	1831	0	0	1805	0	1808
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	6.2	5.7	16.7	8.8	6.7	10.7	0.0	0.0	11.1	0.0	11.8
Incr Delay (d2), s/veh	2.6	0.1	0.0	11.5	1.0	0.0	0.1	0.0	0.0	0.1	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.1	2.0	0.1	0.1	0.0	0.0	0.4	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.1	6.2	5.7	28.2	9.8	6.7	10.8	0.0	0.0	11.2	0.0	12.9
LnGrp LOS	B	A	A	C	A	A	B			B		B
Approach Vol, veh/h		355			490			27			251	
Approach Delay, s/veh		7.6			9.9			10.8			12.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	11.3	4.3	18.4		11.3	5.9	16.8
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s	39.0	9.0	70.0		39.0	13.0	66.0
Max Q Clear Time (g_c+I1), s	2.4	2.1	3.9		5.2	2.8	8.9
Green Ext Time (p_c), s	0.1	0.0	2.3		1.4	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	9.7
HCM 7th LOS	A

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	148	57	146	691	0	0
Future Volume (vph)	148	57	146	691	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	0.99			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	0.96			1.00		
Flt Protected	1.00			0.99		
Satd. Flow (prot)	1779			1845		
Flt Permitted	1.00			0.90		
Satd. Flow (perm)	1779			1681		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	157	61	155	735	0	0
RTOR Reduction (vph)	15	0	0	0	0	0
Lane Group Flow (vph)	203	0	0	890	0	0
Confl. Peds. (#/hr)		7	7		12	2
Turn Type	NA		Perm	NA		
Protected Phases	4			8		
Permitted Phases			8			
Actuated Green, G (s)	29.0			29.0		
Effective Green, g (s)	29.0			29.0		
Actuated g/C Ratio	0.67			0.67		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1194			1128		
v/s Ratio Prot	0.11					
v/s Ratio Perm				c0.53		
v/c Ratio	0.17			0.79		
Uniform Delay, d1	2.6			5.0		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.1			3.7		
Delay (s)	2.7			8.7		
Level of Service	A			A		
Approach Delay (s/veh)	2.7			8.7	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	43.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	742	213	1263	1524	56	121
Future Volume (vph)	742	213	1263	1524	56	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	0.91
Frt	1.00	0.85	1.00	1.00	0.92	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.98	1.00
Satd. Flow (prot)	3539	1583	1770	3539	3254	1441
Flt Permitted	1.00	1.00	0.95	1.00	0.98	1.00
Satd. Flow (perm)	3539	1583	1770	3539	3254	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	789	227	1344	1621	60	129
RTOR Reduction (vph)	0	133	0	0	60	59
Lane Group Flow (vph)	789	94	1344	1621	65	5
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Actuated Green, G (s)	29.5	29.5	46.3	79.8	7.5	7.5
Effective Green, g (s)	29.5	29.5	46.3	79.8	7.5	7.5
Actuated g/C Ratio	0.31	0.31	0.49	0.84	0.08	0.08
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1095	490	859	2963	256	113
v/s Ratio Prot	c0.22		c0.76	0.46		
v/s Ratio Perm		0.06			c0.02	0.00
v/c Ratio	0.72	0.19	1.56	0.55	0.25	0.04
Uniform Delay, d1	29.2	24.1	24.5	2.3	41.3	40.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4	0.2	259.8	0.2	0.5	0.2
Delay (s)	31.6	24.3	284.3	2.5	41.8	40.8
Level of Service	C	C	F	A	D	D
Approach Delay (s/veh)	30.0			130.2	41.4	
Approach LOS	C			F	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	95.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

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MOVEMENT SUMMARY

Site: 101 [California Dr/5th Ave & 8th St (Site Folder: Future 2045 With Improvements AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: 5th Ave															
3	L2	All MCs	1	2.0	1	2.0	0.010	2.8	LOS A	0.0	1.0	0.08	0.02	0.08	33.7
8	T1	All MCs	1	2.0	1	2.0	0.010	2.8	LOS A	0.0	1.0	0.08	0.02	0.08	34.4
18	R2	All MCs	10	2.0	10	2.0	0.010	2.8	LOS A	0.0	1.0	0.08	0.02	0.08	34.1
Approach			13	2.0	13	2.0	0.010	2.8	LOS A	0.0	1.0	0.08	0.02	0.08	34.1
East: 8th St															
1	L2	All MCs	4	2.0	4	2.0	0.217	3.9	LOS A	1.1	29.0	0.04	0.01	0.04	33.3
6	T1	All MCs	268	2.0	268	2.0	0.217	3.9	LOS A	1.1	29.0	0.04	0.01	0.04	34.0
16	R2	All MCs	22	2.0	22	2.0	0.217	3.9	LOS A	1.1	29.0	0.04	0.01	0.04	33.7
Approach			294	2.0	294	2.0	0.217	3.9	LOS A	1.1	29.0	0.04	0.01	0.04	33.9
North: California Dr															
7	L2	All MCs	16	2.0	16	2.0	0.018	3.7	LOS A	0.1	1.8	0.39	0.22	0.39	31.6
4	T1	All MCs	1	2.0	1	2.0	0.018	3.7	LOS A	0.1	1.8	0.39	0.22	0.39	32.2
14	R2	All MCs	1	2.0	1	2.0	0.018	3.7	LOS A	0.1	1.8	0.39	0.22	0.39	32.0
Approach			18	2.0	18	2.0	0.018	3.7	LOS A	0.1	1.8	0.39	0.22	0.39	31.7
West: 8th St															
5	L2	All MCs	1	2.0	1	2.0	0.003	2.7	LOS A	0.0	0.3	0.09	0.02	0.09	33.2
2	T1	All MCs	1	2.0	1	2.0	0.003	2.7	LOS A	0.0	0.3	0.09	0.02	0.09	33.8
12	R2	All MCs	1	2.0	1	2.0	0.003	2.7	LOS A	0.0	0.3	0.09	0.02	0.09	33.6
Approach			4	2.0	4	2.0	0.003	2.7	LOS A	0.0	0.3	0.09	0.02	0.09	33.5
All Vehicles			329	2.0	329	2.0	0.217	3.8	LOS A	1.1	29.0	0.06	0.02	0.06	33.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Future 2045 With Improvements AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	165	2.0	165	2.0	0.244	5.5	LOS A	1.1	28.1	0.40	0.25	0.40	31.4
8	T1	All MCs	308	2.0	308	2.0	0.244	5.5	LOS A	1.1	28.1	0.40	0.25	0.40	32.7
18	R2	All MCs	67	2.0	67	2.0	0.244	5.5	LOS A	1.1	28.1	0.40	0.25	0.40	32.8
Approach			540	2.0	540	2.0	0.244	5.5	LOS A	1.1	28.1	0.40	0.25	0.40	32.3
East: Beach Rd															
1	L2	All MCs	180	2.0	180	2.0	0.361	8.3	LOS A	1.6	40.5	0.59	0.49	0.61	30.2
6	T1	All MCs	79	2.0	79	2.0	0.361	8.3	LOS A	1.6	40.5	0.59	0.49	0.61	30.8
16	R2	All MCs	52	2.0	52	2.0	0.361	8.3	LOS A	1.6	40.5	0.59	0.49	0.61	30.5
Approach			311	2.0	311	2.0	0.361	8.3	LOS A	1.6	40.5	0.59	0.49	0.61	30.4
North: Del Monte Blvd															
7	L2	All MCs	96	2.0	96	2.0	0.636	13.4	LOS B	6.6	167.4	0.76	0.75	1.22	29.0
4	T1	All MCs	998	2.0	998	2.0	0.636	13.4	LOS B	6.6	167.4	0.76	0.75	1.22	29.6
14	R2	All MCs	87	2.0	87	2.0	0.636	13.4	LOS B	6.6	167.4	0.76	0.75	1.22	29.5
Approach			1181	2.0	1181	2.0	0.636	13.4	LOS B	6.6	167.4	0.76	0.75	1.22	29.5
West: Beach Rd															
5	L2	All MCs	62	2.0	62	2.0	0.373	16.6	LOS C	1.4	35.4	0.79	0.84	0.99	27.4
2	T1	All MCs	81	2.0	81	2.0	0.373	16.6	LOS C	1.4	35.4	0.79	0.84	0.99	27.9
12	R2	All MCs	249	2.0	249	2.0	0.570	21.2	LOS C	2.6	65.9	0.82	0.94	1.26	26.6
Approach			393	2.0	393	2.0	0.570	19.5	LOS C	2.6	65.9	0.81	0.91	1.16	27.0
All Vehicles			2425	2.0	2425	2.0	0.636	12.0	LOS B	6.6	167.4	0.67	0.63	0.95	29.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [Imjin Rd & 8th St (Site Folder: Future 2045 With Improvements AM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Driveway															
3	L2	All MCs	1	2.0	1	2.0	0.052	6.6	LOS A	0.2	4.8	0.61	0.56	0.61	32.0
8	T1	All MCs	20	2.0	20	2.0	0.052	6.6	LOS A	0.2	4.8	0.61	0.56	0.61	32.6
18	R2	All MCs	10	2.0	10	2.0	0.052	6.6	LOS A	0.2	4.8	0.61	0.56	0.61	32.4
Approach			31	2.0	31	2.0	0.052	6.6	LOS A	0.2	4.8	0.61	0.56	0.61	32.5
East: 8th St															
1	L2	All MCs	1	2.0	1	2.0	0.055	3.5	LOS A	0.2	6.0	0.26	0.13	0.26	33.6
6	T1	All MCs	39	2.0	39	2.0	0.055	3.5	LOS A	0.2	6.0	0.26	0.13	0.26	34.2
16	R2	All MCs	26	2.0	26	2.0	0.055	3.5	LOS A	0.2	6.0	0.26	0.13	0.26	33.9
Approach			66	2.0	66	2.0	0.055	3.5	LOS A	0.2	6.0	0.26	0.13	0.26	34.1
North: Imjin Rd															
7	L2	All MCs	654	2.0	654	2.0	0.950	20.7	LOS C	43.2	1097.6	1.00	0.46	1.00	26.0
4	T1	All MCs	12	2.0	12	2.0	0.950	20.7	LOS C	43.2	1097.6	1.00	0.46	1.00	26.4
14	R2	All MCs	567	2.0	567	2.0	0.950	20.7	LOS C	43.2	1097.6	1.00	0.46	1.00	26.2
Approach			1232	2.0	1232	2.0	0.950	20.7	LOS C	43.2	1097.6	1.00	0.46	1.00	26.1
West: 8th St															
5	L2	All MCs	104	2.0	104	2.0	0.171	7.3	LOS A	0.7	17.3	0.62	0.55	0.62	30.0
2	T1	All MCs	9	2.0	9	2.0	0.171	7.3	LOS A	0.7	17.3	0.62	0.55	0.62	30.5
12	R2	All MCs	1	2.0	1	2.0	0.171	7.3	LOS A	0.7	17.3	0.62	0.55	0.62	30.3
Approach			114	2.0	114	2.0	0.171	7.3	LOS A	0.7	17.3	0.62	0.55	0.62	30.1
All Vehicles			1443	2.0	1443	2.0	0.950	18.6	LOS C	43.2	1097.6	0.93	0.46	0.93	26.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	63	0	101	0	259	27	73	294	0
Future Volume (veh/h)	0	0	0	63	0	101	0	259	27	73	294	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	0	0	64	0	103	0	264	28	74	300	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	6	6	5	268	0	346	6	932	98	164	1825	0
Arrive On Green	0.00	0.00	0.00	0.15	0.00	0.22	0.00	0.29	0.29	0.09	0.51	0.00
Sat Flow, veh/h	1781	1870	1585	1781	0	1579	1781	3242	341	1781	3647	0
Grp Volume(v), veh/h	0	0	0	64	0	103	0	144	148	74	300	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1579	1781	1777	1806	1781	1777	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	1.6	0.0	1.9	1.9	1.2	1.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.9	0.0	1.6	0.0	1.9	1.9	1.2	1.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	6	6	5	268	0	346	6	511	519	164	1825	0
V/C Ratio(X)	0.00	0.00	0.00	0.24	0.00	0.30	0.00	0.28	0.29	0.45	0.16	0.00
Avail Cap(c_a), veh/h	357	1751	1484	953	0	2006	357	2674	2718	1489	7605	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	11.2	0.0	9.8	0.0	8.3	8.3	12.9	3.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.3	0.3	1.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.3	0.0	0.4	0.0	0.5	0.5	0.4	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	0.0	11.6	0.0	10.2	0.0	8.6	8.6	14.8	3.9	0.0
LnGrp LOS				B		B		A	A	B	A	
Approach Vol, veh/h		0			167			292			374	
Approach Delay, s/veh		0.0			10.8			8.6			6.1	
Approach LOS					B			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	12.6	8.5	2.1	0.0	19.4	0.0	10.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	45.0	16.0	28.0	6.0	64.0	6.0	38.0
Max Q Clear Time (g_c+I1), s	3.2	3.9	2.9	0.0	0.0	3.3	0.0	3.6
Green Ext Time (p_c), s	0.2	1.8	0.1	0.0	0.0	2.2	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A

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Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	44	0	0	486	0	130	0	10	9	80
Future Vol, veh/h	0	144	44	0	0	486	0	130	0	10	9	80
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	166	51	0	0	559	0	149	0	11	10	92
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	11.9	22.9	12.6	10.1
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	0%	0%	0%	0%	0%	53%	0%
Vol Thru, %	100%	100%	77%	100%	0%	47%	0%
Vol Right, %	0%	0%	23%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	0	188	0	486	19	80
LT Vol	0	0	0	0	0	10	0
Through Vol	130	0	144	0	0	9	0
RT Vol	0	0	44	0	486	0	80
Lane Flow Rate	149	0	216	0	559	22	92
Geometry Grp	4b	5	5	5	5	5	5
Degree of Util (X)	0.284	0	0.355	0	0.776	0.044	0.158
Departure Headway (Hd)	6.832	6.078	5.912	5.709	5.002	7.172	6.188
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	524	0	605	0	721	497	577
Service Time	4.9	3.839	3.672	3.456	2.748	4.944	3.959
HCM Lane V/C Ratio	0.284	0	0.357	0	0.775	0.044	0.159
HCM Control Delay, s/veh	12.6	8.8	11.9	8.5	22.9	10.3	10.1
HCM Lane LOS	B	N	B	N	C	B	B
HCM 95th-tile Q	1.2	0	1.6	0	7.5	0.1	0.6

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Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	0	12	0	1	0	9	0	21	4	9
Future Vol, veh/h	7	0	0	12	0	1	0	9	0	21	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	0	16	0	1	0	12	0	28	5	12

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1	0	0	0	0	0	52	52	0
Stage 1	-	-	-	-	-	-	19	19	-
Stage 2	-	-	-	-	-	-	33	33	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1621	-	-	-	-	-	957	839	-
Stage 1	-	-	-	-	-	-	1004	880	-
Stage 2	-	-	-	-	-	-	989	867	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1621	-	-	-	-	-	951	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	951	0	-
Stage 1	-	-	-	-	-	-	998	0	-
Stage 2	-	-	-	-	-	-	989	0	-

Approach	EB	WB	NB
HCM Control Delay, s/v	7.23		
HCM LOS			-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	-	1621	-	-	-	-	-
HCM Lane V/C Ratio	-	0.006	-	-	-	-	-
HCM Control Delay (s/veh)	-	7.2	-	-	-	-	-
HCM Lane LOS	-	A	-	-	-	-	-
HCM 95th %tile Q(veh)	-	0	-	-	-	-	-

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	1867	0	13	1268	62	0	0	0	30	0	223
Future Volume (veh/h)	324	1867	0	13	1268	62	0	0	0	30	0	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	331	1905	0	13	1294	63	0	0	0	31	0	228
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	2359	1052	33	1667	741	2	173	0	65	329	279
Arrive On Green	0.21	0.66	0.00	0.02	0.47	0.47	0.00	0.00	0.00	0.04	0.00	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1580	1781	1870	0	1781	1870	1582
Grp Volume(v), veh/h	331	1905	0	13	1294	63	0	0	0	31	0	228
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1580	1781	1870	0	1781	1870	1582
Q Serve(g_s), s	15.2	33.0	0.0	0.6	25.8	1.9	0.0	0.0	0.0	1.4	0.0	11.8
Cycle Q Clear(g_c), s	15.2	33.0	0.0	0.6	25.8	1.9	0.0	0.0	0.0	1.4	0.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	380	2359	1052	33	1667	741	2	173	0	65	329	279
V/C Ratio(X)	0.87	0.81	0.00	0.39	0.78	0.08	0.00	0.00	0.00	0.47	0.00	0.82
Avail Cap(c_a), veh/h	672	2849	1271	126	1760	782	126	750	0	126	750	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	10.3	0.0	41.1	18.8	12.5	0.0	0.0	0.0	40.1	0.0	33.6
Incr Delay (d2), s/veh	6.2	1.5	0.0	7.3	2.1	0.0	0.0	0.0	0.0	5.3	0.0	5.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	10.9	0.0	0.3	10.3	0.6	0.0	0.0	0.0	0.7	0.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.5	11.8	0.0	48.5	20.9	12.5	0.0	0.0	0.0	45.3	0.0	39.5
LnGrp LOS	D	B		D	C	B				D		D
Approach Vol, veh/h		2236			1370			0			259	
Approach Delay, s/veh		15.8			20.8			0.0			40.2	
Approach LOS		B			C						D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	11.8	5.6	60.3	0.0	18.9	22.1	43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	34.0	6.0	68.0	6.0	34.0	32.0	42.0
Max Q Clear Time (g_c+I1), s	3.4	0.0	2.6	35.0	0.0	13.8	17.2	27.8
Green Ext Time (p_c), s	0.0	0.0	0.0	21.4	0.0	0.7	0.9	8.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.2
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	44	36	58	21	28	60	183	126	40	162	40
Future Volume (veh/h)	32	44	36	58	21	28	60	183	126	40	162	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	48	40	64	23	31	66	201	138	44	178	44
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	226	144	385	141	107	234	384	232	228	524	115
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	271	848	540	601	527	402	158	939	567	141	1281	282
Grp Volume(v), veh/h	123	0	0	118	0	0	405	0	0	266	0	0
Grp Sat Flow(s),veh/h/l	1660	0	0	1529	0	0	1665	0	0	1704	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.3	0.0	0.0	4.4	0.0	0.0	2.5	0.0	0.0
Prop In Lane	0.28		0.33	0.54		0.26	0.16		0.34	0.17		0.17
Lane Grp Cap(c), veh/h	630	0	0	633	0	0	851	0	0	867	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.19	0.00	0.00	0.48	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	2656	0	0	2481	0	0	5656	0	0	5679	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.1	0.0	0.0	7.1	0.0	0.0	5.6	0.0	0.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.3	0.0	0.0	7.2	0.0	0.0	6.0	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h		123			118			405			266	
Approach Delay, s/veh		7.3			7.2			6.0			5.2	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	14.1	10.6	14.1	10.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	84.0	38.0	84.0	38.0
Max Q Clear Time (g_c+I1), s	6.4	3.4	4.5	3.3
Green Ext Time (p_c), s	3.1	0.7	1.9	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.1
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1810	457	343	1217	0	419	0	407	0	0	0
Future Volume (veh/h)	0	1810	457	343	1217	0	419	0	407	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1885	476	357	1268	0	436	0	424	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	1669	1306	380	2202	982	519	562	474	2	393	0
Arrive On Green	0.00	0.47	0.47	0.11	0.62	0.00	0.15	0.00	0.30	0.00	0.00	0.00
Sat Flow, veh/h	1781	3554	2781	3456	3554	1585	3456	1870	1579	1781	3647	0
Grp Volume(v), veh/h	0	1885	476	357	1268	0	436	0	424	0	0	0
Grp Sat Flow(s),veh/h/l	1781	1777	1390	1728	1777	1585	1728	1870	1579	1781	1777	0
Q Serve(g_s), s	0.0	47.0	11.0	10.3	21.1	0.0	12.3	0.0	25.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	47.0	11.0	10.3	21.1	0.0	12.3	0.0	25.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	2	1669	1306	380	2202	982	519	562	474	2	393	0
V/C Ratio(X)	0.00	1.13	0.36	0.94	0.58	0.00	0.84	0.00	0.89	0.00	0.00	0.00
Avail Cap(c_a), veh/h	107	1669	1306	380	2202	982	656	935	789	107	1314	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.5	17.0	44.2	11.3	0.0	41.4	0.0	33.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	66.5	0.2	31.2	0.4	0.0	7.8	0.0	7.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	34.1	3.4	6.0	7.7	0.0	5.7	0.0	10.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	93.0	17.1	75.4	11.6	0.0	49.2	0.0	41.1	0.0	0.0	0.0
LnGrp LOS		F	B	E	B		D		D			
Approach Vol, veh/h		2361			1625			860			0	
Approach Delay, s/veh		77.7			25.6			45.2			0.0	
Approach LOS		E			C			D				

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	34.1	15.0	51.0	19.0	15.1	0.0	66.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	11.0	47.0	19.0	37.0	6.0	52.0
Max Q Clear Time (g_c+I1), s	0.0	27.7	12.3	49.0	14.3	0.0	0.0	23.1
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.7	0.0	0.0	11.5

Intersection Summary	
HCM 7th Control Delay, s/veh	54.5
HCM 7th LOS	D

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	231	162	385	295	355	155	393	460	289	248	9
Future Volume (veh/h)	41	231	162	385	295	355	155	393	460	289	248	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	243	171	405	311	374	163	414	484	304	261	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	321	215	983	532	435	202	496	710	398	933	32
Arrive On Green	0.16	0.16	0.16	0.28	0.28	0.28	0.11	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	1781	2002	1342	3456	1870	1529	1781	1870	2679	3456	3500	120
Grp Volume(v), veh/h	43	214	200	405	311	374	163	414	484	304	132	138
Grp Sat Flow(s),veh/h/ln	1781	1777	1567	1728	1870	1529	1781	1870	1340	1728	1777	1843
Q Serve(g_s), s	1.9	10.6	11.2	8.7	13.1	21.2	8.2	19.1	14.9	7.8	5.4	5.4
Cycle Q Clear(g_c), s	1.9	10.6	11.2	8.7	13.1	21.2	8.2	19.1	14.9	7.8	5.4	5.4
Prop In Lane	1.00		0.86	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	286	285	252	983	532	435	202	496	710	398	474	492
V/C Ratio(X)	0.15	0.75	0.79	0.41	0.58	0.86	0.81	0.84	0.68	0.76	0.28	0.28
Avail Cap(c_a), veh/h	389	388	342	1131	612	501	583	612	877	754	776	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	36.7	37.0	26.6	28.1	31.0	39.6	31.8	30.2	39.3	26.6	26.6
Incr Delay (d2), s/veh	0.2	5.4	8.7	0.3	1.1	12.7	7.3	8.2	1.6	3.1	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.9	4.8	3.6	5.9	9.1	3.9	9.4	4.8	3.4	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.3	42.1	45.7	26.8	29.2	43.8	47.0	40.0	31.8	42.4	26.9	26.9
LnGrp LOS	C	D	D	C	C	D	D	D	C	D	C	C
Approach Vol, veh/h		457			1090			1061			574	
Approach Delay, s/veh		42.9			33.3			37.3			35.1	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	28.3		18.7	14.4	28.4		30.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	20.0	30.0		20.0	30.0	40.0		30.0				
Max Q Clear Time (g_c+I1), s	13.2	21.1		13.2	10.2	7.4		23.2				
Green Ext Time (p_c), s	0.8	3.1		1.5	0.4	1.5		2.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	36.4
HCM 7th LOS	D

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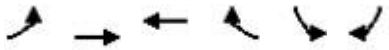

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1200	1431	761	55	86	1129
Future Volume (veh/h)	1200	1431	761	55	86	1129
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1263	1506	801	58	91	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1352	3057	803	680	207	
Arrive On Green	0.39	0.86	0.43	0.43	0.06	0.00
Sat Flow, veh/h	3456	3647	1870	1585	3456	2790
Grp Volume(v), veh/h	1263	1506	801	58	91	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1870	1585	1728	1395
Q Serve(g_s), s	35.1	10.3	42.8	2.2	2.5	0.0
Cycle Q Clear(g_c), s	35.1	10.3	42.8	2.2	2.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1352	3057	803	680	207	
V/C Ratio(X)	0.93	0.49	1.00	0.09	0.44	
Avail Cap(c_a), veh/h	1414	3121	803	680	1173	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.3	1.7	28.6	16.9	45.5	0.0
Incr Delay (d2), s/veh	11.4	0.1	31.2	0.1	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.2	1.3	25.2	0.8	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	40.6	1.8	59.8	17.0	46.9	0.0
LnGrp LOS	D	A	E	B	D	
Approach Vol, veh/h		2769	859		91	
Approach Delay, s/veh		19.5	56.9		46.9	
Approach LOS		B	E		D	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		90.2		10.0	43.2	47.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		88.0		34.0	41.0	43.0
Max Q Clear Time (g_c+I1), s		12.3		4.5	37.1	44.8
Green Ext Time (p_c), s		19.9		0.3	2.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	28.8
HCM 7th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

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Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	59	332	56	62	199
Future Volume (veh/h)	46	59	332	56	62	199
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	63	353	60	66	212
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	352	313	605	499	150	1009
Arrive On Green	0.20	0.20	0.32	0.32	0.08	0.54
Sat Flow, veh/h	1781	1585	1870	1543	1781	1870
Grp Volume(v), veh/h	49	63	353	60	66	212
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1543	1781	1870
Q Serve(g_s), s	0.7	1.0	4.8	0.8	1.1	1.8
Cycle Q Clear(g_c), s	0.7	1.0	4.8	0.8	1.1	1.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	352	313	605	499	150	1009
V/C Ratio(X)	0.14	0.20	0.58	0.12	0.44	0.21
Avail Cap(c_a), veh/h	1875	1668	4060	3348	1172	5537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	10.2	8.6	7.2	13.2	3.6
Incr Delay (d2), s/veh	0.2	0.3	0.9	0.1	2.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	1.4	0.2	0.4	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.3	10.5	9.5	7.3	15.2	3.7
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	112		413			278
Approach Delay, s/veh	10.4		9.2			6.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.6	13.8			20.4	10.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0
Max Green Setting (Gmax), s	28.0	66.0			90.0	32.0
Max Q Clear Time (g_c+I1), s	3.1	6.8			3.8	3.0
Green Ext Time (p_c), s	0.1	2.6			1.4	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	8.4
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	12	10	33	15	131	18	439	23	12	116	10
Future Volume (veh/h)	13	12	10	33	15	131	18	439	23	12	116	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	15	12	41	19	164	22	549	29	15	145	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	193	114	148	62	284	58	754	40	41	713	59
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.43	0.43	0.02	0.42	0.42
Sat Flow, veh/h	408	768	455	168	246	1133	1781	1758	93	1781	1700	141
Grp Volume(v), veh/h	43	0	0	224	0	0	22	0	578	15	0	157
Grp Sat Flow(s),veh/h/ln	1632	0	0	1548	0	0	1781	0	1851	1781	0	1840
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.5	0.0	10.5	0.3	0.0	2.2
Cycle Q Clear(g_c), s	0.8	0.0	0.0	5.0	0.0	0.0	0.5	0.0	10.5	0.3	0.0	2.2
Prop In Lane	0.37		0.28	0.18		0.73	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	532	0	0	494	0	0	58	0	794	41	0	772
V/C Ratio(X)	0.08	0.00	0.00	0.45	0.00	0.00	0.38	0.00	0.73	0.37	0.00	0.20
Avail Cap(c_a), veh/h	2206	0	0	2212	0	0	573	0	2383	441	0	2233
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	0.0	13.2	0.0	0.0	19.1	0.0	9.6	19.4	0.0	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.0	0.0	4.1	0.0	1.3	5.4	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.5	0.0	0.0	0.2	0.0	3.2	0.2	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.7	0.0	0.0	13.8	0.0	0.0	23.2	0.0	10.9	24.8	0.0	7.6
LnGrp LOS	B			B			C		B	C		A
Approach Vol, veh/h		43			224			600			172	
Approach Delay, s/veh		11.7			13.8			11.3			9.1	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	21.3		14.1	5.3	20.9		14.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	10.0	52.0		56.0	13.0	49.0		56.0				
Max Q Clear Time (g_c+I1), s	2.3	12.5		2.8	2.5	4.2		7.0				
Green Ext Time (p_c), s	0.0	4.5		0.2	0.0	1.0		1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.5
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	103	32	231	95	0	0	0	0	457	0	55
Future Volume (veh/h)	0	103	32	231	95	0	0	0	0	457	0	55
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	127	40	285	117	0				564	0	68
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81				0.81	0.81	0.81
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	200	63	358	783	0				688	0	83
Arrive On Green	0.00	0.15	0.15	0.20	0.42	0.00				0.44	0.00	0.44
Sat Flow, veh/h	0	1362	429	1781	1870	0				1569	0	189
Grp Volume(v), veh/h	0	0	167	285	117	0				632	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1791	1781	1870	0				1758	0	0
Q Serve(g_s), s	0.0	0.0	4.9	8.5	2.2	0.0				17.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	4.9	8.5	2.2	0.0				17.7	0.0	0.0
Prop In Lane	0.00		0.24	1.00		0.00				0.89		0.11
Lane Grp Cap(c), veh/h	0	0	263	358	783	0				771	0	0
V/C Ratio(X)	0.00	0.00	0.64	0.80	0.15	0.00				0.82	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1087	1208	2536	0				1442	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	22.5	21.3	10.1	0.0				13.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.5	4.1	0.1	0.0				2.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.1	3.7	0.8	0.0				6.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	25.0	25.4	10.2	0.0				16.0	0.0	0.0
LnGrp LOS			C	C	B					B		
Approach Vol, veh/h		167			402						632	
Approach Delay, s/veh		25.0			21.0						16.0	
Approach LOS		C			C						B	

Timer - Assigned Phs	3	4	6	8
Phs Duration (G+Y+Rc), s	15.3	12.2	28.6	27.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	38.0	34.0	46.0	76.0
Max Q Clear Time (g_c+I1), s	10.5	6.9	19.7	4.2
Green Ext Time (p_c), s	0.9	0.9	4.9	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	485	0	0	337	387	44	0	326	0	0	0
Future Volume (veh/h)	67	485	0	0	337	387	44	0	326	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	68	495	0	0	344	395	45	0	333			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	139	1001	0	0	678	573	491	0	437			
Arrive On Green	0.08	0.54	0.00	0.00	0.36	0.36	0.28	0.00	0.28			
Sat Flow, veh/h	1781	1870	0	0	1870	1581	1781	0	1585			
Grp Volume(v), veh/h	68	495	0	0	344	395	45	0	333			
Grp Sat Flow(s),veh/h/l	1781	1870	0	0	1870	1581	1781	0	1585			
Q Serve(g_s), s	1.5	7.1	0.0	0.0	6.1	9.0	0.8	0.0	8.1			
Cycle Q Clear(g_c), s	1.5	7.1	0.0	0.0	6.1	9.0	0.8	0.0	8.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	139	1001	0	0	678	573	491	0	437			
V/C Ratio(X)	0.49	0.49	0.00	0.00	0.51	0.69	0.09	0.00	0.76			
Avail Cap(c_a), veh/h	464	3010	0	0	2346	1983	2276	0	2026			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	18.7	6.2	0.0	0.0	10.5	11.4	11.4	0.0	14.0			
Incr Delay (d2), s/veh	2.6	0.4	0.0	0.0	0.6	1.5	0.1	0.0	2.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	1.8	0.0	0.0	2.1	2.7	0.3	0.0	2.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.3	6.6	0.0	0.0	11.1	12.9	11.5	0.0	16.8			
LnGrp LOS	C	A			B	B	B		B			
Approach Vol, veh/h		563			739			378				
Approach Delay, s/veh		8.4			12.1			16.2				
Approach LOS		A			B			B				

Timer - Assigned Phs	2	4	7	8
Phs Duration (G+Y+Rc), s	15.6	26.6	7.3	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	54.0	68.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	10.1	9.1	3.5	11.0
Green Ext Time (p_c), s	1.5	3.7	0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	11.8
HCM 7th LOS	B

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	808	13	20	999	0	8	0	27	0	0	5
Future Volume (veh/h)	1	808	13	20	999	0	8	0	27	0	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	842	14	21	1041	0	8	0	28	0	0	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	1517	689	57	2081	0	160	33	220	0	0	282
Arrive On Green	0.44	0.44	0.44	0.03	0.59	0.00	0.18	0.00	0.18	0.00	0.00	0.18
Sat Flow, veh/h	1	3485	1583	1781	3647	0	168	186	1239	0	0	1585
Grp Volume(v), veh/h	452	391	14	21	1041	0	36	0	0	0	0	5
Grp Sat Flow(s),veh/h/l	1869	1617	1583	1781	1777	0	1593	0	0	0	0	1585
Q Serve(g_s), s	0.0	6.1	0.2	0.4	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	6.1	6.1	0.2	0.4	5.8	0.0	0.6	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.00		1.00	1.00		0.00	0.22		0.78	0.00		1.00
Lane Grp Cap(c), veh/h	920	704	689	57	2081	0	413	0	0	0	0	282
V/C Ratio(X)	0.49	0.56	0.02	0.37	0.50	0.00	0.09	0.00	0.00	0.00	0.00	0.02
Avail Cap(c_a), veh/h	4075	3446	3375	475	8942	0	1829	0	0	0	0	1736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	7.1	7.1	5.4	16.0	4.1	0.0	11.7	0.0	0.0	0.0	0.0	11.5
Incr Delay (d2), s/veh	0.4	0.7	0.0	4.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.4	0.0	0.2	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.5	7.8	5.4	20.0	4.3	0.0	11.8	0.0	0.0	0.0	0.0	11.5
LnGrp LOS	A	A	A	C	A		B					B
Approach Vol, veh/h		857			1062			36			5	
Approach Delay, s/veh		7.6			4.6			11.8			11.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4	6	8
Phs Duration (G+Y+Rc), s	10.0	5.1	18.7	10.0	23.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	37.0	9.0	72.0	37.0	85.0
Max Q Clear Time (g_c+I1), s	2.6	2.4	8.1	2.1	7.8
Green Ext Time (p_c), s	0.2	0.0	6.6	0.0	10.3

Intersection Summary	
HCM 7th Control Delay, s/veh	6.1
HCM 7th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	646	17	16	646	81	10	1	11	58	1	67
Future Volume (veh/h)	102	646	17	16	646	81	10	1	11	58	1	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	653	17	16	653	82	10	1	11	59	1	68
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	1985	876	43	907	759	184	46	112	370	3	226
Arrive On Green	0.10	0.56	0.56	0.02	0.49	0.49	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1568	1781	1870	1565	452	321	773	1400	23	1562
Grp Volume(v), veh/h	103	653	17	16	653	82	22	0	0	59	0	69
Grp Sat Flow(s),veh/h/ln	1781	1777	1568	1781	1870	1565	1546	0	0	1400	0	1585
Q Serve(g_s), s	2.4	4.4	0.2	0.4	12.2	1.3	0.0	0.0	0.0	1.0	0.0	1.7
Cycle Q Clear(g_c), s	2.4	4.4	0.2	0.4	12.2	1.3	0.5	0.0	0.0	1.5	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	0.45		0.50	1.00		0.99
Lane Grp Cap(c), veh/h	174	1985	876	43	907	759	343	0	0	370	0	229
V/C Ratio(X)	0.59	0.33	0.02	0.37	0.72	0.11	0.06	0.00	0.00	0.16	0.00	0.30
Avail Cap(c_a), veh/h	769	5731	2529	324	2549	2133	1429	0	0	1408	0	1404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	5.3	4.3	21.1	9.0	6.2	16.3	0.0	0.0	16.7	0.0	16.8
Incr Delay (d2), s/veh	3.2	0.1	0.0	5.2	1.1	0.1	0.1	0.0	0.0	0.2	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	0.0	0.2	3.7	0.3	0.2	0.0	0.0	0.5	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	5.4	4.3	26.4	10.1	6.2	16.4	0.0	0.0	16.9	0.0	17.6
LnGrp LOS	C	A	A	C	B	A	B			B		B
Approach Vol, veh/h		773			751			22			128	
Approach Delay, s/veh		7.6			10.0			16.4			17.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	10.4	5.1	28.6		10.4	8.3	25.4
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s	39.0	8.0	71.0		39.0	19.0	60.0
Max Q Clear Time (g_c+I1), s	2.5	2.4	6.4		3.7	4.4	14.2
Green Ext Time (p_c), s	0.1	0.0	5.4		0.6	0.2	5.6

Intersection Summary	
HCM 7th Control Delay, s/veh	9.5
HCM 7th LOS	A

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	644	56	60	165	0	0
Future Volume (vph)	644	56	60	165	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	1.00			1.00		
Frpb, ped/bikes	1.00			1.00		
Flpb, ped/bikes	1.00			1.00		
Frt	0.99			1.00		
Flt Protected	1.00			0.99		
Satd. Flow (prot)	1837			1836		
Flt Permitted	1.00			0.76		
Satd. Flow (perm)	1837			1412		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	716	62	67	183	0	0
RTOR Reduction (vph)	4	0	0	0	0	0
Lane Group Flow (vph)	774	0	0	250	0	0
Confl. Peds. (#/hr)		21	21		19	5
Confl. Bikes (#/hr)		1				
Turn Type	NA		Perm	NA		
Protected Phases	4			8		
Permitted Phases			8			
Actuated Green, G (s)	20.3			20.3		
Effective Green, g (s)	20.3			20.3		
Actuated g/C Ratio	0.59			0.59		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	1084			833		
v/s Ratio Prot	c0.42					
v/s Ratio Perm				0.18		
v/c Ratio	0.71			0.30		
Uniform Delay, d1	5.0			3.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	2.3			0.2		
Delay (s)	7.2			3.7		
Level of Service	A			A		
Approach Delay (s/veh)	7.2			3.7	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	34.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1810	62	166	1090	187	442
Future Volume (vph)	1810	62	166	1090	187	442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.92	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.98	1.00
Satd. Flow (prot)	3539	1583	1770	3539	3241	1441
Flt Permitted	1.00	1.00	0.95	1.00	0.98	1.00
Satd. Flow (perm)	3539	1583	1770	3539	3241	1441
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1946	67	178	1172	201	475
RTOR Reduction (vph)	0	13	0	0	161	161
Lane Group Flow (vph)	1946	54	178	1172	278	76
Confl. Peds. (#/hr)					2	
Turn Type	NA	Perm	Prot	NA	Perm	Perm
Protected Phases	4		3	8		
Permitted Phases		4			2	2
Actuated Green, G (s)	66.9	66.9	13.6	85.0	16.5	16.5
Effective Green, g (s)	66.9	66.9	13.6	85.0	16.5	16.5
Actuated g/C Ratio	0.61	0.61	0.12	0.77	0.15	0.15
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2142	958	217	2722	483	215
v/s Ratio Prot	c0.55		c0.10	0.33		
v/s Ratio Perm		0.03			c0.09	0.05
v/c Ratio	0.91	0.06	0.82	0.43	0.58	0.35
Uniform Delay, d1	19.1	8.9	47.3	4.4	43.7	42.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.0	21.3	0.1	1.7	1.0
Delay (s)	25.2	8.9	68.6	4.5	45.4	43.2
Level of Service	C	A	E	A	D	D
Approach Delay (s/veh)	24.7			13.0	44.6	
Approach LOS	C			B	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	110.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

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MOVEMENT SUMMARY

Site: 101 [California Dr/5th Ave & 8th St (Site Folder: Future 2045 With Improvements PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: 5th Ave															
3	L2	All MCs	1	2.0	1	2.0	0.011	2.8	LOS A	0.0	1.2	0.13	0.03	0.13	33.7
8	T1	All MCs	12	2.0	12	2.0	0.011	2.8	LOS A	0.0	1.2	0.13	0.03	0.13	34.3
18	R2	All MCs	1	2.0	1	2.0	0.011	2.8	LOS A	0.0	1.2	0.13	0.03	0.13	34.1
Approach			15	2.0	15	2.0	0.011	2.8	LOS A	0.0	1.2	0.13	0.03	0.13	34.2
East: 8th St															
1	L2	All MCs	16	2.0	16	2.0	0.014	2.8	LOS A	0.1	1.5	0.09	0.02	0.09	32.0
6	T1	All MCs	1	2.0	1	2.0	0.014	2.8	LOS A	0.1	1.5	0.09	0.02	0.09	32.6
16	R2	All MCs	1	2.0	1	2.0	0.014	2.8	LOS A	0.1	1.5	0.09	0.02	0.09	32.4
Approach			19	2.0	19	2.0	0.014	2.8	LOS A	0.1	1.5	0.09	0.02	0.09	32.1
North: California Dr															
7	L2	All MCs	28	2.0	28	2.0	0.034	2.9	LOS A	0.1	3.7	0.09	0.02	0.09	32.5
4	T1	All MCs	5	2.0	5	2.0	0.034	2.9	LOS A	0.1	3.7	0.09	0.02	0.09	33.1
14	R2	All MCs	12	2.0	12	2.0	0.034	2.9	LOS A	0.1	3.7	0.09	0.02	0.09	32.8
Approach			45	2.0	45	2.0	0.034	2.9	LOS A	0.1	3.7	0.09	0.02	0.09	32.6
West: 8th St															
5	L2	All MCs	9	2.0	9	2.0	0.009	2.9	LOS A	0.0	1.0	0.15	0.04	0.15	32.2
2	T1	All MCs	1	2.0	1	2.0	0.009	2.9	LOS A	0.0	1.0	0.15	0.04	0.15	32.7
12	R2	All MCs	1	2.0	1	2.0	0.009	2.9	LOS A	0.0	1.0	0.15	0.04	0.15	32.5
Approach			12	2.0	12	2.0	0.009	2.9	LOS A	0.0	1.0	0.15	0.04	0.15	32.3
All Vehicles			91	2.0	91	2.0	0.034	2.9	LOS A	0.1	3.7	0.10	0.02	0.10	32.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [Del Monte Blvd & Beach Rd (Site Folder: Future 2045 With Improvements PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Del Monte Blvd															
3	L2	All MCs	262	2.0	262	2.0	0.347	6.4	LOS A	1.8	45.8	0.40	0.22	0.40	30.9
8	T1	All MCs	441	2.0	441	2.0	0.347	6.4	LOS A	1.8	45.8	0.40	0.22	0.40	32.3
18	R2	All MCs	105	2.0	105	2.0	0.347	6.4	LOS A	1.8	45.8	0.40	0.22	0.40	32.4
Approach			808	2.0	808	2.0	0.347	6.4	LOS A	1.8	45.8	0.40	0.22	0.40	31.8
East: Beach Rd															
1	L2	All MCs	42	2.0	42	2.0	0.261	8.2	LOS A	1.0	24.5	0.61	0.56	0.61	30.9
6	T1	All MCs	78	2.0	78	2.0	0.261	8.2	LOS A	1.0	24.5	0.61	0.56	0.61	31.4
16	R2	All MCs	62	2.0	62	2.0	0.261	8.2	LOS A	1.0	24.5	0.61	0.56	0.61	31.2
Approach			182	2.0	182	2.0	0.261	8.2	LOS A	1.0	24.5	0.61	0.56	0.61	31.2
North: Del Monte Blvd															
7	L2	All MCs	58	2.0	58	2.0	0.227	5.9	LOS A	1.0	24.5	0.49	0.36	0.49	31.8
4	T1	All MCs	313	2.0	313	2.0	0.227	5.9	LOS A	1.0	24.5	0.49	0.36	0.49	32.7
14	R2	All MCs	67	2.0	67	2.0	0.227	5.9	LOS A	1.0	24.5	0.49	0.36	0.49	32.6
Approach			438	2.0	438	2.0	0.227	5.9	LOS A	1.0	24.5	0.49	0.36	0.49	32.6
West: Beach Rd															
5	L2	All MCs	60	2.0	60	2.0	0.145	5.4	LOS A	0.6	14.1	0.47	0.36	0.47	31.7
2	T1	All MCs	69	2.0	69	2.0	0.145	5.4	LOS A	0.6	14.1	0.47	0.36	0.47	32.2
12	R2	All MCs	171	2.0	171	2.0	0.178	5.4	LOS A	0.7	17.4	0.46	0.34	0.46	32.8
Approach			300	2.0	300	2.0	0.178	5.4	LOS A	0.7	17.4	0.46	0.35	0.46	32.4
All Vehicles			1729	2.0	1729	2.0	0.347	6.3	LOS A	1.8	45.8	0.46	0.31	0.46	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [Imjin Rd & 8th St (Site Folder: Future 2045 With Improvements PM)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] ft	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Driveway															
3	L2	All MCs	1	2.0	1	2.0	0.135	4.4	LOS A	0.6	15.5	0.34	0.19	0.34	33.1
8	T1	All MCs	149	2.0	149	2.0	0.135	4.4	LOS A	0.6	15.5	0.34	0.19	0.34	33.7
18	R2	All MCs	1	2.0	1	2.0	0.135	4.4	LOS A	0.6	15.5	0.34	0.19	0.34	33.5
Approach			152	2.0	152	2.0	0.135	4.4	LOS A	0.6	15.5	0.34	0.19	0.34	33.7
East: 8th St															
1	L2	All MCs	1	2.0	1	2.0	0.486	8.3	LOS A	3.3	84.8	0.48	0.25	0.48	31.3
6	T1	All MCs	1	2.0	1	2.0	0.486	8.3	LOS A	3.3	84.8	0.48	0.25	0.48	31.9
16	R2	All MCs	559	2.0	559	2.0	0.486	8.3	LOS A	3.3	84.8	0.48	0.25	0.48	31.7
Approach			561	2.0	561	2.0	0.486	8.3	LOS A	3.3	84.8	0.48	0.25	0.48	31.7
North: Imjin Rd															
7	L2	All MCs	11	2.0	11	2.0	0.084	3.1	LOS A	0.4	9.6	0.03	0.00	0.03	33.6
4	T1	All MCs	10	2.0	10	2.0	0.084	3.1	LOS A	0.4	9.6	0.03	0.00	0.03	34.2
14	R2	All MCs	92	2.0	92	2.0	0.084	3.1	LOS A	0.4	9.6	0.03	0.00	0.03	33.9
Approach			114	2.0	114	2.0	0.084	3.1	LOS A	0.4	9.6	0.03	0.00	0.03	33.9
West: 8th St															
5	L2	All MCs	1	2.0	1	2.0	0.164	3.9	LOS A	0.8	20.4	0.11	0.03	0.11	33.4
2	T1	All MCs	166	2.0	166	2.0	0.164	3.9	LOS A	0.8	20.4	0.11	0.03	0.11	34.0
12	R2	All MCs	51	2.0	51	2.0	0.164	3.9	LOS A	0.8	20.4	0.11	0.03	0.11	33.7
Approach			217	2.0	217	2.0	0.164	3.9	LOS A	0.8	20.4	0.11	0.03	0.11	33.9
All Vehicles			1044	2.0	1044	2.0	0.486	6.2	LOS A	3.3	84.8	0.33	0.17	0.33	32.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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	Roadway Segment	Description	ADT Volume	LOS
Existing				
16	Del Monte(2nd Ave)/Patton Parkway Extension	2-Lane Collector	3,733	A
17	8th Street - 3rd Ave to Intergarrison	2-Lane Collector	4,290	A
18	Salinas Avenue - Reservation Road to Carmel Avenue	2-Lane Collector	830	A
19	Imjin Parkway (12th) & SR1 Interchange	2-Lane Collector	4,480	A
20	Del Monte Blvd. - Beach Road to Marina Greens Drive	2-Lane Collector	2,460	A
21	Del Monte & SR 1 Interchange	4-Lane Expressway	24,610	B
22	Reservation Road - Beach to SR1	2-Lane Arterial (w/ left-turn lane)	8,080	A
23	Reservation Road - Imjin Road to Blanco Road	4-Lane Divided Arterial (w/ left-turn lane)	17,890	A
24	Airport Access Road	-	-	-

	Roadway Segment	Description	ADT Volume	LOS
Future No Project				
16	Del Monte(2nd Ave)/Patton Parkway Extension	2-Lane Collector	4,075	A
17	8th Street - 3rd Ave to Intergarrison	2-Lane Collector	7,466	B
18	Salinas Avenue - Reservation Road to Carmel Avenue	2-Lane Collector	722	A
19	Imjin Parkway (12th) & SR1 Interchange	2-Lane Collector	20,078	F
20	Del Monte Blvd. - Beach Road to Marina Greens Drive	2-Lane Collector	10,073	D
21	Del Monte & SR 1 Interchange	4-Lane Expressway	20,673	B
22	Reservation Road - Beach to SR1	2-Lane Arterial (w/ left-turn lane)	15,360	D
23	Reservation Road - Imjin Road to Blanco Road	4-Lane Divided Arterial (w/ left-turn lane)	42,173	F
24	Airport Access Road	-	-	-

	Roadway Segment	Description	ADT Volume	LOS
Future With Project				
16	Del Monte(2nd Ave)/Patton Parkway Extension	2-Lane Collector	4,075	A
17	8th Street - 3rd Ave to Intergarrison	2-Lane Arterial (w/ left-turn lane)	7,466	A
18	Salinas Avenue - Reservation Road to Carmel Avenue	2-Lane Collector	722	A
19	Imjin Parkway (12th) & SR1 Interchange	4-Lane Freeway	20,078	A
20	Del Monte Blvd. - Beach Road to Marina Greens Drive	4-Lane Undivided Arterial (no left-turn lane)	10,073	A
21	Del Monte & SR 1 Interchange	4-Lane Expressway	20,673	B
22	Reservation Road - Beach to SR1	4-Lane Divided Arterial (w/ left-turn lane)	15,360	A
23	Reservation Road - Imjin Road to Blanco Road	6-Lane Expressway	42,173	C
24	Airport Access Road	2-Lane Collector	5,000	A

Attachment C

Table 1 - Public Facilities, Public Safety, Parks [(1)]

Land Use Category	per Unit	Public Facilities (General Gov.)	Public Safety	Parks	Total
Residential					
Single Family					
Units 900 SF or less	per Unit	$787	$1,907	$4,585	$7,279
Units 901-2,999 SF	per KSF	$874	$2,119	$5,094	$8,087
Units 3,000 SF or greater	per Unit	$2,622	$6,356	$15,283	$24,261
Multifamily					
Units 500 SF or less	per Unit	$807	$1,957	$4,706	$7,470
Units 501-1,599 SF	per KSF	$1,615	$3,914	$9,413	$14,942
Units 1,600 SF or greater	per Unit	$2,584	$6,263	$15,060	$23,907
Senior Homes					
Units 500 SF or less	per Unit	$682	$1,653	$3,976	$6,311
Units 501-1,599 SF	per KSF	$1,364	$3,307	$7,952	$12,623
Units 1,600 SF or greater	per Unit	$2,183	$5,291	$12,723	$20,197
Assisted Living					
Units 500 SF or less	per Unit	$341	$827	$1,988	$3,156
Units 501-1,599 SF	per KSF	$682	$1,653	$3,976	$6,311
Units 1,600 SF or greater	per Unit	$1,091	$2,645	$6,361	$10,097
Nonresidential					
Office/Research	per KSF	$998	$2,420	-	$3,418
Retail/Service	per KSF	$599	$1,452	-	$2,051
Industrial	per KSF	$200	$484	-	$684
Hotel	per KSF	$272	$660	-	$932
Church	per KSF	$200	$484	-	$684
Daycare Center	per KSF	$799	$1,936	-	$2,735
Animal Hospital/Vet Clinic	per KSF	$1,198	$2,904	-	$4,102
Medical/Dental	per KSF	$1,198	$2,904	-	$4,102

(1) SF = Square Feet, KSF = 1,000 Square Feet.

Attachment C

Table 2 - Intersections and Roadways [(1)]

Land Use Category	per Unit	Intersections	Roadways	Total
Residential				
Single Family	per KSF	$2,239	$8,236	$10,475
Senior Homes	per Unit	$2,429	$8,932	$11,361
Assisted Living	per Unit	$1,465	$5,388	$6,853
Multifamily	per Unit	$3,798	$13,968	$17,766
Nonresidential				
Office/Research	per KSF	$6,045	$22,234	$28,279
Retail/Service	per KSF	$15,050	$55,351	$70,401
Industrial	per KSF	$2,772	$10,197	$12,969
Hotel	per KSF	$4,456	$16,388	$20,844
Church	per KSF	$4,018	$14,776	$18,794
Daycare Center	per KSF	$23,790	$87,499	$111,289
A Animal Hospital/Vet Clinic	per KSF	$12,240	$45,017	$57,257
Medical/Dental	per KSF	$20,495	$75,377	$95,872

(1) SF = Square Feet, KSF = 1,000 Square Feet.

Attachment D

Current DIF Schedule

Land Use	Unit	Public Building	Public Safety	Parks	Intersections	Roadways	Proposed Total
Residential							
Single Family	DU	$4,983	$1,074	$10,791	$2,275	$9,396	**$28,519**
Senior Homes	DU	$3,323	$714	$7,194	$881	$3,632	**$15,744**
Assisted Living – Senior	DU	$1,845	$397	$3,996	$633	$2,606	**$9,477**
Multifamily	DU	$4,615	$993	$9,991	$1,592	$6,563	**$23,754**
Non-Residential							
Office/Research	KSF	$347	$651	-	$2,593	$10,699	**$14,290**
Retail/Service	KSF	$209	$389	-	$4,359	$17,983	**$22,940**
Industrial	KSF	$71	$129	-	$1,638	$6,761	**$8,599**
Hotel	ROOM	$94	$177	-	$1,920	$7,926	**$10,117**
Church	KSF	$71	$129	-	$2,141	$8,837	**$11,178**
Day Care Center	KSF	$278	$522	-	$17,415	$71,842	**$90,057**
Animal Hospital/Clinic	KSF	$417	$780	-	$11,098	$45,786	**$58,081**
Medical Office	KSF	$417	$780	-	$8,494	$35,048	**$44,739**

Proposed DIF Schedule

Land Use	Unit	Public Building	Public Safety	Parks	Intersections	Roadways	Proposed Total
Residential							
Single Family	KSF	$2,185	$5,298	$12,735	$5,598	$20,590	**$46,405**
Senior Homes	DU	$2,183	$5,291	$12,723	$2,429	$8,932	**$31,558**
Assisted Living – Senior	DU	$1,091	$2,645	$6,361	$1,465	$5,388	**$16,950**
Multifamily	DU	$2,584	$6,263	$15,060	$3,798	$13,968	**$41,673**
Non-Residential							
Office/Research	KSF	$998	$2,420	-	$6,045	$22,234	**$31,697**
Retail/Service	KSF	$599	$1,452	-	$15,050	$55,352	**$72,452**
Industrial	KSF	$200	$484	-	$2,772	$10,197	**$13,653**
Hotel	ROOM	$272	$660	-	$4,456	$16,388	**$21,776**
Church	KSF	$200	$484	-	$4,018	$14,776	**$19,478**
Day Care Center	KSF	$799	$1,936	-	$23,790	$87,499	**$114,023**
Animal Hospital/Clinic	KSF	$1,198	$2,904	-	$12,240	$45,017	**$61,358**
Medical Office	KSF	$1,198	$2,904	-	$20,495	$75,378	**$99,974**

Typical Size

⇦ 2,500 SF

⇦ 1,600 SF

⇦ 1,600 SF

⇦ 1,600 SF

Agenda item: **11c**
City Council Meeting of
July 1, 2025

CITY COUNCIL OPEN PUBLIC HEARING AND CONSIDER ADOPTING RESOLUTION NO. 2025-, APPROVING 2025 SCHEDULE OF FEES AND SERVICE CHARGES.

This item is to be continued to August 6, 2025.

June 17, 2025 Item No. **11d**

Honorable Mayor and Members of the Marina City Council

City Council Meeting of July 1, 2025

CITY COUNCIL CONSIDER INTRODUCING ORDINANCE NO. 2025-, AMENDING THE MARINA MUNICIPAL CODE (MMC) TITLE 17 ADDING SECTION 17.04.305 (GARDEN STRUCTURES), SECTION 17.42.060 (FENCES), AND CHAPTER 17.55 (STAFF APPROVALS AND PROCEDURES) AND AMENDING SECTIONS 17.42.020 (USE REGULATIONS), 17.42.055 (HEIGHT), AND 17.42.070 (YARDS) WITH CORRESPONDING UPDATES TO RESIDENTIAL DISTRICTS (17.06, 17.08, 17.10, AND 17.12). THE PROPOSED ACTION IS EXEMPT FROM ENVIRONMENTAL REVIEW PER SECTION 15061(B)(3) OF THE CEQA GUIDELINES.

RECOMMENDATION: City council to

1. Consider introducing Ordinance No. 2025-, amending the Marina Municipal Code (MMC) Title 17 adding Section 17.04.305 (Garden Structures), Section 17.42.060 (Fences), and Chapter 17.55 (Staff Approvals and Procedures) and amending Sections 17.42.020 (Use Regulations), 17.42.055 (Height), and 17.42.070 (Yards) with corresponding updates to residential districts (17.06, 17.08, 17.10, and 17.12); and
2. Finding this action is exempt from environmental review per Section 15061(b)(3) of the CEQA Guidelines.

BACKGROUND

The Community Development Department (CDD) of the City of Marina (City), through its regular use and implementation of the Marina Municipal Code's (MMC) Title 17 (Zoning Ordinance), finds that targeted changes should be implemented to update and streamline the ordinance to better serve the community.

On April 10, 2025, the Planning Commission received an informational presentation and gave input on the proposed targeted amendments to Marina Municipal Code Title 17.

On June 12, 2025, the Planning Commission held a public hearing at which staff presented and received input from the Commission on the proposed amendments to the Marina Municipal Code (MMC) Title 17, adding Section 17.04.305 (Garden Structures), Section 17.42.060 (Fences), and Chapter 17.55 (Staff Approvals and Procedures) and amending Sections 17.42.020 (Use Regulations), 17.42.055 (Height), and 17.42.070 (Yards) with corresponding updates to residential districts (17.06, 17.08, 17.10, and 17.12). The Planning Commission approved Resolution 2025-07 with minor changes that recommended the City Council adopt changes to Chapter 17 of the Marina Municipal Code as described in the draft ordinance (**EXHIBIT A**).

PROJECT OVERVIEW

The proposed changes are a targeted update to the Zoning Ordinance to formalize staff level review processes, update outdated standards, and align regulations with other cities in California. These updates are intended to make the zoning code more user-friendly, provide clear and consistent guidance to customers, and support small businesses by streamlining certain permitting processes.

Staff proposes adding Chapter 17.55 (Staff Approvals and Procedures), which creates the processes for the different staff level approvals. This chapter defines the scope of staff-level decisions, including administrative design review, administrative use permits, and minor variances. Further, it incorporates the recently added Table in MMC Section 17.56.030 in the Site and Architectural Design Review Chapter that will soon include administrative design review thresholds.

The proposed staff approvals and procedures chapter is needed because staff proposes administrative review for sheds that are closer than four feet to a setback and for fences that exceed the height limits within setbacks. Further, staff suggests including minor variances that can be decided at a staff level for smaller requests, such as reducing development standards by ten percent or less or for fences over eight feet in height. These changes will streamline existing processes that do not receive public comments, which reduces costs for the public and makes the review more efficient. Further, by clarifying approval processes, required findings, public notification requirements, and opportunities for appeal, these changes enhance transparency in the planning process.

One of the main components of the targeted update is updating the fence regulations to reduce the number of variances needed. Section 17.42.060 (Fences) is amended to allow a retaining wall to be one foot taller for fences in combination with retaining walls. Further, it also establishes a new staff-level review process for fences and retaining walls up to six feet in front of properties or along the street and up to eight feet in the rear yard. This will allow property owners who live on a hill or have other mitigating reasons to construct retaining walls and fences for privacy and security. Further, it moves fences and retaining walls that exceed the development standards to be a minor variance, rather than a major variance. Additionally, the proposed amendments prohibit razor wire in all districts, set new provisions for temporary fencing, and prohibit the establishment of new gated communities consistent with General Plan Section 2.31.8.

Section 17.42.070 (Yards) has been simplified and made consistent with state law. For instance, requiring that all accessory structures be at least four feet from fences, which aligns with Accessory Dwelling Unit (ADU) standards, while allowing staff-level review for exceptions. This will also eliminate the requirement for costly design review with a public hearing for accessory structures that exceed 12 feet in residential districts and replace it with staff level design review. Another proposed section would limit cement or hardscape coverage to 50% of a residential lot, excluding homes and accessory structures, to enhance permeability and mitigate stormwater impacts.

Additional amendments focus on zoning definitions and outdated provisions. A definition for “Garden Structures” is being added in Section 17.04.305, and these structures would be explicitly permitted in R-1, R-2, R-3, and R-4 districts. Private stables are being removed as a conditionally permitted use in the R-1 District due to minimum parcel size requirements that no longer align with typical lot sizes. The mention of B District zoning designation is also being eliminated, as there are no remaining parcels under this classification and no reference within the zoning code.

Furthermore, the update includes zoning modifications to improve regulatory clarity and economic development for small businesses. For example, beer and wine permits will be eligible for staff-level approval under Section 17.42.020 (Use Regulations). Staff proposes this change after four years of no public input, no concerns from the Police Department, and no issues raised by the Planning Commission for these types of Conditional Use Permits. Additionally, staff has received feedback from multiple small business owners expressing interest in offering beer and wine but have been discouraged by the cost and complexity of a full Conditional Use Permit.

Allowing these requests at a staff level supports local businesses and reflects a reasonable and modernized approach to permitting.

Additionally, the ordinance introduces a separate "Height" section (17.42.055) to differentiate fence regulations under Section 17.42.060 (Fences). This aligns with other zoning ordinances and makes the regulations clearer for the public. Below is a table covering the extent of the proposed changes.

MMC Reference	Topic	Summary of Proposed Changes	Reason
Article 1: Definitions			
Section 17.04.305	Garden Structures	Adding the definition for "Garden Structures" to the Zoning Ordinance.	Ordinance missing the definition.
Article 2: R-1 or Single-Family Residential			
Section 17.06.030	Private Stables	Remove Private Stables as a Conditionally permitted use from the R-1 District.	Requires at least a one-acre parcel. No longer a viable use.
Section 17.06.040	Garden Structures in R-1	Adding Garden Structures to R-1, Single Family Residential District.	Not previously included in the ordinance.
Section 17.06.050	Height of Accessory Structures	Amend the height of Accessory Structures to be consistent with changes to 17.42.070.	Update the Zoning Ordinance.
Section 17.06.120	B District	There is no B District zoning left in the ordinance and no more parcels zoned as B District.	Cleaning up outdated references in the Zoning Ordinance
Article 2: R-2 or Duplex Residential			
Section 17.08.040	Garden Structures in R-2	Adding Garden Structures to R-2, Duplex Residential District.	Not previously included in the ordinance.
Section 17.08.050	Height of Accessory Structures	Amend the height of Accessory Structures to be consistent with changes to 17.42.070.	Update the Zoning Ordinance.
Article 2: R-3 or Limited Multiple-Family Residential			
Section 17.10.040	Garden Structures in R-3	Adding Garden Structures to R-3, Limited Multiple-Family Residential District.	Not previously included in the ordinance.
Section 17.10.050	Height of Accessory Structures	Amend the height of Accessory Structures to be consistent with changes to 17.42.070.	Update the Zoning Ordinance.
Article 2: R-4 or Multiple Family Residential			
Section 17.12.050	Garden Structures in R-4	Adding Garden Structures to R-4, Multiple-Family Residential District.	Not previously included in the ordinance.
Section 17.12.060	Height of Accessory Structures	Amend the height of Accessory Structures to be consistent with changes to 17.42.070	Update the Zoning Ordinance.

MMC Reference	Topic	Summary of Changes	Reason
Article 4: General Zoning Regulations			
Section 17.42.020	Use Regulations	Allow beer and wine permits to be a staff level decision	Economic Development
Section 17.42.055	Height	Add new Section for Height so that Fences can have its own Section: 17.42.060	Update the Zoning Ordinance.
Section 17.42.060	Fences	Replace Height with Fences to add visibility triangle, amend maximum height limitations to include a staff level review process, add standards for Garden Structures, prohibit razor wire on fences, incorporate temporary fencing and prohibit gated communities.	Update the Zoning Ordinance to create clear guidelines and add staff level approvals.
Section 17.42.070	Yards	Simplify detached accessory structures by increasing the required setback from one foot to four feet to be consistent with Accessory Dwelling Units and add a provision that allows them closer with a Staff Level permit. Further, staff propose to add a requirement that no more than 50% of lots in residential districts be covered by cement or hardscape.	Update the Zoning Ordinance to create clear guidelines and add staff level approvals.
Article 6: Staff Approvals and Procedures			
Chapter 17.55	Staff Approvals and Procedures	Add a new chapter that establishes a clear process for staff-level decisions. This includes administrative design review, administrative use permits, and minor variances.	Create process for staff level approvals.

ENVIRONMENTAL REVIEW

In accordance with the California Environmental Quality Act (CEQA), this ordinance is not subject to CEQA pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Article 5, Section 15061(b)(3) because the activity would not result in a direct or reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

CONCLUSION

This request is submitted for City Council consideration and action.

Respectfully submitted,

_____

Nicholas McIlroy, AICP
Senior Planner
City of Marina

REVIEWED/CONCUR:

_____
Guido Persicone, AICP
Community Development Director
City of Marina

_____
Layne Long
City Manager
City of Marina

Exhibit A: Draft Ordinance
Exhibit B: PC Resolution 2025-07

Exhibit A

ORDINANCE NO.

AN ORDINANCE AMENDING THE MARINA MUNICIPAL CODE (MMC), TITLE 17 BY ADDING SECTION 17.04.305 (GARDEN STRUCTURES), SECTION 17.42.060 (FENCES), AND CHAPTER 17.55 (STAFF APPROVALS AND PROCEDURES) AND AMENDING SECTIONS 17.42.020 (USE REGULATIONS), 17.42.055 (HEIGHT), AND 17.42.070 (YARDS) WITH CORRESPONDING UPDATES TO RESIDENTIAL DISTRICTS (17.06, 17.08, 17.10, AND 17.12) IN THE MARINA MUNICIPAL CODE. THE PROPOSED AMENDMENTS ARE EXEMPT FROM ENVIRONMENTAL REVIEW PER SECTION 15061(B)(3) OF THE CEQA GUIDELINES.

-oOo-

THE CITY COUNCIL OF THE CITY OF MARINA DOES HEREBY ORDAIN AS FOLLOWS:

1. The Community Development Dept. (CDD) of the City of Marina (City), through its regular use and implementation of the Marina Municipal Code (MMC), finds that targeted changes should be implemented to update and streamline the ordinance to better serve the community.

2. On April 10, 2025, the Planning Commission received an informational presentation on the proposed amendments to Marina Municipal Code Title 17 and gave their input.

3. The proposed amendments include:

    a. Modifying Title 17, Article 1 by adding Section 17.04.305 (Garden Structures) to Definitions;

    b. Modifying Title 17, Article 2 by making changes to remove outdated language, update the residential districts with changes to height and permitted uses (17.06, 17.08, 17.10, and 17.12);

    c. Modifying MMC Section 17.42.020 (Use Regulations) to allow beer and wine permits to be a staff level decision;

    d. Modifying Title 17, Article 4 by changing Section 17.60 to be dedicated to Fences and renumbering Section 17.55 to be Height;

    e. Modifying MMC Sections 17.42.060 (Fences), and 17.42.070 (Yards) to clarify the development standards and to allow changes to be reviewed administratively rather than with a variance; and

    f. Modifying Title 17, Article 6 by adding Chapter 17.55 (Staff Approvals and Procedures) to provide a process for administrative review.

4. The proposed amendments to Chapter 17 of the MMC are consistent with Section 17.72 (Amendments).

5. Environmental. The proposed Ordinance amendments are not subject to environmental review pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Article 5, Section 15061(b)(3) because the proposed procedural changes would not result in a direct or a

reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have potential for causing significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

6. Effective Date. This Ordinance shall be in full force and effect on thirty (30) days after its final passage and adoption.

7. Severability. If any portion of this Ordinance is found to be unconstitutional or invalid the City Council hereby declares that it would have enacted the remainder of this Ordinance regardless of the absence of any such invalid part.

8. Posting of Ordinance. Within fifteen (15) days after the passage of this Ordinance, the City Clerk shall cause it to be posted in the three (3) public places designated by resolution of the City Council.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Marina duly held on July 1, 2025, and was passed and adopted at a regular meeting duly held on August 6, 2025, 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST: _____
Anita Sharp, Deputy City Clerk

Exhibit A

(New text is indicated with underlining, and deleted text is indicated with strikethrough)

Chapter 17.04 DEFINITIONS

Sections:

17.04.305 Garden Structures.

17.04.305 Garden Structures.

"Garden structures" includes arbors, trellises, pergolas, arches, and other similar open structures that are primarily designed to support the growth of plants or to provide shade and shelter in a garden or yard. Garden structures do not include accessory buildings, gazebos with a solid roof and floor, cisterns, hot tubs, fountains, walls, fences, hedges, and other similar features. The area of a garden structure area is calculated from the structure's largest horizontal dimensions.

Chapter 17.06 R-1 OR SINGLE-FAMILY RESIDENTIAL DISTRICT

17.06.030 R-1—Conditional uses.

Uses permitted, subject to first securing a use permit in each case, or in the Coastal Zone, a coastal permit, in the R-1 districts shall be as follows:

A. Public and quasi-public uses and buildings, including churches, firehouses, hospitals, parks and playgrounds, community or recreational centers, schools (public and parochial), or schools accredited to the state school system and public utility buildings and uses exclusive of corporate, storage or repair yards.

~~B. Private stables, subject to Section 17.42.030.~~

~~C~~B. Large residential care homes. Approval shall be pursuant to Section 17.58.040 (Use permit action by appropriate authority).

~~D~~C. Condominium and/or planned development projects, subject to the provisions of Chapter 17.66.

D. Day care centers as defined in Section 17.04.211 and licensed under Title 22, Division 12 of the California Code of Regulations, as may be amended.

17.06.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-1 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and.

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.06.050 Building height.

A. Maximum building height limit in the R-1 districts shall be thirty feet for main buildings and sixteen feet for accessory buildings not intended for living purposes, except that approval by the planning commission Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height, or if any portion within five feet of any lot line is over ten feet in height. Any action taken by the planning commissionCommunity Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

C. The maximum building heights for public and quasi-public uses and buildings, including churches, firehouses, hospitals, parks and playgrounds, community or recreational centers, schools (public and parochial), or schools accredited to the state school system and public utility buildings and uses exclusive of corporate, storage or repair yards is forty feet.

Chapter 17.08 R-2 OR DUPLEX RESIDENTIAL DISTRICT

17.08.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-2 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.08.050 Building height.

A. Maximum building height limit in the R-2 districts shall be thirty feet for main buildings and sixteen feet for accessory buildings not intended for living purposes, except that approval by the Community Development Director ~~planning commission~~ shall be obtained prior to the construction of any accessory building over twelve feet in height~~, or if any portion within five feet of any lot line is over ten feet in height~~. Any action taken by the Community Development Director ~~planning commission~~ may be appealed, in writing, to the planning commission within ten days of such action. Any action taken by the ~~planning commission~~ Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

Chapter 17.10 R-3 OR LIMITED MULTIPLE-FAMILY RESIDENTIAL DISTRICT

17.10.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-3 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.10.050 Building height.

A. Maximum building height limit in the R-3 districts shall be thirty-five (35) feet and three stories for main buildings. The height limit for accessory buildings not intended for living purposes shall be sixteen feet, except that approval by the Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height. Any action taken by the Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

Chapter 17.12 R-4 OR MULTIPLE-FAMILY RESIDENTIAL DISTRICT

17.12.050 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-4 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.12.060 Building height.

A. The maximum building height limit in the R-4 district shall be forty-two feet and ~~three~~ four stories. for main buildings. The height limit for accessory buildings not intended for living purposes shall be sixteen feet, except that approval by the Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height. Any action taken by the Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

Chapter 17.42GENERAL ZONING REGULATIONS

17.42.020 Use regulations.

A. No dancehall, roadhouse, nightclub, commercial club, establishment or business where alcoholic beverages are served or sold for off-sale consumption, commercial place of amusement or recreation, including but not limited to an amusement center or arcade, or place where entertainers are provided whether as social companions or otherwise, shall be established in any zoning district in the city unless a use permit is first secured in each case. Incidental beer and wine, when served with food or sold with groceries, shall require an Administrative Use Permit pursuant to Chapter 17.55.

B. A finding of public convenience or necessity is required for an establishment or business where alcoholic beverages are served or sold for on- and/or off-sale consumption, except when incidental and in combination with food or groceries and within an area of undue concentration as determined by Alcoholic Beverage Control (ABC). Such finding shall require that selling of alcohol for on- and/or off-sale consumption at the subject establishment of business:

1. Will not constitute a public nuisance;

2. Will not occur within five hundred feet of a park or school or place of public assembly;

3. Will not contribute to law enforcement problems associated with an undue concentration of on- and/or off-sale licenses in the vicinity of the subject business or establishment.

17.42.~~060~~055 Height.

A. Chimneys, vents, cupolas, spires, and other architectural or mechanical appurtenances may be erected to a greater height than the limit established for the district in which the building is located, except in the Coastal Zone where the height of such structures shall be subject to a coastal permit.

B. Towers, poles, water tanks, and similar structures may be erected to a greater height than the limit established for the district in which they are to be located, subject to securing a use permit and, in the Coastal Zone, a coastal permit in each case.

17.42.060 Fences.

~~C~~A. In any required front yard or in any required exterior side yard or any side yard abutting a street, separate fences and retaining walls shall not exceed three and one-half feet in height and fences combined with retaining walls shall not exceed a combined height of four and one-half

feet with the retaining wall not exceeding ~~one foot~~two feet in height, all subject to modifications in subsections ~~G~~ F and H of this section. Maximum height limitations may be exceeded to six feet in height for fences, retaining walls and for combination of fences and retaining walls as determined necessary for public safety, privacy, or security subject to the approval of the Community Development Director or by the planning commission on appeal. The review authority may require alternative materials, segmented retaining walls, landscaping or other measures to mitigate the visual impacts of proposed fences and/or retaining walls or any combination thereof.

~~D. NOTE: Retaining walls exceeding thirty inches in height are required to meet all Uniform Building Code (UBC) requirements. All persons planning to install a retaining wall should check with the Marina Building Division prior to installing a retaining wall. Retaining walls that exceed thirty inches in height above grade are required to install a thirty-six-inch (three-foot) tall guardrail on top of the retaining wall for safety reasons. The Marina Building Department shall determine when a guardrail is required. This note is provided for informational purposes only. It is not a quote from the UBC.~~

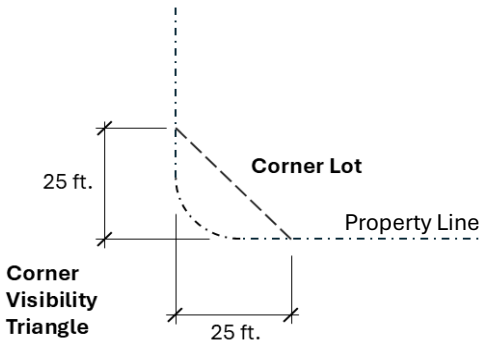
~~E~~B. In any required rear yard or in any required interior side yard or any required side yard not abutting a street, separate fences and separate retaining walls shall not exceed six feet in height, and fences combined with retaining walls shall not exceed a combined height of nine feet with the retaining wall not exceeding ~~three~~ four feet in height. Maximum height limitations may be exceeded to eight feet total height for fences and retaining walls and up to 12 feet in total height for combination of fences and retaining walls as determined necessary for public safety, privacy, or security subject to the approval of the Community Development Director or by the planning commission on appeal. The review authority may require alternative materials, segmented retaining walls, landscaping or other measures to mitigate the visual impacts of proposed fences and/or retaining walls or any combination thereof. Other factors in allowing a height exception include (1) to provide satisfactory visual or sound isolation of sensitive land uses from commercial activities such as contractors yards, loading docks and similar commercial activities or (2) to provide reasonable security for areas approved for outdoor storage of equipment or material associated with approved contractor's yards to restrict unauthorized access to facilities that might be dangerous or hazardous or (3) to minimize grading and/or tree removal impacts.

~~F~~C. All heights referenced in subsections ~~C~~ A and ~~D~~ B of this section shall be measured from the finished ground elevation at the base of a separate fence and from the finished ground elevation at the base of the lower side of a separate retaining wall or a combined retaining wall and fence. A fence or a wall shall be considered a separate fence or a separate wall when the face of the fence and the face of the retaining wall are separated by a minimum three-foot horizontal distance or are located on separate building sites.

DG. The heights of fence columns may extend a maximum of six inches above the maximum height otherwise allowed by the height limitations described ~~above~~herein. The height of arbors integrated into the design of a fence and incorporating a pedestrian opening in the fence may exceed the height limitations described ~~above~~herein, provided the height of such an arbor does not exceed a height of twelve feet above the height of the finished ground elevation at the pedestrian opening.

E. As provided in Section 10.70.010 of the Marina Municipal Code Chapter 10.70 (Visibility at Intersections), corner parcels shall be developed in a manner that ensures unrestricted visibility across the corners of the intersecting streets, alleys, and private driveways.

1. The corner vision triangle area is a triangular-shaped area on a corner parcel formed by measuring the prescribed distance from the intersection of the front and street side property lines, an intersecting alley, or an intersecting driveway and connecting the lines diagonally across the property making a 90-degree triangle. See figure below.



2. The dimensions of a corner vision triangle are 25 feet from the intersection of two public or private street rights-of-way.

3. It is illegal to erect, place, plant, or allow to grow within the corner vision triangle area.

a. Fences, walls, signs, accessory structures, mounds of earth, advertising matter, storage area, merchandise display area or other visual obstructions over 30 inches in height;

b. Hedges, shrubbery, and vegetation over or with a growth characteristic over 30 inches in height; and

c. Tree canopies maintained at a height less than seven feet above ground level, as measured from adjacent street curb elevation.

~~H. Maximum height limitations as otherwise required above may be exceeded determined necessary by the planning commission on appeal (1) to provide satisfactory visual or sound isolation of sensitive land uses from commercial activities such as contractors yards, loading docks and similar commercial activities or (2) to provide reasonable security for areas approved for outdoor storage of equipment or material associated with approved contractor's yards to restrict unauthorized access to facilities that might be dangerous or hazardous.~~

GI. Master fence plans for subdivisions ~~of five units/lots or more~~ shall be reviewed as part of the entitlement process. ~~Master fence plans for minor subdivisions may, at the discretion of the applicant, be reviewed as part of the entitlement process.~~ Master fence plans may deviate from the fence regulations stated herein if the Development Director or planning commission makes findings that the proposed fences provide public safety, privacy or security and are aesthetically pleasing from the street side view (findings are listed in order of importance). The Development Director or planning commission may require landscaping or other measures to mitigate the visual impacts of proposed fences and/or retaining walls or any combination thereof.

H. Garden structures are allowed, subject to the following standards:

1. A garden structure shall not encroach onto a public right-of-way.

2. If a garden structure has an area of 36 square feet or less, it may have a solid roof. If a garden structure has an area greater than 36 square feet, its roof shall be at least half open to the elements, with no solid roof portion greater in area than 36 square feet.

3. A garden structure 100 square feet or less in area may encroach into a required side yard or rear yard setback, but if greater than six feet in height, shall be located at least three feet from the property line, with the following exceptions:

    a. If the property line faces a street or alley, one garden structure, over a gate or walkway, shall be allowed on the outward-facing property line. Such structures shall be no more than 24 square feet in area and shall be nine feet or less in height.

    b. In each side yard setback, a single garden structure over a gate or walkway is allowed to encroach up to the property line. Such structures shall be nine feet or less in height, and shall not have a depth greater than two feet.

4. In required front yard setbacks, one garden structure is allowed over a gate or walkway. Such structures shall be no more than 24 square feet in area with a height of nine feet or less and may be located either in the setback or on the front property line.

5. Vertical trellises that serve the same function as a fence shall be treated as a fence under MMC 17.42.060.

6. Garden structures exceeding these standards may be allowed with an administrative design review pursuant to Section 17.55.030. Garden structures outside of required setbacks do not require a planning permit.

I. Prohibited Materials

1. Fences in any district may not contain strands of barbed or razor wire, sharp or jagged glass, sharp or jagged metal components (e.g., razor-spikes), or similar materials. The only exception shall be for properties that contain a public safety hazard such as a power plant, facilities with hazardous materials or as determined by the Community Development Director, which must receive an Administrative Use Permit.
2. Prohibited fence materials on an existing fence may not be expanded or repaired. Further, all prohibited fence materials must be removed within one year of the feature becoming non-conforming.

J. Temporary fencing to secure and/or screen a property may be authorized by the Community Development Director or their designee on vacant lots, lots with an active building permit or a blighted property as defined in MMC Chapter 8.70 (Public Nuisance).

K. Gated communities shall not be allowed as part of a development application.

~~K. In the R-1 district, on a corner lot created prior to January 7, 1997, fences, retaining walls or combined retaining walls/fences are subject to the pre-January 7, 1997, fence regulations listed below:~~

~~1. *Fences.* Maximum height of six feet measured from the lowest ground elevation at wall, fence or screen planting or one foot above the lowest ground elevation with a three-foot horizontal distance from said wall, fence or screen planting, whichever measurement point results in the greater height;~~

~~2. *Combined Retaining Wall/Fence.* Maximum height of eight feet measured from the lowest ground elevation at wall, fence or screen planting or one foot above the lowest ground elevation within a three-foot horizontal distance from said wall, fence or screen planting, whichever measurement point results in the greater height;~~

~~3. No required side yard fence setbacks.~~

17.42.070 Yards.

A. In any case, where an official plan line has been established as a part of the street and highway master plan, the required yards on the street side shall be measured from such official plan lines and in no case shall the provisions of this title be construed as permitting any structures to extend beyond such building line.

B. Cornices, eaves, canopies, and similar architectural features may extend into any required yard not exceeding two and one-half feet.

C. Uncovered porches, or stairways, fire escapes or landing places may extend into any required front or rear yard not exceeding six feet, and into any required side yard not exceeding three feet. Covered porches on interior lots may extend into the required front yard not exceeding six feet and sixty square feet. Covered porches on corner lots may extend into any combination of the required front yard and the required exterior side yard not exceeding six feet and a total area of one hundred twenty square feet.

D. In any R ~~or K~~ district, where fifty percent or more of the building sites on any one block or portion thereof in the same district have been improved with buildings, the required front yard shall be of a depth equal to the average of the front yards of the improved building sites, to a maximum of that specified for the district in which such building site is located.

E. In case a dwelling is to be located so that the front or rear thereof faces any side lot line, such dwelling shall not be less than ten feet from such lot line.

F. In case a building site is less than sixty feet in width, side yards equal to ten percent of the lot width but not less than five feet shall be required, except in C or M districts.

G. In the case of a corner lot adjacent to a key lot, the required side yard on the street side for any building within twenty-five feet of the side line of the key lot shall be equal to the front yard required on the key lot, and if more than twenty-five feet from such side line, the required side yard shall be fifty percent of the front yard required on the key lot.

H. In case an accessory building is attached to the main building it shall be made structurally a part thereof and shall comply in all respects with the requirements of this title applicable to the main building.

I. Except as otherwise provided in subsection J of this section, detached accessory buildings not for living purposes shall not be located:

1. Within ~~six~~ five feet from the main building;

2. ~~Within fifty feet from the front property line;~~Within the front one-half of the lot;~~3. Within six feet from the sidelines of the front one-half of the lot;~~

~~4. Within six feet of the sidelines of the front one-half of any adjacent lot;~~

3. Within 10 feet of a street side-yard setback;

~~5~~4. Within ~~one~~ four feet~~foot~~ of any lot line ~~of the rear one-half of the lot~~;

~~6~~5. So as to encroach on any easement or right-of-way of record;

~~7~~6. Within six feet of an alley from which the building has access.

J. The location of accessory buildings not for living purposes may only exceed ~~Notwithstanding~~ the limitations of subsection I of this section subject to an administrative use permit~~,~~. The Community Development Director or the planning commission on appeal may require landscaping or other measures to mitigate the visual impacts of accessory buildings. ~~detached accessory buildings with a projected roof area of less than one hundred twenty square feet as defined in the Marina building code, a height not exceeding eight feet, and on a building site used exclusively for single-family dwelling purposes in any residential district may be constructed or placed on the site as long as it is:~~

~~1. Located at least three feet from the main building or perimeter fence; and~~

~~2. Located within that portion of the site which is separated from the public way by the main building or by a minimum five-foot-high fence.~~

K. In case of a lot abutting upon two or more streets, the main building and accessory buildings shall not be erected so as to encroach upon the front yard or the exterior side yard required on any of the streets.

L. Notwithstanding any requirements in this section, in cases where the elevation of the front half of the lot at a point fifty feet from the centerline of the traveled roadway is seven feet above or below the grade of the centerline, a private garage attached or detached may be built to within five feet of the front line of the lot.

M. Nothing contained in the general provisions shall be deemed to reduce special yard requirements as set forth in the regulations for any R or K districts.

N. Structures, except utility poles and utility equipment appurtenant thereto, shall not be located so as to encroach on any utility or road easement or right-of-way.

O. Notwithstanding the provisions of subsections B, C and H of this section, porches, decks and patios exceeding a height of eighteen inches and attached to the main building, and patio covers attached to the main building, may extend into the required rear yard and together with other buildings on the lot may occupy an area greater than the maximum site coverage allowed in the district in which it is located, except as follows:

1. The structures shall not extend more than ten feet into the required rear yard and shall not occupy an area of the required rear yard exceeding two hundred square feet.

2. The finished floor surface shall not exceed five feet in height and the patio cover is a single story structure not exceeding sixteen feet in height.

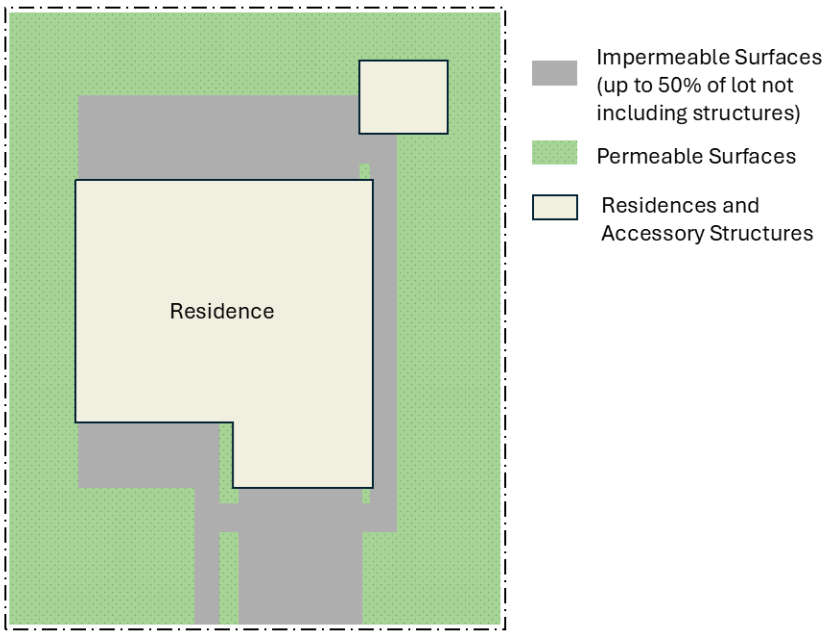
3. If the structure is enclosed by walls, the walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least sixty-five percent of the area of each respective wall below a minimum of six feet eight inches measured from the floor.

4. Wall openings may be enclosed with insect screening, plastic or glass. The plastic or glass shall be readily removable, translucent or transparent and not exceed a thickness provided by the current edition of the Uniform Building Code.

5. Patio covers shall be used only for recreational and outdoor living purposes and not as carports, garages, storage rooms, commercial or business space or habitable space as defined by the current edition of the Uniform Building Code.

P. Stormwater Runoff Limitations. Impermeable surfacing may not exceed the stormwater runoff design for the parcel or lot and must not cause runoff to affect adjacent property. Properties located in residential districts shall not cover the front, side or rear yards not including buildings and accessory structures with impermeable surfaces such as concrete, asphalt or hardscape more than 50% of the yard including the driveway and all pathways, unless approved by the Community Development Director. To exceed this standard, applicants must include calculations by a registered civil engineer demonstrating consistency with onsite stormwater retention subject to review by the City Engineer.

Figure (Limits on Paving and Hardscaping for Residential Front, Rear, and Side Yards)



Article 6, Chapter 17.55
STAFF APPROVALS AND PROCEDURES

Sections:

17.55.010 Purpose.
17.55.020 Types of Staff Approvals and Related Review Authorities.
17.55.030 Applicability.
17.55.040 Review Process.
17.55.050 Review Criteria.
17.55.060 Findings Required for Approval.
17.55.070 Effective Date of Decision.
17.55.080 Notice of administrative decision procedure.

17.55.010 Purpose.

This section establishes procedures and findings for the issuance of, and effective time periods for, staff-approved permits. No public hearings are held unless a request for a hearing is submitted or the Community Development Director refers it to the hearing authority. The intent of this section is to ensure that planning permits are in compliance with the general plan, local coastal program, objective design review, specific plans and these regulations, and are issued quickly yet allow for public input.

17.55.020 Types of Staff Approvals and Related Review Authorities.

Table 17.55.020.1 below, entitles "Types of Review and Roles of Review Authorities," identifies the city official or body responsible for reviewing and making decisions on community development permit applications, legislative amendments, and other actions required by these regulations.

Table 17.55.020.1:
Types of Review and Roles of Review Authorities

	Roles of Review Authorities		
Type of Permit Application	**Director**	**PC**	**CC**
Administrative Design Review	Decision	Appeal	Appeal
Design Review Changes	Decision	Appeal	Appeal
Lot mergers	Decision	Appeal	Appeal
Reversion to acreage	Decision	Appeal	Appeal
Lot-line adjustments	Decision	Appeal	Appeal
Certificate of compliance	Decision	Appeal	Appeal
Parcel map	Decision	Appeal	Appeal
Admin. sign permit	Decision	Appeal	Appeal
Admin. use permit and admin. use permit amendments	Decision	Appeal	Appeal
Admin. variance and admin. variance amendments	Decision	Appeal	Appeal
CC = City Council, PC = Planning Commission, and MMC = Marina Municipal Code Section.			

Table footnotes:

1. "Decision" means that the review authority makes the decision on the matter; "appeal" means that the review authority may consider and decide upon appeals to the decision of an earlier decision-making body, in compliance with MMC Chapter 17.70 (Appeals).

2. The director may defer action and refer the item to the first hearing authority for decision.

17.55.030 Applicability.

The Community Development Director or designee is the decision-making authority for the following community development permits:

1. Administrative Design Review Permits.
    a. Administrative Design Review Permits as described in Table 17.56.030.
    b. In all residential zoning districts, administrative design review permits may be granted for the following:
        i. Detached accessory structures not intended for living that are 12 feet to 16 feet in height in the R-1 District;
        ii. Structures, fences, retaining walls, or other visual obstructions in excess of height limits under MMC Section 17.42.060.F;
        iii. Covering the yard outside of buildings and accessory structures with more than 50% with asphalt, concrete, or hardscape; and
        iv. Garden structures exceeding the standards required by MMC 17.42.060 Paragraph J.
2. Design Review Changes. Once a Planning Commission design review permit or an administrative design review permit, outside the coastal zone, has been approved, but before the associated building permit becomes final, changes up to ten percent that modify the exterior design, height or setback of the project shall be processed as an administrative design change; provided, that cumulative design changes to a prior design review permit or administrative design review permit shall not appreciably alter the originally approved design.
3. Administrative subdivisions. The following subdivision map changes shall be reviewed at the staff level, in accordance with Title 16, Subdivisions:
    a. Lot mergers, in accordance with this section and the procedures in MMC Chapter 16.12.
    b. Reversion to acreage, in accordance with this section and the procedures in MMC Chapter 16.14.
    c. Parcel maps, in accordance with this section and the procedures in MMC Chapter 16.18.
    d. Lot line adjustments, in accordance with this section and the procedures in MMC Chapter 16.20.
    e. Certificates of compliance, in accordance with this section and the procedures in MMC Chapter 16.22.
4. Administrative Sign Permit. An administrative sign permit may be granted for compliant signs as described in Section 17.46.050.

5. Administrative Use Permits. Administrative use permits and administrative use permit amendments may be granted for the following:
    a. Beer and wine when served with food or sold with groceries.
    b. Detached or semi-detached accessory rooms within the R-1 district;
    c. Detached accessory structures not intended for living that exceed the limitations in Section 17.42.070 as allowed in Paragraph J;
    d. Temporary use permits;
    e. Barbed or razor wire affixed to the top of a fence for properties with public safety hazards;
    f. Wireless eligible facilities requests (for modification of previously permitted wireless telecommunications facilities); and
    g. Uses similar in nature as listed above as determined by the Community Development Director.
6. Minor Variances. Administrative variances and administrative variance amendments may be granted for the following:
    a. Reductions in required yards or setbacks that are ten percent or less of the required distance;
    b. Increases in maximum front yard setbacks;
    c. Increases in allowable building site coverage of ten percent or less for additions to an existing structure;
    d. The occupancy of any part of a required side or front yard by a parking pad;
    e. Fences or retaining walls over 8 feet in height; and
    f. Fences and retaining walls in combination over 12 feet.

17.55.040 Review Process.

Upon submittal of one of the community development permit applications listed in this section, the department shall process it in accordance with the following:

1. Staff reviews the proposed project for compliance with the general plan, certified local coastal program, these regulations, and other applicable conditions and regulations.
2. The Community Development Director issues a notice of administrative decision, pursuant to the procedures in 17.55.080, or determines that the permit application presents issues of sufficient public concern to warrant a public hearing and refers the application directly to the appropriate hearing authority. The hearing authority decision may be appealed in accordance with Chapter 17.70 (Appeals).
3. If no written request for a hearing is received by the department within 10 days of the issuance of the notice of administrative decision, then the action of the director is final.

17.55.050 Review Criteria.

For design review projects, the review criteria in MMC 17.56 and in Marina's Objective Design Standards shall apply.

17.55.060 Findings Required for Approval.

Permit applications under this section shall be approved or approved with conditions, only if the review authority first makes all the following applicable findings:

1. Findings for All Staff Approvals

a. The proposed development conforms to the applicable provisions of the general plan, the local coastal program, any applicable specific plan, and these regulations;
b. The proposed development is located on a legally created lot;
c. The subject property is otherwise in compliance with all applicable laws, regulations, and rules pertaining to uses, subdivision, setbacks, and any other applicable provisions of this municipal code, and all applicable zoning violation enforcement and processing fees have been paid; and
d. The proposed development is in compliance with all citywide permits, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) permit.

2. Additional Findings for Administrative Use Permits and Variances.
   a. The findings in MMC 17.58.040 shall apply to administrative use permits;
   b. Additional Finding for Administrative Use Permits for Fences, Deer Fences, and Garden Structures. The proposed fencing, and/or garden structure, will be in keeping with the neighborhood and will not obstruct views, air or light from the adjoining public street(s) without there being unique or exceptional circumstances of the property to warrant it; and
   c. The findings in MMC 17.60.030 shall apply to administrative variances.
3. Administrative Use Permit (AUP) Findings for Wireless Eligible Facilities Requests.
   a. The proposed wireless telecommunications facility qualifies as a wireless eligible facilities request, satisfying each element specified in 47 CFR Sections 1.6001 through 1.6100, as may be amended.
   b. The proposed wireless telecommunications facility complies with applicable safety codes and guidelines, and FCC regulations governing radiofrequency emissions.

17.55.070 Effective Date of Decision.

The decision shall become effective only when:

1. The 10-day request for hearing period has expired, or the appeal period following a hearing authority decision has expired or, if appealed in accordance with Chapter 17.70; and
2. All necessary prior approvals have been obtained.

17.55.080 Notice of administrative decision procedure.

Notice of an administrative decision to approve a community development permit shall be given as follows:

(a) Contents of Notice. The contents of a notice of administrative decision shall be as follows:
   a. Hearing Information. A brief description of the city's general procedure concerning the conduct of hearings and decisions; and the phone number and street address of the department, where an interested person could call or visit to obtain additional information;
   b. Project Information. The date of filing of the application and the name of the applicant; the city's file number assigned to the application; a general explanation

of the matter to be considered; and a general description, in text and/or by diagram, of the location of the property that is the subject of the hearing;

c. Coastal Zone Information. If the proposed development is within the coastal zone, the notice shall also include a statement that the development is within the coastal zone.

(b) Method of Notice Distribution. A notice of administrative decision shall be given as follows:

(1) Mailed notice for administrative permits as referenced herein shall be provided to:

(A) Owners of all property that are abutting the exterior boundaries of the subject lot. The names and addresses used for such notice shall be those appearing on the equalized county assessment roll, as updated from time to time; and

(B) Any person who has filed a written request for notice with the department and has paid the required fee for the notice.

(2) Posting. The department shall conspicuously post notice on the subject lot in a location that can be viewed from the nearest street. If the subject lot is a through lot, a notice shall be conspicuously posted adjacent to each street frontage in a location that can be viewed from the street.

(3) Timeline. The notice shall be mailed and posted at least 10 days before an action by the Community Development Director or their designee to approve a community development permit.

(4) Duration of Posting. The notice shall be continuously posted from the date required by subsection (b)(3) of this section until the effective date of the Community Development Director or their designee's decision to approve, or approve with conditions, the community development permit.

(5) Provide Comment. Members of the public may provide comments during the 10 days prior to the approval by the Community Development Director or their designee.

RESOLUTION NO. 2025-07

THE PLANNING COMMISSION HEREBY ADOPTS A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL ADOPT AN ORDINANCE TO AMEND TITLE 17 ADDING SECTION 17.04.305 (GARDEN STRUCTURES), SECTION 17.42.060 (FENCES), AND CHAPTER 17.55 (STAFF APPROVALS AND PROCEDURES) AND AMENDING SECTIONS 17.42.020 (USE REGULATIONS), 17.42.055 (HEIGHT), AND 17.42.070 (YARDS) WITH CORRESPONDING UPDATES TO RESIDENTIAL DISTRICTS (17.06, 17.08, 17.10, AND 17.12) IN THE MARINA MUNICIPAL CODE.

WHEREAS, Community Development Dept. (CDD) of the City of Marina (City), through its regular use and implementation of the Marina Municipal Code (MMC), finds that targeted changes should be implemented to update and streamline the ordinance to better serve the community.

WHEREAS, on April 10, 2025, the Planning Commission received an informational presentation on the proposed amendments to Marina Municipal Code Title 17 and gave input.

WHEREAS, the CDD recommends amendments to Title 17, Article 1 by adding Section 17.04.305 (Garden Structures) to Definitions;

WHEREAS, the CDD recommends amendments to Title 17, Article 2 by making changes to remove outdated language, update the residential districts with changes to accessory structures and fences (17.06, 17.08, 17.10, and 17.12);

WHEREAS, the CDD recommends amendments to Title 17, Article 4 by amending Section 17.42.020 (Use Regulations) to allow beer and wine permits to be a staff level decision and changing Section 17.60 to be dedicated to Fences and renumbering Section 17.55 to be Height. Further, amend Sections 17.42.060 (Fences), and 17.42.070 (Yards) to clarify the development standards and to allow changes to be reviewed administratively rather than with a variance.

WHEREAS, the CDD recommends amending Title 17, Article 6 by adding Chapter 17.55 (Staff Approvals and Procedures) to provide a process for administrative review;

WHEREAS, the proposed amendments to Title 17 of the MMC are included in the draft ordinance referenced herein as Exhibit A;

WHEREAS, the proposed amendments to Title 17 of the MMC are consistent with Section 17.72 (Amendments);

WHEREAS, the findings and conclusions made by the Planning Commission in this resolution are based upon the oral and written evidence presented as well as the entirety of the administrative record for the proposed amendments, which are incorporated herein by reference. The findings are not based solely on the information provided in this resolution;

WHEREAS, the project is exempt from CEQA per Section 15061(b)(3) because the activity would not

result in a direct or reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

NOW THEREFORE BE IT RESOLVED that the Planning Commission does hereby recommend that the City Council adopt changes to Chapter 17 of the Marina Municipal Code as described in the draft ordinance referenced herein as Exhibit A.

PASSED AND ADOPTED by the Planning Commission of the City of Marina at a regular meeting duly held on the 12th day of June 2025, by the following vote:

AYES: Woodson, Baron, Rana, Jacobsen, St. John, Cheng
NOES: None
ABSENT: Walton
ABSTAIN: None

Glenn Woodson, Chair

ATTEST:

For
Guido Persicone, AICP
Community Development Director
City of Marina

Exhibit A: Proposed Draft Ordinance

1924359.1

ORDINANCE NO.

AN ORDINANCE AMENDING THE MARINA MUNICIPAL CODE (MMC), TITLE 17 BY ADDING SECTION 17.04.305 (GARDEN STRUCTURES), SECTION 17.42.060 (FENCES), AND CHAPTER 17.55 (STAFF APPROVALS AND PROCEDURES) AND AMENDING SECTIONS 17.42.020 (USE REGULATIONS), 17.42.055 (HEIGHT), AND 17.42.070 (YARDS) WITH CORRESPONDING UPDATES TO RESIDENTIAL DISTRICTS (17.06, 17.08, 17.10, AND 17.12) IN THE MARINA MUNICIPAL CODE. THE PROPOSED AMENDMENTS ARE EXEMPT FROM ENVIRONMENTAL REVIEW PER SECTION 15061(B)(3) OF THE CEQA GUIDELINES.

-oOo-

THE CITY COUNCIL OF THE CITY OF MARINA DOES HEREBY ORDAIN AS FOLLOWS:

1. The Community Development Dept. (CDD) of the City of Marina (City), through its regular use and implementation of the Marina Municipal Code (MMC), finds that targeted changes should be implemented to update and streamline the ordinance to better serve the community.

2. On April 10, 2025, the Planning Commission received an informational presentation on the proposed amendments to Marina Municipal Code Title 17 and gave their input.

3. The proposed amendments include:

    a. Modifying Title 17, Article 1 by adding Section 17.04.305 (Garden Structures) to Definitions;

    b. Modifying Title 17, Article 2 by making changes to remove outdated language, update the residential districts with changes to height and permitted uses (17.06, 17.08, 17.10, and 17.12);

    c. Modifying MMC Section 17.42.020 (Use Regulations) to allow beer and wine permits to be a staff level decision;

    d. Modifying Title 17, Article 4 by changing Section 17.60 to be dedicated to Fences and renumbering Section 17.55 to be Height;

e. Modifying MMC Sections 17.42.060 (Fences), and 17.42.070 (Yards) to clarify the development standards and to allow changes to be reviewed administratively rather than with a variance; and

f. Modifying Title 17, Article 6 by adding Chapter 17.55 (Staff Approvals and Procedures) to provide a process for administrative review.

4. The proposed amendments to Chapter 17 of the MMC are consistent with Section 17.72 (Amendments).

5. Environmental. The proposed Ordinance amendments are not subject to environmental review pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Article 5, Section 15061(b)(3) because the proposed procedural changes would not result in a direct or a reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have potential for causing significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

6. Effective Date. This Ordinance shall be in full force and effect on thirty (30) days after its final passage and adoption.

7. Severability. If any portion of this Ordinance is found to be unconstitutional or invalid the City Council hereby declares that it would have enacted the remainder of this Ordinance regardless of the absence of any such invalid part.

8. Posting of Ordinance. Within fifteen (15) days after the passage of this Ordinance, the City Clerk shall cause it to be posted in the three (3) public places designated by resolution of the City Council.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Marina duly held on _____, 2025, and was passed and adopted at a regular meeting duly held on _____, 2025, by the following vote:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

_____

Bruce C. Delgado, Mayor

ATTEST: _____

Anita Sharp, Deputy City Clerk

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Exhibit A

Chapter 17.04 DEFINITIONS

Sections:

17.04.305 Garden Structures.

17.04.305 Garden Structures.

"Garden structures" includes arbors, trellises, pergolas, arches, and other similar open structures that are primarily designed to support the growth of plants or to provide shade and shelter in a garden or yard. Garden structures do not include accessory buildings, gazebos with a solid roof and floor, cisterns, hot tubs, fountains, walls, fences, hedges, and other similar features. The area of a garden structure area is calculated from the structure's largest horizontal dimensions.

Chapter 17.06 R-1 OR SINGLE-FAMILY RESIDENTIAL DISTRICT

17.06.030 R-1—Conditional uses.

Uses permitted, subject to first securing a use permit in each case, or in the Coastal Zone, a coastal permit, in the R-1 districts shall be as follows:

A. Public and quasi-public uses and buildings, including churches, firehouses, hospitals, parks and playgrounds, community or recreational centers, schools (public and parochial), or schools accredited to the state school system and public utility buildings and uses exclusive of corporate, storage or repair yards.

~~B. Private stables, subject to Section 17.42.030.~~

~~C~~B. Large residential care homes. Approval shall be pursuant to Section 17.58.040 (Use permit action by appropriate authority).

~~C~~D. Condominium and/or planned development projects, subject to the provisions of Chapter 17.66.

D. Day care centers as defined in Section 17.04.211 and licensed under Title 22, Division 12 of the California Code of Regulations, as may be amended.

17.06.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-1 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and.

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.06.050 Building height.

A. Maximum building height limit in the R-1 districts shall be thirty feet for main buildings and sixteen feet for accessory buildings not intended for living purposes, except that approval by the ~~planning commission~~ Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height~~, or if any portion within five feet of any lot line is over ten feet in height~~. Any action taken by the ~~planning commission~~ Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

C. The maximum building heights for public and quasi-public uses and buildings, including churches, firehouses, hospitals, parks and playgrounds, community or recreational centers, schools (public and parochial), or schools accredited to the state school system and public utility buildings and uses exclusive of corporate, storage or repair yards is forty feet.

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Chapter 17.08 R-2 OR DUPLEX RESIDENTIAL DISTRICT

17.08.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-2 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and

D. Garden structures subject to Section 17.42.060 Paragraph J. ~~.~~

17.08.050 Building height.

A. Maximum building height limit in the R-2 districts shall be thirty feet for main buildings and sixteen feet for accessory buildings not intended for living purposes, except that approval by the Community Development Director ~~planning commission~~ shall be obtained prior to the construction of any accessory building over twelve feet in height~~, or if any portion within five feet of any lot line is over ten feet in height~~. Any action taken by the Community Development Director ~~planning commission~~ may be appealed, in writing, to the planning commission within ten days of such action. Any action taken by the ~~planning commission~~ Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

Chapter 17.10 R-3 OR LIMITED MULTIPLE-FAMILY RESIDENTIAL DISTRICT

17.10.040 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-3 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets; and

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.10.050 Building height.

A. Maximum building height limit in the R-3 districts shall be thirty-five (35) feet and three stories for main buildings. The height limit for accessory buildings not intended for living purposes shall be sixteen feet, except that approval by the Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height. Any action taken by the Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

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Chapter 17.12 R-4 OR MULTIPLE-FAMILY RESIDENTIAL DISTRICT

17.12.050 Accessory buildings, structures and uses.

Accessory buildings not intended for living purposes and accessory structures and uses permitted in the R-4 districts shall be on the same building site with, and of a nature customarily incidental and subordinate to, the principal use, structure or building including, but not limited to:

A. Portable recreation structures;

B. Detached sheds, garages, workrooms, and other outbuildings, in compliance with the limitations contained in Section 17.42.070;

C. Non-portable recreation structures located in a yard area screened from public and private streets~~.~~ ; and

D. Garden structures subject to Section 17.42.060 Paragraph J.

17.12.060 Building height.

A. The maximum building height limit in the R-4 district shall be forty-two feet and ~~three~~ four stories~~.~~ for main buildings. The height limit for accessory buildings not intended for living purposes shall be sixteen feet, except that approval by the Community Development Director shall be obtained prior to the construction of any accessory building over twelve feet in height. Any action taken by the Community Development Director may be appealed, in writing, to the planning commission within ten days of such action.

B. The maximum building heights for accessory dwelling units shall be governed by the provisions of Section 17.42.040.

Chapter 17.42GENERAL ZONING REGULATIONS

17.42.020 Use regulations.

A. No dancehall, roadhouse, nightclub, commercial club, establishment or business where alcoholic beverages are served or sold for off-sale consumption, commercial place of amusement or recreation, including but not limited to an amusement center or arcade, or place where entertainers are provided whether as social companions or otherwise, shall be

established in any zoning district in the city unless a use permit is first secured in each case. Incidental beer and wine, when served with food or sold with groceries, shall require an Administrative Use Permit pursuant to Chapter 17.55.

B. A finding of public convenience or necessity is required for an establishment or business where alcoholic beverages are served or sold for on- and/or off-sale consumption, except when incidental and in combination with food or groceries and within an area of undue concentration as determined by Alcoholic Beverage Control (ABC). Such finding shall require that selling of alcohol for on- and/or off-sale consumption at the subject establishment of business:

1. Will not constitute a public nuisance;

2. Will not occur within five hundred feet of a park or school or place of public assembly;

3. Will not contribute to law enforcement problems associated with an undue concentration of on- and/or off-sale licenses in the vicinity of the subject business or establishment.

17.42.~~060~~055 Height.

A. Chimneys, vents, cupolas, spires, and other architectural or mechanical appurtenances may be erected to a greater height than the limit established for the district in which the building is located, except in the Coastal Zone where the height of such structures shall be subject to a coastal permit.

B. Towers, poles, water tanks, and similar structures may be erected to a greater height than the limit established for the district in which they are to be located, subject to securing a use permit and, in the Coastal Zone, a coastal permit in each case.

17.42.060 Fences.

~~C~~A. In any required front yard or in any required exterior side yard or any side yard abutting a street, separate fences and retaining walls shall not exceed three and one-half feet in height and fences combined with retaining walls shall not exceed a combined height of four and one-half feet with the retaining wall not exceeding ~~one foot~~two feet in height, all subject to modifications in subsections ~~G~~ F and H of this section.

~~D. NOTE: Retaining walls exceeding thirty inches in height are required to meet all Uniform Building Code (UBC) requirements. All persons planning to install a retaining wall should check with the Marina Building Division prior to installing a retaining wall. Retaining walls that exceed thirty inches in height above grade are required to install a thirty-six-inch (three-foot) tall guardrail on top of the retaining wall for safety reasons. The Marina Building Department shall~~

~~determine when a guardrail is required. This note is provided for informational purposes only. It is not a quote from the UBC.~~

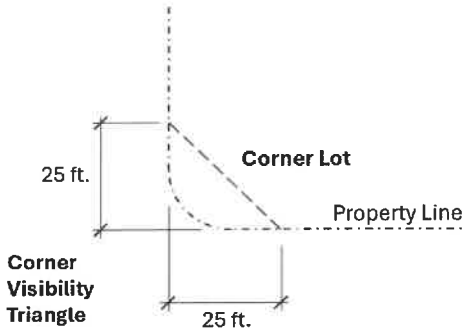
~~E~~B. In any required rear yard or in any required interior side yard or any required side yard not abutting a street, separate fences and separate retaining walls shall not exceed six feet in height, and fences combined with retaining walls shall not exceed a combined height of nine feet with the retaining wall not exceeding ~~three~~ four feet in height.

~~F~~C. All heights referenced in subsections ~~C~~ A and ~~D~~ B of this section shall be measured from the finished ground elevation at the base of a separate fence and from the finished ground elevation at the base of the lower side of a separate retaining wall or a combined retaining wall and fence. A fence or a wall shall be considered a separate fence or a separate wall when the face of the fence and the face of the retaining wall are separated by a minimum three-foot horizontal distance or are located on separate building sites.

D~~G~~. The heights of fence columns may extend a maximum of six inches above the maximum height otherwise allowed by the height limitations described ~~above~~herein. The height of arbors integrated into the design of a fence and incorporating a pedestrian opening in the fence may exceed the height limitations described ~~above~~herein, provided the height of such an arbor does not exceed a height of twelve feet above the height of the finished ground elevation at the pedestrian opening.

E. As provided in Section 10.70.010 of the Marina Municipal Code Chapter 10.70 (Visibility at Intersections), corner parcels shall be developed in a manner that ensures unrestricted visibility across the corners of the intersecting streets, alleys, and private driveways.

1. The corner vision triangle area is a triangular-shaped area on a corner parcel formed by measuring the prescribed distance from the intersection of the front and street side property lines, an intersecting alley, or an intersecting driveway and connecting the lines diagonally across the property making a 90-degree triangle. See figure below.



2. The dimensions of a corner vision triangle are 25 feet from the intersection of two public or private street rights-of-way.

3. It is illegal to erect, place, plant, or allow to grow within the corner vision triangle area.

a. Fences, walls, signs, accessory structures, mounds of earth, advertising matter, storage area, merchandise display area or other visual obstructions over 30 inches in height;

b. Hedges, shrubbery, and vegetation over or with a growth characteristic over 30 inches in height; and

c. Tree canopies maintained at a height less than seven feet above ground level, as measured from adjacent street curb elevation.

~~H~~F. Maximum height limitations as otherwise required above in paragraph A may be exceeded to six feet in height for fences, retaining walls and for combination of fences and retaining walls as determined necessary for public safety, privacy, or security. The maximum height limitations as otherwise required above in paragraph B may be exceeded to eight feet total height for fences and retaining walls and up to 12 feet in total height for combination of fences and retaining walls as determined necessary for public safety, privacy, or security. Increased height shall be subject to the approval of the Community Development Director or by the planning commission on appeal. The review authority may require alternative materials, segmented retaining walls, landscaping or other measures to mitigate the visual impacts of proposed fences and/or retaining walls or any combination thereof. Other factors in allowing a height exception include (1) to provide satisfactory visual or sound isolation of sensitive land uses from commercial activities such as contractors yards, loading docks and similar commercial activities or (2) to provide reasonable security for areas approved for outdoor storage of equipment or material associated with approved contractor's yards to restrict unauthorized

access to facilities that might be dangerous or hazardous or (3) to minimize grading and/or tree removal impacts.

GI. Master fence plans for subdivisions ~~of five units/lots or more~~ shall be reviewed as part of the entitlement process. ~~Master fence plans for minor subdivisions may, at the discretion of the applicant, be reviewed as part of the entitlement process.~~ Master fence plans may deviate from the fence regulations stated herein if the Development Director or planning commission makes findings that the proposed fences provide public safety, privacy or security and are aesthetically pleasing from the street side view (findings are listed in order of importance). The Development Director or planning commission may require landscaping or other measures to mitigate the visual impacts of proposed fences and/or retaining walls or any combination thereof.

H. Garden structures are allowed, subject to the following standards:

1. A garden structure shall not encroach onto a public right-of-way.

2. If a garden structure has an area of 36 square feet or less, it may have a solid roof. If a garden structure has an area greater than 36 square feet, its roof shall be at least half open to the elements, with no solid roof portion greater in area than 36 square feet.

3. A garden structure 100 square feet or less in area may encroach into a required side yard or rear yard setback, but if greater than six feet in height, shall be located at least three feet from the property line, with the following exceptions:

    a. If the property line faces a street or alley, one garden structure, over a gate or walkway, shall be allowed on the outward-facing property line. Such structures shall be no more than 24 square feet in area and shall be nine feet or less in height.

    b. In each side yard setback, a single garden structure over a gate or walkway is allowed to encroach up to the property line. Such structures shall be nine feet or less in height, and shall not have a depth greater than two feet.

4. In required front yard setbacks, one garden structure is allowed over a gate or walkway. Such structures shall be no more than 24 square feet in area with a height of nine feet or less and may be located either in the setback or on the front property line.

5. Vertical trellises that serve the same function as a fence shall be treated as a fence under MMC 17.42.060.

6. Garden structures exceeding these standards may be allowed with an administrative design review pursuant to Section 17.55.030. Garden structures outside of required setbacks do not require a planning permit.

I. Prohibited Materials

1. Fences in any district may not contain strands of barbed or razor wire, sharp or jagged glass, sharp or jagged metal components (e.g., razor-spikes), or similar materials. The only exception shall be for properties that contain a public safety hazard such as a power plant, facilities with hazardous materials or as determined by the Community Development Director, which must receive an Administrative Use Permit.
2. Prohibited fence materials on an existing fence may not be expanded or repaired. Further, all prohibited fence materials must be removed within one year of the feature becoming non-conforming.

J. Temporary fencing to secure and/or screen a property may be authorized by the Community Development Director or their designee on vacant lots, lots with an active building permit or a blighted property as defined in MMC Chapter 8.70 (Public Nuisance).

K. Gated communities shall not be allowed as part of a development application, unless significant public benefits are provided as part of the project.

~~K. In the R-1 district, on a corner lot created prior to January 7, 1997, fences, retaining walls or combined retaining walls/fences are subject to the pre-January 7, 1997, fence regulations listed below:~~

~~1. *Fences.* Maximum height of six feet measured from the lowest ground elevation at wall, fence or screen planting or one foot above the lowest ground elevation with a three-foot horizontal distance from said wall, fence or screen planting, whichever measurement point results in the greater height;~~

~~2. *Combined Retaining Wall/Fence.* Maximum height of eight feet measured from the lowest ground elevation at wall, fence or screen planting or one foot above the lowest ground elevation within a three-foot horizontal distance from said wall, fence or screen planting, whichever measurement point results in the greater height;~~

~~3. No required side yard fence setbacks.~~

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17.42.070 Yards.

A. In any case, where an official plan line has been established as a part of the street and highway master plan, the required yards on the street side shall be measured from such official plan lines and in no case shall the provisions of this title be construed as permitting any structures to extend beyond such building line.

B. Cornices, eaves, canopies, and similar architectural features may extend into any required yard not exceeding two and one-half feet.

C. Uncovered porches, or stairways, fire escapes or landing places may extend into any required front or rear yard not exceeding six feet, and into any required side yard not exceeding three feet. Covered porches on interior lots may extend into the required front yard not exceeding six feet and sixty square feet. Covered porches on corner lots may extend into any combination of the required front yard and the required exterior side yard not exceeding six feet and a total area of one hundred twenty square feet.

D. In any R ~~or K~~ district, where fifty percent or more of the building sites on any one block or portion thereof in the same district have been improved with buildings, the required front yard shall be of a depth equal to the average of the front yards of the improved building sites, to a maximum of that specified for the district in which such building site is located.

E. In case a dwelling is to be located so that the front or rear thereof faces any side lot line, such dwelling shall not be less than ten feet from such lot line.

F. In case a building site is less than sixty feet in width, side yards equal to ten percent of the lot width but not less than five feet shall be required, except in C or M districts.

G. In the case of a corner lot adjacent to a key lot, the required side yard on the street side for any building within twenty-five feet of the side line of the key lot shall be equal to the front yard required on the key lot, and if more than twenty-five feet from such side line, the required side yard shall be fifty percent of the front yard required on the key lot.

H. In case an accessory building is attached to the main building it shall be made structurally a part thereof and shall comply in all respects with the requirements of this title applicable to the main building.

I. Except as otherwise provided in subsection J of this section, detached accessory buildings not for living purposes shall not be located:

1. Within ~~six~~ five feet from the main building;

2. ~~Within fifty feet from the front property line;~~Within the front one-half of the lot;

~~3. Within six feet from the sidelines of the front one-half of the lot;~~

~~4. Within six feet of the sidelines of the front one-half of any adjacent lot;~~

3. Within 10 feet of a street side-yard setback;

~~5~~4. Within ~~one~~ four ~~feet~~foot of any lot line ~~of the rear one-half of the lot~~;

~~6~~5. So as to encroach on any easement or right-of-way of record;

~~7~~6. Within six feet of an alley from which the building has access.

J. The location of accessory buildings not for living purposes may only exceed ~~Notwithstanding~~ the limitations of subsection I of this section subject to an administrative use permit. The Community Development Director or the planning commission on appeal may require landscaping or other measures to mitigate the visual impacts of accessory buildings. ~~detached accessory buildings with a projected roof area of less than one hundred twenty square feet as defined in the Marina building code, a height not exceeding eight feet, and on a building site used exclusively for single-family dwelling purposes in any residential district may be constructed or placed on the site as long as it is:~~

~~1. Located at least three feet from the main building or perimeter fence; and~~

~~2. Located within that portion of the site which is separated from the public way by the main building or by a minimum five-foot-high fence.~~

K. In case of a lot abutting upon two or more streets, the main building and accessory buildings shall not be erected so as to encroach upon the front yard or the exterior side yard required on any of the streets.

L. Notwithstanding any requirements in this section, in cases where the elevation of the front half of the lot at a point fifty feet from the centerline of the traveled roadway is seven feet above or below the grade of the centerline, a private garage attached or detached may be built to within five feet of the front line of the lot.

M. Nothing contained in the general provisions shall be deemed to reduce special yard requirements as set forth in the regulations for any R or K districts.

N. Structures, except utility poles and utility equipment appurtenant thereto, shall not be located so as to encroach on any utility or road easement or right-of-way.

O. Notwithstanding the provisions of subsections B, C and H of this section, porches, decks and patios exceeding a height of eighteen inches and attached to the main building, and patio covers attached to the main building, may extend into the required rear yard and together with other buildings on the lot may occupy an area greater than the maximum site coverage allowed in the district in which it is located, except as follows:

1. The structures shall not extend more than ten feet into the required rear yard and shall not occupy an area of the required rear yard exceeding two hundred square feet.

2. The finished floor surface shall not exceed five feet in height and the patio cover is a single story structure not exceeding sixteen feet in height.

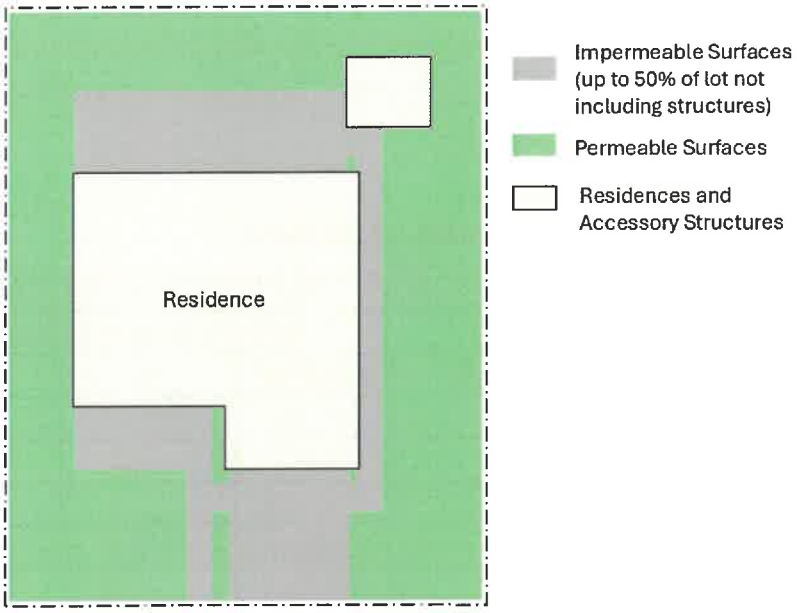
3. If the structure is enclosed by walls, the walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least sixty-five percent of the area of each respective wall below a minimum of six feet eight inches measured from the floor.

4. Wall openings may be enclosed with insect screening, plastic or glass. The plastic or glass shall be readily removable, translucent or transparent and not exceed a thickness provided by the current edition of the Uniform Building Code.

5. Patio covers shall be used only for recreational and outdoor living purposes and not as carports, garages, storage rooms, commercial or business space or habitable space as defined by the current edition of the Uniform Building Code.

P. Stormwater Runoff Limitations. Impermeable surfacing may not exceed the stormwater runoff design for the parcel or lot and must not cause runoff to affect adjacent property. Properties located in residential districts shall not cover the front, side or rear yards not including buildings and accessory structures with impermeable surfaces such as concrete, asphalt or hardscape more than 50% of the yard including the driveway and all pathways, unless approved by the Community Development Director. To exceed this standard, applicants must include calculations by a registered civil engineer demonstrating consistency with onsite stormwater retention subject to review by the City Engineer.

Figure (Limits on Paving and Hardscaping for Residential Front, Rear, and Side Yards)



Article 6, Chapter 17.55
STAFF APPROVALS AND PROCEDURES

Sections:

17.55.010 Purpose.
17.55.020 Types of Staff Approvals and Related Review Authorities.
17.55.030 Applicability.
17.55.040 Review Process.
17.55.050 Review Criteria.
17.55.060 Findings Required for Approval.
17.55.070 Effective Date of Decision.
17.55.080 Notice of administrative decision procedure.

17.55.010 Purpose.

This section establishes procedures and findings for the issuance of, and effective time periods for, staff-approved permits. No public hearings are held unless a request for a hearing is submitted or the director refers it to the hearing authority. The intent of this section is to ensure that planning permits are in compliance with the general plan, local coastal program, objective design review, specific plans and these regulations, and are issued quickly yet allow for public input.

17.55.020 Types of Staff Approvals and Related Review Authorities.

Table 17.55.020.1 below, entitles "Types of Review and Roles of Review Authorities," identifies the city official or body responsible for reviewing and making decisions on community development permit applications, legislative amendments, and other actions required by these regulations.

Table 17.55.020.1:

Types of Review and Roles of Review Authorities

	Roles of Review Authorities		
Type of Permit Application	**Director**	**PC**	**CC**
Administrative Design Review	Decision	Appeal	Appeal
Design Review Changes	Decision	Appeal	Appeal
Lot mergers	Decision	Appeal	Appeal
Reversion to acreage	Decision	Appeal	Appeal
Lot-line adjustments	Decision	Appeal	Appeal
Certificate of compliance	Decision	Appeal	Appeal
Parcel map	Decision	Appeal	Appeal
Admin. sign permit	Decision	Appeal	Appeal
Admin. use permit and admin. use permit amendments	Decision	Appeal	Appeal
Admin. variance and admin. variance amendments	Decision	Appeal	Appeal
CC = City Council, PC = Planning Commission, and MMC = Marina Municipal Code Section.			

Table footnotes:

1. "Decision" means that the review authority makes the decision on the matter; "appeal" means that the review authority may consider and decide upon appeals to the decision of an earlier decision-making body, in compliance with MMC Chapter 17.70 (Appeals).

2. The director may defer action and refer the item to the first hearing authority for decision.

17.55.030 Applicability.

The director or designee is the decision-making authority for the following community development permits:

1. Administrative Design Review Permits.
    a. Administrative Design Review Permits as described in Table 17.56.030.
    b. In all residential zoning districts, administrative design review permits may be granted for the following:
        i. Detached accessory structures not intended for living that are 12 feet to 16 feet in height in the R-1 District;
        ii. Structures, fences, retaining walls, or other visual obstructions in excess of height limits under MMC Section 17.42.060.F;

iii. Covering the yard outside of buildings and accessory structures with more than 50% with asphalt, cement, or hardscape; and

iv. Garden structures exceeding the standards required by MMC 17.42.060 Paragraph J.

2. Design Review Changes. Once a Planning Commission design review permit or an administrative design review permit, outside the coastal zone, has been approved, but before the associated building permit becomes final, changes up to ten percent that modify the exterior design, height or setback of the project shall be processed as an administrative design change; provided, that cumulative design changes to a prior design review permit or administrative design review permit shall not appreciably alter the originally approved design.

3. Administrative subdivisions. The following subdivision map changes shall be reviewed at the staff level, in accordance with Title 16, Subdivisions:

   a. Lot mergers, in accordance with this section and the procedures in MMC Chapter 16.12.

   b. Reversion to acreage, in accordance with this section and the procedures in MMC Chapter 16.14.

   c. Parcel maps, in accordance with this section and the procedures in MMC Chapter 16.18.

   d. Lot line adjustments, in accordance with this section and the procedures in MMC Chapter 16.20.

   e. Certificates of compliance, in accordance with this section and the procedures in MMC Chapter 16.22.

4. Administrative Sign Permit. An administrative sign permit may be granted for compliant signs as described in Section 17.46.050.

5. Administrative Use Permits. Administrative use permits and administrative use permit amendments may be granted for the following:

   a. Beer and wine when served with food or sold with groceries;

   b. Detached or semi-detached accessory rooms within the R-1 district;

   c. Detached accessory structures not intended for living that exceed the limitations in Section 17.42.070 as allowed in Paragraph J;

   d. Temporary use permits;

   e. Barbed or razor wire affixed to the top of a fence for properties with public safety hazards;

   f. Wireless eligible facilities requests (for modification of previously permitted wireless telecommunications facilities); and

g. Uses similar in nature as listed above as determined by the Community Development Director.

6. Minor Variances. Administrative variances and administrative variance amendments may be granted for the following:
   a. Reductions in required yards or setbacks that are ten percent or less of the required distance;
   b. Increases in maximum front yard setbacks;
   c. Increases in allowable building site coverage of ten percent or less for additions to an existing structure;
   d. The occupancy of any part of a required side or front yard by a parking pad;
   e. Fences or retaining walls over 8 feet in height; and
   f. Fences and retaining walls in combination over 12 feet.

17.55.040 Review Process.

Upon submittal of one of the community development permit applications listed in this section, the department shall process it in accordance with the following:

1. Staff reviews the proposed project for compliance with the general plan, certified local coastal program, these regulations, and other applicable conditions and regulations.
2. The director issues a notice of administrative decision, pursuant to the procedures in 17.55.080, or determines that the permit application presents issues of sufficient public concern to warrant a public hearing and refers the application directly to the appropriate hearing authority. The hearing authority decision may be appealed in accordance with Chapter 17.70 (Appeals).
3. If no written request for a hearing is received by the department within 10 days of the issuance of the notice of administrative decision, then the action of the director is final.

17.55.050 Review Criteria.

For design review projects, the review criteria in MMC 17.56 and in Marina's Objective Design Standards shall apply.

17.55.060 Findings Required for Approval.

Permit applications under this section shall be approved or approved with conditions, only if the review authority first makes all the following applicable findings:

1. Findings for All Staff Approvals
    a. The proposed development conforms to the applicable provisions of the general plan, the local coastal program, any applicable specific plan, and these regulations;
    b. The proposed development is located on a legally created lot;
    c. The subject property is otherwise in compliance with all applicable laws, regulations, and rules pertaining to uses, subdivision, setbacks, and any other applicable provisions of this municipal code, and all applicable zoning violation enforcement and processing fees have been paid; and
    d. The proposed development is in compliance with all citywide permits, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) permit.
2. Additional Findings for Administrative Use Permits and Variances.
    a. The findings in MMC 17.58.040 shall apply to administrative use permits;
    b. Additional Finding for Administrative Use Permits for Fences, Deer Fences, and Garden Structures. The proposed fencing, and/or garden structure, will be in keeping with the neighborhood and will not obstruct views, air or light from the adjoining public street(s) without there being unique or exceptional circumstances of the property to warrant it; and
    c. The findings in MMC 17.60.030 shall apply to administrative variances.
3. Administrative Use Permit (AUP) Findings for Wireless Eligible Facilities Requests.
    a. The proposed wireless telecommunications facility qualifies as a wireless eligible facilities request, satisfying each element specified in 47 CFR Sections 1.6001 through 1.6100, as may be amended.
    b. The proposed wireless telecommunications facility complies with applicable safety codes and guidelines, and FCC regulations governing radiofrequency emissions.

17.55.070 Effective Date of Decision.

The decision shall become effective only when:

1. The 10-day request for hearing period has expired, or the appeal period following a hearing authority decision has expired or, if appealed in accordance with Chapter 17.70; and

2. All necessary prior approvals have been obtained.

17.55.080 Notice of administrative decision procedure.

Notice of an administrative decision to approve a community development permit shall be given as follows:

(a) Contents of Notice. The contents of a notice of administrative decision shall be as follows:

a. Hearing Information. A brief description of the city's general procedure concerning the conduct of hearings and decisions; and the phone number and street address of the department, where an interested person could call or visit to obtain additional information;

b. Project Information. The date of filing of the application and the name of the applicant; the city's file number assigned to the application; a general explanation of the matter to be considered; and a general description, in text and/or by diagram, of the location of the property that is the subject of the hearing;

c. Coastal Zone Information. If the proposed development is within the coastal zone, the notice shall also include a statement that the development is within the coastal zone.

(b) Method of Notice Distribution. A notice of administrative decision shall be given as follows:

(1) Mailed notice for administrative permits as referenced herein shall be provided to:

(A) Owners of all property that are abutting the exterior boundaries of the subject lot. The names and addresses used for such notice shall be those appearing on the equalized county assessment roll, as updated from time to time; and

(B) Any person who has filed a written request for notice with the department and has paid the required fee for the notice.

(2) Posting. The department shall conspicuously post notice on the subject lot in a location that can be viewed from the nearest street. If the subject lot is a through lot, a notice shall be conspicuously posted adjacent to each street frontage in a location that can be viewed from the street.

(3) Timeline. The notice shall be mailed and posted at least 10 days before an action by the Community Development Director or their designee to approve a community development permit.

(4) Duration of Posting. The notice shall be continuously posted from the date required by subsection (b)(3) of this section until the effective date of the

Community Development Director or their designee's decision to approve, or approve with conditions, the community development permit.

(5) Provide Comment. Members of the public may provide comments during the 10 days prior to the approval by the Community Development Director or their designee.

1924350.1

DRAFT

June 26, 2025 Agenda Item: **11e**

Honorable Members
Of The Marina City Council

Marina City Council Meeting
of July 1, 2025

MARINA CITY COUNCIL TO CONSIDER INTRODUCING ORDINANCE NO. 2025-, AMENDING THE MARINA MUNICIPAL CODE (MMC), TITLE 8, BY ADDING A NEW CHAPTER 8.80 - "SHOPPING CART REGULATIONS". THE PROPOSED ORDINANCE IS EXEMPT FROM ENVIRONMENTAL REVIEW PURSUANT TO SECTION 15061(B)(3) OF THE CEQA GUIDELINES.

RECOMMENDATION: It is recommended that the City Council consider:

1. Introducing Ordinance No. 2025-, amending the Marina Municipal Code (MMC) Title 8, to add Chapter 8.80 relating to shopping cart regulations as directed; and
2. Find this action is exempt from environmental review pursuant to Section 15061(b)(3) of the CEQA Guidelines.

BACKGROUND

Abandoned shopping carts constitute a nuisance, create potential hazards to the health and safety of the public, and interfere with pedestrian and vehicular traffic within the City. The accumulation of wrecked, abandoned, and dismantled shopping carts on public or private property also tends to create conditions that reduce property values and promote blight and deterioration.

Staff received a request from the City Council to begin examining this policy issue. From January through March staff reviewed other cities' shopping cart regulations and crafted the proposed ordinance based on the needs of the City of Marina.[1] The MMC Amendment for shopping cart regulations is to address current and potential future safety issues and give clarity as to how shopping cart regulations are addressed within the City.

Chapter 19 of the California Business and Professions Code (Sections 22435 to 22435.13) provides regulations to eliminate the accumulation of abandoned shopping carts and permits local governments to develop complementary regulations via ordinance. This chapter would implement and augment these provisions of state law.

On May 2, 2025, staff conducted an outreach meeting via zoom for the businesses and shopping centers impacted by this ordinance. Staff received input related to different impacts and concerns that staff has addressed in the ordinance and staff report below.

On June 6, 2025, staff presented the draft ordinance to the Public Works Commission and received input that has been incorporated into the draft ordinance **(EXHIBIT A).**

ANALYSIS

Staff has identified several pros and cons associated with including these provisions in the MMC.

One benefit of shopping cart regulations is that they will provide further clarity regarding the regulation of current and future shopping cart nuisances in the City of Marina. By deterring cart removal by individuals and imposing responsibility on business owners, the regulations support the goal of preventing shopping carts from being removed and abandoned.

[1] City of Patterson Municipal Code Chapter 9.26; City of San Luis Obispo Municipal Code Chapter 8.10.

One potential drawback to the shopping cart regulations is the increased burden on the City for the regulation and management of these potential nuisances. Here is a non-exhaustive list of ongoing staff obligations under this ordinance:

- Cart retrieval:
  - Notification to the business owner that a shopping cart is abandoned;
  - Waiting for 72 hours after notification;
  - Retrieval of the cart after owner's failure to retrieve; and
  - Second notification to the business owner that the City has retrieved the cart.
- Cart impoundment:
  - Disposal is only allowed after 30 days, so staff must track how long each cart has been impounded.
  - Under Business and Professions Code Section 22435.7(e), the City must hold impounded carts at a location that is both:
    - (1) reasonably convenient to the owner of the shopping cart; and
    - (2) open for business at least six hours of each business day.

The ordinance will likely increase staff workload in the first several months after its adoption because of the requirement that all current and future business owners submit a shopping cart containment plan no later than 90 days after the ordinance takes effect (or 60 days after their business license is issued for new businesses). Staff obligations related to these plans include the following:

- Inform business owners that they need to submit a shopping cart containment plan[2];
- Track all businesses that are subject to the ordinance to confirm that they have submitted plans;
- Follow-up with owners who have not submitted plans on time (and possibly fine them if they remain out of compliance after multiple notices);
- Notify the owner within 30 days of submission whether the containment plan is consistent with the standard plan or if changes are required.

FISCAL IMPACT

Business owners must submit a cart retrieval plan within 90 days of the ordinance taking effect. The fee for reviewing the cart retrieval plan or plan amendment is proposed to be set at $220 and established by a separate fee schedule amendment in conjunction with this ordinance amendment.

Business owners who fail to submit a plan for implementing the proposed plan measures, or who fail to implement any required modifications to the plan within the timeframes specified, would be subject to a $500 civil penalty, plus an additional penalty of $50 for each day of noncompliance. Note that other jurisdictions have imposed fines of up to $1,000 for failure to submit shopping cart management plans on time.[3] Other jurisdictions have imposed fees for the cost of reviewing plans.[4]

The ordinance references the California Business and Professions Code (BPC), which has limitations on the fees that municipalities can charge. BPC Section 22435.7(f) limits the maximum fine to retrieve and impound an abandoned shopping cart to fifty dollars ($50). If this amount is increased by the legislature, then the City will be able to increase the citation amount without

[2] Example Abandoned Shopping Cart Prevention and Retrieval Plan (San Luis Obispo): https://www.slocity.org/home/showpublisheddocument/32411/637920087539200000

[3] See, e.g., City of Milpitas Municipal Code § V-13-160 (imposing $1,000 penalty and additional $50 penalty per each day of noncompliance for failure to timely submit plan); Daly City Municipal Code § 8.58.140 (requiring installation of disabling devices upon failure to timely submit plan, and imposing $1,000 penalty and additional $50 penalty per day of noncompliance).

[4] See, e.g., City of San Jose Municipal Code § 9.60.340 (requiring with submission of plan the payment of a fee set by City Council resolution).

modifying the ordinance. Further, 22435.7(d) allows a city to recover its actual costs for impounding shopping carts when a shopping cart impedes emergency services or when a business has been notified and it remains after three days. Unauthorized possession of an abandoned shopping cart may result in an infraction or an administrative citation starting at $100 per day.

ENVIRONMENTAL REVIEW

The proposed project is exempt from the California Environmental Quality Act (CEQA) under Section 15061(b)(3) of the State CEQA Guidelines. Staff has determined that the exemption applies in this case because the proposed procedural changes would not result in a direct or a reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have potential for causing significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

CONCLUSION

This request is submitted for City Council consideration and action.

Respectfully submitted,

_____

Shane Doughty
Planning Intern
City of Marina

_____

Nicholas McIlroy, AICP
Senior Planner
City of Marina

REVIEWED/CONCUR:

_____

Guido Persicone, AICP
Community Development Director
City of Marina

_____

Layne Long
City Manager
City of Marina

Exhibit A: Draft Ordinance
Exhibit B: Draft Shopping Containment Plan Fee

ORDINANCE NO. 2025-

AN ORDINANCE AMENDING THE MARINA MUNICIPAL CODE (MMC), TITLE 8, BY ADDING A NEW CHAPTER 8.80 - "SHOPPING CART REGULATIONS". THE PROPOSED ORDINANCE IS EXEMPT FROM ENVIRONMENTAL REVIEW PERSUANT TO SECTION 15061(B) (3) OF THE CEQA GUIDELINES.

THE CITY COUNCIL OF THE CITY OF MARINA DOES HEREBY ORDAIN AS FOLLOWS:

1. The Community Development Department (CDD) of the City of Marina (City), through its regular use and implementation of the Marina Municipal Code (MMC), finds that new language should be added for clarity.

2. The addition to Title 8 of MMC Chapter 8.80 explicitly states that abandoned carts are a Health and Safety issue and gives the City of Marina the ability to impound abandoned shopping carts if necessary.

3. The adoption of these procedural standards will clarify important processes for both City staff and the general public.

4. Title 8, Chapter 8.80 entitled "Shopping Cart Regulations", containing Sections 8.80.010 to 8.80.190, is hereby added to the Marina Municipal Code to read as set forth on the attached **Exhibit A** and incorporated herein.

5. Chapter 8.80 will become the central location for regulations pertaining to shopping cart procedures in the City of Marina. This chapter will not impact the defined terminology for an abandoned shopping cart in MMC Section 8.70.050 ("Nuisance defined").

6. Environmental. The proposed Ordinance amendments are not subject to environmental review pursuant to the State CEQA Guidelines, California Code of Regulations, Title 14, Article 5, Section 15061(b)(3) because the proposed procedural changes would not result in a direct or a reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have potential for causing significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

7. Effective Date. This Ordinance shall be in full force and effect thirty (30) days after its final passage and adoption.

8. Severability. If any portion of this Ordinance is found to be unconstitutional or invalid the City Council hereby declares that it would have enacted the remainder of this Ordinance regardless of the absence of any such invalid part.

9. Posting of Ordinance. Within fifteen (15) days after the passage of this Ordinance, the City Clerk shall cause it to be posted in the three (3) public places designated by resolution of the City Council.

The foregoing Ordinance was introduced at a regular meeting of the City Council of the City of Marina duly held on July 1, 2025, and was passed and adopted at a regular meeting duly held on August 6, 2025, by the following vote:

AYES, COUNCIL MEMBERS:

NOES, COUNCIL MEMBERS:

ABSENT, COUNCIL MEMBERS:

ABSTAIN, COUNCIL MEMBERS:

_____

Bruce C. Delgado, Mayor

ATTEST:

_____

Anita Sharp, Deputy City Clerk

Exhibit A

Chapter 8.80 - Shopping Cart Regulations

8.80.010 Intent and declaration of nuisance.
8.80.020 Definitions.
8.80.030 Enforcement authority.
8.80.040 Shopping cart identification signs.
8.80.050 Shopping cart containment plan required.
8.80.060 Permission for cart removal from business premises.
8.80.070 Cart containment plan review fee.
8.80.080 Shopping cart retrieval – registration and records required.
8.80.090 Cart containment plan approval, conditional approval or denial.
8.80.100 Penalties for failing to submit a prevention plan.
8.80.110 Repeat offenders – imposition of additional measures to prevent cart removal.
8.80.120 Physical containment system.
8.80.130 Unauthorized acts or possession of an abandoned shopping cart.
8.80.140 Shopping cart retrieval.
8.80.150 Impound, retrieval, and administrative costs and fines.
8.80.160 Exemptions.
8.80.170 Disposition of carts after thirty days.
8.80.180 Remedies.
8.80.190 Appeal procedure.

8.80.010 Intent and declaration of nuisance.

A. In enacting this chapter, the City of Marina (City) hereby finds that abandoned shopping carts constitute a nuisance, create potential hazards to the health and safety of the public, and interfere with pedestrian and vehicular traffic with the City. The accumulation of wrecked, abandoned, and dismantled shopping carts on public or private property also tends to create conditions that reduce property values and promote blight and deterioration.

B. The purpose of this chapter is to ensure that measures are taken by store owners to prevent the removal of shopping carts from store premises and parking lots and to facilitate the retrieval of abandoned shopping carts as permitted by State law. This chapter implements the provisions of California Business and Professions Code Section 22435 et seq.

C. To the extent any provision of this chapter is determined to be preempted by state law or otherwise held invalid, it shall be deemed severed from all other provisions of this chapter and such other provisions shall remain in full force and effect.

8.80.020 Definitions.

A. "Abandoned cart" shall mean any shopping cart that has been removed without written permission of the cart owner or on-duty manager from the premises of the business establishment, regardless of whether it has been left on either private or public property.

B. "Business premises" shall mean the entire area owned and utilized by the business establishment that provides carts for use by customers, including any parking lot or other property provided by the cart owner for customer parking.

C. "Cart owner" shall mean any person or entity, who, in connection with the conduct of a business, owns, leases, possesses, uses, or otherwise makes any cart available to customers or the public. For the purposes of this chapter, "cart owner" shall also include the owner's on-site or designated agent that provides the carts for use by its customers.

D. "Enforcement official" shall mean the city manager or other enforcement official as designated by the city manager.

E. “Qualified cart retrieval service” shall mean a city approved commercial service operated by a third party and paid by a cart owner to retrieve and return shopping carts.
F. “Shopping cart” or “cart” shall mean a basket which is mounted on wheels or a similar device provided by a business establishment for use by a customer for the purpose of transporting goods of any kind, including, but not limited to, grocery store shopping carts.

8.80.030 Enforcement authority.
A. The city manager and their designees shall have the authority and powers necessary to determine whether a violation of this chapter exists and to take appropriate action to gain compliance with the provisions of this chapter and applicable state codes. These powers include, without limitation,
the authority to impound the shopping carts, issue administrative citations, inspect public and private property, impose civil penalties for any violation of this chapter, or pursue criminal actions. The provisions of this chapter are cumulative and in addition to any and all other procedures or remedies provided in ordinances of the City or by state law for the abatement of, or prosecutions for, nuisances.

8.80.040 Shopping cart identification signs.
A. Each cart owner shall post and maintain a sign at each customer pedestrian exit at the owner’s establishment which meets all the following minimum specifications:
1. Meet or exceed eighteen inches in width and twenty-four inches in height.
2. Using block lettering not less than one-half inch in width and two inches in height, contain a statement to the effect that unauthorized removal of a shopping cart from the business premises, or possession of a shopping cart in a location other than on the business premises, is a violation of state law and city ordinance.
3. List a local or toll-free telephone number and email for shopping cart retrieval.
4. The signs shall be conspicuously and prominently displayed on the interior walls of the building within two feet of each customer pedestrian exit.

B. Each cart owner shall include clearly legible information on each shopping cart that identifies the owner of the cart or the retailer, or both; notifies the public of the procedure to be utilized for authorized removal of the cart from the premises; notifies the public that the unauthorized removal of the cart from the premises or parking area of the retail establishment, or the unauthorized possession of the cart, is a violation of state law; and lists a valid telephone number or address for returning the cart removed from the premises or parking area to the owner or retailer.

8.80.050 Shopping cart containment plan required.
A. Each cart owner must contain all shopping carts on the business premises except as provided by this chapter.
B. Every cart owner shall operate and maintain a shopping cart containment program pursuant to a shopping cart containment plan. Every cart owner shall submit a proposed plan no later than ninety days after the effective date of this chapter. Any cart owner which opens operations after the effective date of this chapter shall submit a proposed plan no later than sixty days after the issuance of their business license under MMC Chapter 5.16. The shopping cart containment plan must contain all of the following provisions:
1. Name of the Owner. The name of the business owner, the physical address of the owner’s establishment, and the name, address and phone number(s) if different from the business owner.
2. Inventory of Carts. A complete inventory of carts maintained on or in the business premises.

3. Cart Identification. Shopping cart identification requirements as listed in Section 8.80.040(B).

4. Loss Prevention Measures. A description of the specific measures that the cart owner shall implement to prevent cart removal from the business premises. These measures may include, but are not limited to:

a. Placing signs directing customers not to remove the shopping carts from the business premises without express written consent of the cart owner;

b. Using courtesy clerks to accompany customers and return the carts to the owner's establishment;

c. Using security personnel to prevent shopping carts from being removed from the business premises or requiring a security deposit for use of a cart;

d. Providing small, two-wheeled shopping carts that a customer may rent or purchase for the customer's personal use;

e. Providing a neighborhood shuttle or other service to transport purchased goods for a customer;

f. Installing on shopping carts electronic disabling devices, such as wheel locks, which disable the cart upon crossing a barrier at the perimeter of the business premises;

g. Installing barriers on carts or at the doors, near the loading areas, or at other defined perimeters of the business premises to prevent the passage of a cart beyond such barrier.

C. A cart owner shall submit a plan amendment to address any changed circumstances no later than sixty days after the change occurs. The addition of more than ten carts to a cart owner's inventory constitutes a changed circumstance; the cart owner shall notify the Community Development Department of this addition no later than ten days after the addition, and submit a plan amendment as required by this section.

8.80.060 Permission for cart removal from business premises.

No person shall be deemed to be authorized to remove a shopping cart from the business premises unless such person possesses express written authorization from the cart owner. Written permission shall be valid for a period of time not to exceed seventy-two hours. A contract between the cart owner and a person to provide repair or maintenance of the owner's carts constitutes express written authorization for such person to remove the owner's carts for the purpose of repair or maintenance.

8.80.070 Cart containment plan review fees.

A cart owner must submit a shopping cart containment plan that complies with the requirements established in Section 8.80.050, and any amendments to a shopping cart containment plan previously approved. The cart owner shall pay a fee upon submitting the plan or plan amendment for review of the plan or plan amendment in an amount established by ordinance of the City Council.

8.80.080 Shopping cart retrieval—Registration and records required.

Any person or business who engages in shopping cart retrieval must be registered with the city so as to provide contact names and phone numbers to city enforcement staff. Each shopping cart retrieval business shall retain records showing written authorization from the shopping cart owner, or any agent thereof, to retrieve the cart or carts and to be in possession of the cart or carts retrieved. A copy of the record showing written authorization shall be maintained in each vehicle used for shopping cart retrieval and presented to enforcement personnel upon request.

8.80.090 Cart containment plan approval, conditional approval or denial.

A. The city manager or their designee shall approve, conditionally approve, or deny a proposed shopping cart containment plan, and shall notify the cart owner of such decision within thirty days of receipt of the plan and payment of the fee required pursuant to Section 8.80.070. If approved, the cart containment plan shall be implemented by the cart owner no later than thirty days from the date of approval.

B. A shopping cart containment plan or an amendment to a plan may be approved subject to conditions, or denied based upon one or more of the following grounds:

1. Implementation of the plan violates any provision of the building, zoning, health, safety, fire, police, or other provision of this code or any county, state or federal law which substantially affects public health, welfare, or safety;
2. The plan fails to include all of the information required by this chapter;
3. The plan is insufficient or inadequate to prevent removal of shopping carts from the business premises as evidenced by data regarding the cart owner's abandoned shopping carts;
4. The plan fails to address any special or unique conditions due to the geographical location of the business premises as they relate to cart retention and prevention efforts;
5. Implementation of the plan violates another provision of the Municipal Code;
6. The cart owner knowingly makes a false statement of fact or omits a material fact required to be submitted for the plan, or for any amendment to the plan or in any other information required by the city.

C. Within fifteen (15) days of the written decision of the city manager or their designee that a plan or amendment is incomplete or denied, the cart owner shall submit a revised or complete plan, as appropriate. The city may require specific measures to be included in the plan, including mandatory electronic disabling devices.

D. The city manager may revoke any prior approval of a plan based on one or more of the grounds listed in subsection B of this section.

8.80.100 Penalties for failing to submit a prevention plan.

Any cart owner that fails to submit a plan, implement the proposed plan measures, or implement any required modifications to the plan by the city within the time frames specified in this chapter shall be subject to a five-hundred-dollar civil penalty, plus an additional penalty of fifty dollars for each day of noncompliance.

8.80.110 Repeat offenders—Imposition of additional measures to prevent cart removal.

Specific measures may be required by the city to prevent cart removal from the business premises if the business has had more than three carts impounded in any six-month period. These measures may include, but are not limited to: ordering the business to immediately install disabling devices on all of their shopping carts, requiring the posting of a security guard to deter and stop customers who attempt to remove carts from the premises, installation of bollards, chains or similar devices around the premises to prevent cart removal, or requiring that the business provide for the rental or sale of carts that can be temporarily or permanently used by customers for transport of purchases to a location outside the premises.

8.80.120 Physical containment system.

A. A cart owner shall be required to install a physical containment system to the satisfaction of the planning director when the cart owner establishes a facility consisting of more than five thousand square feet or more of new construction.

B. A cart owner shall be required to install a physical containment system to the satisfaction of the planning director and the city manager following the issuance of more than ten administrative citations in a thirty-day period.

C. Mandatory locking of carts after hours. Carts stored outdoors shall be locked after business hours in a manner that prevents theft.

8.80.130 Unauthorized acts or possession of an abandoned shopping cart.

It is unlawful for any person to do any of the following:

A. To either temporarily or permanently remove a cart that has a permanently affixed sign as provided in MMC Section 8.80.040.B from the premises or parking area of a business establishment without the express prior written approval of the cart owner or on-duty manager of the business establishment. Written permission shall be valid for a period of time not to exceed seventy-two hours.

B. Except in cases where written permission is granted, to be in possession of a cart that has been removed from the premises or parking area of a business establishment unless it is in the process of being immediately returned to the cart owner or business establishment.

C. To alter, convert, or tamper with a shopping cart, or to remove any part or portion thereof, or to remove, obliterate or alter serial numbers on a shopping cart or to be in possession of any shopping cart with serial numbers removed, obliterated, or altered, with the intent to temporarily or permanently deprive the cart owner of possession of the cart.

D. To leave or abandon a shopping cart at a location other than the business premises with the intent to temporarily or permanently deprive the cart owner of possession of the shopping cart. This section shall not apply to shopping carts that are removed for the purposes of repair or maintenance.

8.80.140 Shopping cart retrieval.

A. The city may retrieve an abandoned cart from public property (or private property with the consent of the property owner) in the following circumstances:

1. Where the location of the shopping cart will impede emergency services;
2. When the abandoned shopping cart does not identify the owner of the cart, as required in Section 8.80.040;
3. When the city has contacted either the cart owner, the cart owner's agent, or the entity contracted by the cart owner under the abandoned cart prevention plan, and actually notified them of the abandoned cart and the cart has not been retrieved within seventy-two hours;
4. When the shopping cart is in a public right-of-way.

B. Alternatively to subsection A of this section, the city shall immediately abate, remove, and impound an off-site shopping cart that has identifying information affixed to it, as set forth in Section 8.80.040, if the city provides the cart owner, or whoever is identified by the cart owner as the party responsible for retrieval of the carts, with actual notice within twenty-four hours following the impound and informs the cart owner or responsible party of the location where the off-site shopping cart may be claimed.

8.80.150 Impound, retrieval, and administrative costs and fines.

A. In the event the city retrieves a shopping cart, the city shall notify the cart owner or the responsible party, as identified in Section 8.80.080, of the following:

1. The location of the shopping cart(s).
2. How the shopping cart(s) may be retrieved.
3. Failure to retrieve the shopping cart(s) may result in the sale or destruction of the impounded shopping cart(s), and that the cart owner will be responsible for the city's costs, and that the city may fine owners fifty dollars after the city has picked up shopping carts belonging to the cart owner more than three times in a calendar year.
4. If the shopping cart does not provide adequate identification or markings to determine its owner, the city shall only be required to notify the cart owner if the city obtains actual knowledge of the cart owner's identity.

B. The city's enforcement officer may issue an administrative citation as stipulated in California Code, Business and Professions Code - BPC § 22435.7.
C. The enforcement officer or Public Works Department that impounds a shopping cart under the authority of this ordinance and under State Law is authorized to recover its actual costs for providing this service as stipulated in BPC § 22435.7.
D. Notwithstanding Section 8.80.160, the city is not obligated to release an impounded shopping cart to the cart owner unless the owner pays all applicable administrative citation and impound fees.

8.80.160 Exemptions.
No administrative citation fine shall be levied against:
A. A cart owner who installs and maintains a security system that causes at least one of the wheels of the shopping cart to lock when the conveyance is moved across an antenna located at the perimeter of the establishment's parking area.
B. A business that owns or maintains fifteen or less shopping carts for use by customers.
C. Nothing in this section shall preclude the city from imposing and collecting an impound fee prior to releasing any impounded shopping cart.

8.80.170 Disposition of carts after thirty days.
If a shopping cart is not retrieved by its owner within thirty days after the cart owner has received notice of the cart being impounded, or if the cart's owner cannot be determined within thirty days after the cart has been impounded, the cart, pursuant to state law, may be sold or destroyed by the city, its agents, or contractors.

8.80.180 Remedies.
Any person who violates any provisions of this chapter shall be subject to any civil, criminal, or administrative remedies as provided by law. Unless otherwise stated in this chapter, a violation of this chapter shall be assessed as an infraction pursuant to MMC Chapter 1.08 (Code Violations – Penalties) with a fine not exceeding one hundred dollars for the first conviction. If the violation is on private property, then the enforcement official shall issue an administrative citation pursuant to MMC Chapter 1.12 (Administrative Fines).

8.80.190 Appeal procedure
The business owner may appeal administrative citations as provided for appeal of administrative fines in Chapter 1.12.

ORDINANCE NO. 2025-11

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MARINA AMENDING SECTION 10.60.010 "SPEED LIMITS ESTABLISHED" OF CHAPTER 10.60 "SPEED LIMITS" OF TITLE 10 "VEHICLES AND TRAFFIC," OF THE MUNICIPAL CODE TO ADOPT *PRIMA FACIE* SPEED LIMITS PURSUANT TO AN ENGINEERING AND TRAFFIC SURVEY AND THE CALIFORNIA VEHICLE CODE

WHEREAS, California Vehicle Code Sections 22357 and 22358 provide that local entities may declare *prima facie* speed limits of more than 25 miles per hour on City streets on the basis of an engineering and traffic survey; and

WHEREAS, THE California Vehicles Code Section 627 defines an engineering and traffic survey to include consideration of all of the following:

1) Prevailing speeds as determined by traffic engineering measurements;
2) Accident records;
3) Highway, traffic and roadside conditions not readily apparent to the driver; and

WHEREAS, the City of Marina has completed an engineering and traffic survey pursuant to California Vehicle Code Sections 22357 and 22358.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MARINA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. The City of Marina is authorized to use radar enforcement of speed limits on local streets pursuant to the *prima facie* speed limits specified in the California Vehicle Code and on other streets if the speed limits established by the City are consistent with the results of an engineering and traffic survey conducted according to the standards set forth in the California Vehicle Code.

SECTION 2. The City Council of the City of Marina finds and declares that an Engineering and Traffic Survey has been completed in full compliance with the requirements of the California Vehicle Code.

SECTION 3 Based on the findings and recommendations of the Engineering and Traffic Survey, all Subsections of Section 10.60.010 entitled "Speed Limits Established" of Title 10, Chapter 10.60, of the Marina Municipal Code are amended, repealing in their entirety and replacing Subsections A through G and adding Subsections H through Y; to read in their entirety as follows:

"A. Reservation Road, as follows:
   1. Thirty-five miles per hour from Dunes Drive to Beach Road;
   2. Thirty miles per hour from Beach Road to Del Monte Blvd;
   3. Thirty-five miles per hour from Del Monte Blvd to Crescent Ave;
   4. Forty miles per hour from Crescent Ave to Salinas Ave;
   5. Fifty miles per hour from Salinas Avenue to Imjin Parkway;
   6. Fifty-five miles per hour from Imjin Parkway to Blanco Road.

B. Del Monte Boulevard, as follows:
   1. Thirty-Five miles per hour from six hundred feet south of Reindollar Avenue to Reservation Road;
   2. Thirty miles per hour from Reservation Road to Beach Road;
   3. Forty miles per hour from Beach Road to Marina Greens Drive.

C. Cardoza Avenue, as follows:
   1. Thirty miles per hour from Reservation Road to the end thereof, which is approximately six hundred feet north of Lakewood Drive.

D. Carmel Avenue, as follows:
   1. Twenty-five miles per hour from Del Monte Boulevard to approximately 300 feet west of Everett Drive;
   2. The prima facie speed limit on Carmel Avenue from approximately 300 feet west of Everett Drive to Bostick Avenue shall be fifteen miles per hour when children are present;
   3. Twenty-five miles per hour from Bostick Avenue to Salinas Avenue.

E. California Avenue, as follows:
   1. Thirty miles per hour from Reservation Road to Carmel Avenue;
   2. Twenty-five miles per hour from Carmel Avenue to Reindollar Avenue;
   3. Forty miles per hour from Reindollar Avenue to Imjin Parkway;
   4. Thirty miles per hour from Imjin Parkway to 8th Street.

F. Crescent Avenue, as follows:
   1. Thirty miles per hour from Carmel Avenue to Reservation Road;
   2. Twenty-five miles per hour from Reservation Road to the end thereof, which is approximately two hundred fifty feet north of Quebrada Del Mar.

G. Beach Road, as follows:
   1. Thirty miles per hour from Reservation Road to Del Monte Boulevard;
   2. Twenty-five miles per hour from Del Monte Boulevard to De Forest Road;
   3. The prima facie speed limit from Begonia Circle to Villa Circle shall be fifteen miles per hour when children are present.

H. 2nd Avenue, as follows:
   1. Forty miles per hour from Divarty Street to 8th Street;
   2. Thirty-five miles per hour from 8th Street to Imjin Parkway.

I. 3rd Avenue, as follows:
   1. Twenty-five miles per hour from 8th Street to Imjin Parkway.

J. 8th Street, as follows:
   1. Twenty-five miles per hour from 2nd Avenue to 3rd Avenue;
   2. Thirty-five miles per hour from 5th Avenue/California Avenue to Inter-Garrison Road.

K. 9th Street, as follows:
   1. Twenty-five miles per hour from 1st Avenue to 2nd Avenue.

L. De Forest Road, as follows:
   1. Thirty miles per hour from Beach Road to Reservation Road.

M. Reindollar Avenue, as follows:
   1. Twenty-five miles per hour from Del Monte Boulevard to California Avenue;
   2. Twenty-five miles per hour from California Avenue to Carmel Avenue.

N. Lake Drive, as follows:
   1. Twenty-five miles per hour from Palm Avenue to Reservation Road.

O. Palm Avenue, as follows:
   1. Twenty-five miles per hour from Lake Drive to Del Monte Boulevard.

P. Salinas Avenue, as follows:
   1. Twenty-five miles per hour from Carmel Avenue to Reservation Road.

Q. Paul Davis Drive, as follows:
   1. Twenty-five miles per hour from Healy Avenue to Marina Greens Drive.

R. Seacrest Avenue, as follows:
   1. Thirty miles per hour from Carmel Avenue to Reservation Road.

S. Sunset Avenue, as follows:
   1. Twenty-five miles per hour from Reindollar Avenue to Carmel Avenue.

T. Vaughan Avenue, as follows:
   1. Twenty-five miles per hour from Reindollar Avenue to Carmel Avenue.

U. Crescent Street, as follows:
   1. The prima facie speed limit from Patton Parkway to Reindollar Avenue shall be twenty-five miles per hour when children are present.

V. Patton Parkway, as follows:
   1. The prima facie speed limit from End (Marina High School) to Crescent Street shall be twenty-five miles per hour when children are present;
   2. Thirty-five miles per hour from Crescent Street to California Avenue.

W. Preston Drive, as follows:
   1. Thirty miles per hour from Abrams Drive to Imjin Parkway.

X. Abrams Drive, as follows:
   1. Thirty miles per hour from Preston Drive to Imjin Parkway (East).
   2. Thirty miles per hour from Preston Drive to Imjin Parkway (West).

Y. Imjin Parkway, as follows:
1. Forty-five miles per hour from State Route 1 to California Avenue;
2. Fifty miles per hour from California Avenue to Reservation Road.

Z. Marina Heights Drive, as follows:
1. Thirty miles per hour from California Avenue to Imjin Parkway."

SECTION 4. The *prima facie* speed limit for each portion of Reservation Road, Del Monte Boulevard, Cardoza Avenue, Carmel Avenue, California Avenue, Crescent Avenue, Beach Road, 2nd Avenue, 3rd Avenue, 8th Street, 9th Street, De Forest Road, Reindollar Avenue, Lake Drive, Palm Avenue, Salinas Avenue, Paul Davis Drive, Seacrest Avenue, Sunset Avenue, Vaughan Avenue, Crescent Street, Patton Parkway, Preston Drive, Abrams Drive, Imjin Parkway, and Marina Heights Drive set forth in Section 3 hereof, shall be as set forth therein when signs are erected giving notice thereof.

SECTION 5. Any provision of the Marina Municipal Code or appendices thereto inconsistent with the provisions of this Ordinance, to the extent of such inconsistencies and no further, is hereby repealed or modified to the extent necessary to effect the provisions of this Ordinance.

SECTION 6. The City Council hereby declares it would have passed this ordinance sentence by sentence, paragraph by paragraph, and section by section, and does hereby declare that the provisions of this ordinance are severable and, if for any reason any sentence, paragraph or section of this ordinance shall be held invalid, such decision shall not affect the validity of the remaining parts of this ordinance.

SECTION 7. This ordinance shall take effect and be in force thirty (30) days from and after its final passage.

SECTION 8. Within fifteen (15) days after the passage of this ordinance, the City Clerk shall cause it to be posted in the three (3) public places designated by resolution of the City Council.

The foregoing ordinance was introduced at a regular meeting of the City Council of the City of Marina duly held on June 3, 2025, and was passed and adopted at a regular meeting duly held on July 1, 2025, by the following vote:

AYES: COUNCIL MEMBERS:
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:

_____
Bruce C. Delgado, Mayor

ATTEST:

_____
Anita Sharp, Deputy City Clerk

June 23, 2025 Item No: **13b**

Honorable Mayor and Members of the Marina City Council

Regular Meeting of July 1, 2025

CITY COUNCIL TO RECEIVE A STATUS UPDATE AND PROVIDE ADDITIONAL DIRECTION TO STAFF ON ACTIVITIES RELATING TO LOCKE-PADDON PARK. THIS PRESENTATION IS EXEMPT FROM ENVIRONMENTAL REVIEW PER SEC. 15378 OF THE CEQA GUIDELINES.

REQUEST:
City Council to receive a status update relating to Locke-Paddon Park (LPP or the Park), including receiving informational documents provided to the Monterey Peninsula Regional Park District (MPRPD) Real Estate Subcommittee meeting on June 11, 2025, and to request any additional direction to the City Manager to begin negotiating long- and short-term activities already authorized by the City Council.

BACKGROUND:
The City Council and MPRPD Board held a joint meeting on Tuesday, April 29, 2025, to hear a staff presentation on the history of the Park and the deed restrictions and development constraints known to be in effect on the subject parcels, and to receive public comment and brief Council/Board member comments on goals for Park maintenance and improvements moving forward.

On May 6, 2025, the City Council provided the following direction regarding **short-term** actions and activities (from the adopted meeting minutes):

1. Direct staff and the City Attorney to initiate a discussion with MPRPD staff and counsel to determine the appropriate instrument (lease, MOU, or other) needed to pursue the development of an approximately one (1) acre Asian Community Garden at the south end of Lot 43 and begin the work of creating a Coastal Development Permit (CDP) application and EIR;
2. Direct staff to begin discussions with MPRPD staff on the process to trim the existing Cypress trees on Lots 42 and 43 (Isakson property) and along the south side of Seaside Circle (APN 033-121-010), as needed;
3. Direct City staff to begin working with MPRPD staff on a new maintenance agreement that defines roles and responsibilities between the parties;
4. Direct staff to request that MPRPD remove the residual radio tower infrastructure remaining on APN -006 at its earliest opportunity; and
5. Coordinate with MPRPD to ensure that any existing or future improvements on MPRPD-owned property is appropriately documented including, but not limited to:
    a. Existing MLK Jr. sculpture garden
    b. Existing Oak woodland community garden including planted fruit trees (food forest)
    c. Existing garden shed
    d. Existing and future decomposed granite pathways and interpretive panels
    e. Potential Asian Community Garden
    f. Potential children's sensory garden

At the same meeting, the Council also provided direction regarding the following **long-term** actions and activities:

1. Staff preparation of a comprehensive pond management/maintenance/restoration plan based on the following two (2) strategies:

    a. A CEQA-exempt "Cutting the Green Tape" restoration-based management plan, or
    b. A larger-scale plan that would require an EIR and permitting by multiple agencies

2. Potential land swap to facilitate the management of lands based on each agencies' mission and community goals.

On June 11, 2025, the Real Property/Land Use & Management Committee of the MPRPD Board held a public meeting to receive a staff report **(EXHIBIT A)**[1] and presentation **(EXHIBIT B)**[2] on the status of plans, agreements, and improvements at LPP. Councilmembers Biala and Visscher and Mayor Delgado were present. At this meeting, the Chair (Lee) of the Committee asked City representatives to convey to any Marina volunteer groups to cease activities until further notice. This request was included in a letter to the City Manager from Interim General Manager, Shuran Parker, dated June 20, 2025, and is attached as **EXHIBIT C.**

ANALYSIS:

As part of the presentation to the Real Property/Land Use & Management Committee, MPRPD staff provided the information regarding the Park properties and ownership. The chart below reflects the information provided and is updated to reflect known restrictions based on available documentation.

Property	Year Acquired	Owner	APNs	Lot No.	Acres	Restrictions
2-acre	1973	City	033-121-004	N/A	1.9	None identified
Walton Radio Parcel	1987	MPRPD	033-121-005-006	40, 41, 42, 46, 47, 48	12	Easement in favor of Walton Radio(grantor) Per MPRPD, grant funding imposed conditions: public recreation and scenic preservation Portion subject to incidental take permit mitigation area
Austin	1987	City/MPRPD	033-132-002	45	1.8	Subject to Coastal Conservancy deed restrictions – open space, wildlife habitat, and passive recreational use
MRWPCA	1987	City	033-132-003	44	2.0	Subject to Coastal Conservancy deed restrictions – open space, wildlife habitat, and passive recreational use
Crivello	1991	MPRPD	033-121-101	Portion of lots 40, 41, and 42	1.8	None identified
Crivello (Library)	2001	City	033-121-009	Portion of lot 41 and 42	2.7	Subject to being developed as a public facility, limited to an auditorium, community center, class room, community meeting room, or library
Isakson	2004	MPRPD	033-121-002	43	6.5	None identified[3]

[1] https://www.mprpd.org/files/4f23436c6/Item061125-4_LPWCPStatus.pdf
[2] https://www.mprpd.org/files/e924bbc2f/RPLUM_CommitteePresentation_250611.pdf
[3] Notice of Exemption (NOE) filed by MPRPD pursuant to CEQA for the acquisition of Lot 43 (Isakson) parcel exempting the acquisition from CEQA; further development of parcel remains subject to CEQA and the City's local coastal zone requirements.

MPRPD has also requested a letter from the City stating the City's position regarding various activities in the Park, including the City's position and maintenance obligations on the following existing and proposed activities:

- Asian American Garden
- Oak Woodland Community Garden, including food forest
- MLK Jr. Sculpture Garden
- Children's Sensory Garden

City staff requests Council direction regarding these activities as well as coordinating with MPRPD on any necessary amendment to the 2005 Master Plan for the Park.

Additionally, City staff has been in discussion with the Sierra Club regarding the Settlement Agreement between the City and the Sierra Club in 1985 which requires "the City will neither adopt nor file Negative Declarations, but shall instead require Environmental Impact Reports on all future projects except those projects otherwise categorically exempt from the EIR requirements of the California Environmental Quality Act I the Coastal Zone within the Cit of Marina".

Since the original Settlement Agreement, the Sierra Club has entered into five separate Addendums with the City to the Settlement Agreement that have allowed the City to provide a Negative Declaration for the CEQA review of certain warranted projects in the Coastal Zone. These projects have included the Library at Locke-Paddon Park, cell tower sites in the Marina Landing Shopping Center and a sidewalk from Highway 1 to Marina Dunes State Park.

☐ The Sierra Club is willing to enter into another Addendum to the Settlement Agreement exempting the City from the Environmental Impact Review requirements and permit the approval of a Coastal Development Permit and Use Permit and Design Approval and Negative Declarations that would include the following projects – some already completed, some currently being developed and others future projects: Children's Sensory Garden; Oak Woodland Community Garden; MLK Jr. Sculpture Garden; and a hybrid Coastal Passive Garden which fits in the context of the proposed Asian American Garden.

FISCAL IMPACT:
The Council has allocated funding for the Cypress tree trimming as well as a portion of the expected cost to develop the Asian Community Garden. Funding for the other short- and long-term items has not yet been identified. Staff work involved in developing MOUs, leases, or other agreements will be funded by the City's general fund.

ENVIRONMENTAL REVIEW:
This request for direction qualifies for a CEQA exemption per § 15378 of the CEQA Guidelines which allows for organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment.

CONCLUSION:
Staff requests that the Council reaffirm the tasks listed above and direct the City Manager to continue working with MPRPD staff to accomplish these goals.
Respectfully submitted,

Alyson Hunter, AICP
Planning Manager, Community Development Dept.
City of Marina

REVIEW/CONCUR

Layne Long
City Manager
Cit of Marina

EXHIBIT A

Monterey Peninsula Regional Park District

P.O. Box 223340 • Carmel, California 93922 | 4860 Carmel Valley Road • Carmel, California 93923

BOARD OF DIRECTORS
Jeffrey Markham – Ward 1
jmarkham@mprpd.org
Marina, northern Ft. Ord

Shane Anderson – Ward 2
shanea@mprpd.org
Seaside, northern Sand City, southern Ft. Ord

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kraskoff@mprpd.org
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Kathleen Lee – Ward 4
klee@mprpd.org
Pacific Grove, New Monterey, northern Pebble Beach

Monta Potter – Ward 5
mpotter@mprpd.org
Carmel, Carmel Valley, Big Sur, southern Pebble Beach

INTERIM GENERAL MANAGER
Shuran Parker
parker@mprpd.org

June 20, 2025

Layne Long, City Manager
211 Hillcrest Avenue
Marina, CA 93933

Re: Locke-Paddon Wetland Community Park

Dear Mr. Long,

I wanted to thank you for the April 29 meeting, which was the first of what I hope will be several, joint meetings between the City of Marina (City) and the Monterey Peninsula Regional Park District (District), to discuss the future of Locke-Paddon Wetland Community Park and our two agencies' interests, along with the public's desired use, for the park. Following that initial meeting, we were able to briefly discuss next steps with the District Board of Directors (Board) to gather additional information on their vision for the park and the best path forward for future meetings.

Because of the complexities surrounding the park's acquisitions, land ownership, sensitive habitat and potential regulatory complexities, the District Board has directed staff to temporarily cease new projects and activities related to new activities in the park such as the issuance of special use permits. This cessation is necessary until the District can complete review of projects already undertaken at the park without the District's express consent or requisite permitting, as well as until discussions regarding a potential new maintenance agreement with the City conclude. The District is directing the City to comply with these mandates on parcels owned by the District until further notice. The Board has assigned its Real Property/Land Use & Management Committee to meet and discuss potential uses and options for the park. A meeting of that Committee took place on June 11 (with Mayor Delgado and Councilmembers Biala and Visscher also in attendance), where we reviewed some of the historical information discussed on April 29, along with other information that will help inform the District's next joint meeting with the City.

In the meantime, I am looking forward to our July 2 meeting, to discuss next steps and plans for our next joint meeting. Please don't hesitate to reach out if you have any questions before then.

Sincerely,

Shuran Parker

Shuran Parker
Interim General Manager

AGENDA ITEM NO. 4

MONTEREY PENINSULA REGIONAL PARK DISTRICT
BOARD REPORT

DATE:	**June 11, 2025**
TO:	**Real Property / Land Use Management Committee**
FROM:	**Jake Smith, Planning & Conservation Program Manager**
REVIEWED BY:	**Shuran Parker, Interim General Manager**
SUBJECT:	**Locke-Paddon Wetland Community Park**

SUMMARY

This report provides the Real Property and Land Use Management Committee with an overview of Locke-Paddon Wetland Community Park's multi-agency acquisition history, long-standing management agreements, evolving community-led projects, and current site conditions. It is intended to support Committee discussion on how MPRPD and the City of Marina can clarify long-term management responsibilities, address deferred maintenance and past obligations, and develop a sustainable framework for ecological stewardship, public access, and future park improvements.

FISCAL IMPACT

There is no fiscal impact associated with receiving this report.

FUNDING SOURCE

Not applicable

FUNDING BALANCE

Not applicable

DISCUSSION

Locke-Paddon Wetland Community Park (Park) is a 29-acre park located in the City of Marina. It was acquired, developed, and managed through a joint partnership between the City of Marina (City) and the Monterey Peninsula Regional Park District (MPRPD). Collaborative work on the Park began shortly after the City completed the Marina Wetlands Enhancement Plan (Wetlands Enhancement Plan) in 1986 (**ATTACHMENT 1**), when the City requested MPRPD's assistance in acquiring land to protect it from development and create a public park consistent with the Wetlands Enhancement Plan.

In response, MPRPD adopted the Wetlands Enhancement Plan and entered into a Memorandum of Understanding (MOU) with the City outlining that MPRPD would assist with land acquisition and seek grant funding for creation of the Park, while the City would assume responsibility for operation and maintenance of the Park and its improvements (**ATTACHMENT 2**). This was followed in 1987 by a 25-year lease agreement (Lease), in which MPRPD leased its land to the City for $1.00 (**ATTACHMENT 3**). The Lease formalized all necessary approvals for the City to serve as the Park's manager, as originally envisioned in the MOU.

Park Properties and Ownership

Table 1. Summary of Property Ownership within Locke-Paddon Wetland Community Park.

Property	Year Acquired	Owner	APNs	Acreage
2-acre	1973	City	033-121-004	1.9
Walton Radio	1987	MPRPD	033-121-005, -006	12
Austin	1987	City/MPRPD	033-132-002	1.8
MRWPCA	1987	City	033-132-003	2
Crivello	1991	MPRPD	033-121-101	1.8
Crivello (Library)	2001	City	033-121-009	2.7
Isakson	2004	MPRPD	033-121-002	6.5

Figure 1. Locke Paddon Wetland Community Park map showing property APNs with MPRPD owned properties shown in green.

2-acre City Parcel (1973)

The City acquired an approximately 2-acre parcel (APN 033-121-004) in the Park's northwestern corner in 1973, which served as the seed parcel for the Park's formation.

Walton Radio Parcels (1987):

MPRPD acquired these parcels (APNs 033-132-005 and -006) using grant funds from the Land and Water Conservation Fund (LWCF), with the condition that they be maintained in perpetuity for public recreation and scenic preservation. A retained easement allowed existing radio facilities to remain until decommissioned, at which point the easement could be extinguished and the remaining infrastructure removed.

Austin and MRWPCA Parcels (1987):

These parcels were jointly acquired by MPRPD and the City using State Coastal Conservancy (SCC) grant funds. Deed restrictions limit their use to open space, habitat protection, and passive recreation. MPRPD and the City each hold a 50% interest in the Austin parcel (APN 033-132-002), while the MRWPCA parcel (APN 033-132-003) is solely owned by the City.

Crivello Property (1991):

MPRPD purchased this property for approximately $900,000 using a combination of its General Fund and City contributions. The acquisition followed an agreement reflecting MPRPD's goal to "purchase and preserve open space near Locke-Paddon Wetlands" and the City's goal to "develop a public facility, such as a library or other community purpose." The City was granted a 10-year option to purchase up to three acres for civic use. In 2001, it exercised this option, acquiring 2.7 acres (APN 033-121-009) for the Marina Branch Library. The remaining 1.8 acres (APN 033-132-002) remained under MPRPD ownership for Park uses.

Isakson Property (2004):

The final private parcel acquisition that completed the Parks footprint. MPRPD purchased the property (APN 033-121-002) for approximately $900,000 to preserve it for fish and wildlife habitat, passive recreation, and open space management. MPRPD subsequently funded the demolition of residential and agricultural structures to enhance the open space character.

Park Use and Management Plans

1987 Wetland Enhancement Plan

As outlined in the MOU and Lease, the Park's development was guided by the 1987 Wetlands Enhancement Plan (**ATTACHMENT 1**), which emphasized wetland preservation, removal of invasive species, restoration of native habitat, and development of passive recreational facilities designed to require only periodic maintenance. Although the Park was estimated to be capable of accommodating up to 187 visitors, facilities were intentionally programmed to support no more than 60 users at any given time, preserving space for enhanced habitat and reducing wildlife disturbance. Facilities such as the restroom and amphitheater were designed to be "subdued and sympathetic with the site," constructed of "durable material sympathetic to the habitat such as heavy stone or timber," and sited more built-out improvements like the parking lot to be clustered in the northeast corner to distance them from the wetland pond.

1994 Coastal Wetland/Vernal Pond Management Plan

While the Wetlands Enhancement Plan helped guide land use and broader management goals for the Park, the City of Marina also developed a Coastal Wetland/Vernal Pond Management Plan in 1994 (**ATTACHMENT 4**) part of its LCP revision process that was intended to guide future policies for wetland protection, restoration, and public use within city limits. MPRPD actively participated in the Technical Advisory Committee, endorsed the final document, and committed to support implementation of its key policies—namely, habitat protection, restoration, low-impact public access, and long-term vegetation management. MPRPD also provided funding

for plan implementation focused on maintaining wetland habitat protection, passive recreation improvements, and other habitat management enhancement actions.

2005 Locke Paddon Wetland Community Park Master Plan

Following the acquisition of the Isakson Property in 2004, the last privately held parcel within Park, MPRPD and the City of Marina jointly funded the development of a revised Master Plan (**ATTACHMENT 5**). The updated plan sought to integrate the City's proposed library facility and the Isakson property into the park's long-term vision.

While the Master Plan accommodated the future library, it largely followed the design principles of the 1987 Wetlands Enhancement Plan and reaffirmed that the primary intent for most of the Park was to maintain a naturalistic character that complements the existing pond, native vegetation, and passive recreational amenities, acknowledging that the City's 1994 a comprehensive Vernal Pond Management Plan "…reaffirmed the unique wetland nature of the park as wildlife habitat." and emphasizing the removal of non-native plant species and the management and expansion of native vegetation to improve both habitat quality and the park's overall aesthetics. Although the Mater Plan left the majority of the property, including most of the former Isakson parcel, as passive open space free from new structures, it also proposed several more intensive built features more closely clustered around the proposed Library, its parking lot, and Seaside Avenue. These included a head pond, and an artificial meandering stream designed to improve circulation and maintain pond water levels and quality, an elevated pedestrian bridge over Del Monte Boulevard connecting to Vince DiMaggio Park, a "tot lot" playground, and courts for horseshoes, volleyball, and bocce ball. During the plan's review in 2005, MPRPD's Board expressed concerns about the cost and complexity of constructing and maintaining these more complicated built-out improvements. Ultimately, while MPRPD funded the installation of a playground structure within the City's library property and worked with the City to fund and address vegetation overgrowth and reclaim and refurbish Park improvements that were in a state of decline and disrepair at the time of the plan's development, none of the other proposed built features were constructed in the Park.

2012 Locke-Paddon Wetland Community Park Implementation Plan

The Locke-Paddon Wetland Community Park Implementation Plan (**ATTACHMENT 6**) was commissioned by the City of Marina and supported by the Monterey Peninsula Regional Park District to develop revised best practices for improving and maintaining the health of the wetland at the park. While the plan proposed a robust strategy for the management and enhancement of the pond, it was reportedly never implemented due to lack of funding.

Recent Notable Projects

Holiday Inn ITP Mitigation Commitments 2001

In 2001, MPRPD was approached by the developer of the Holiday Inn Express project and agreed to allow a portion of the Park to restored as mitigation for the development project finding it this consistent with both the original Marina Wetlands Enhancement Plan and the 1994 Coastal Vernal Ponds Management Plan and supported the relocation of state protected Sand Gilia seed stock to the Park, the enhancement and protection of federally protected Monterey spine flower populations, and creation of coastal scrub habitat within a 3.55 acre area of the Park. In addition to allowing mitigation work to occur at the park, MPRPD committed to several other actions as a component of the mitigation, including: merging all parcels within the park into a single parcel, rezoning the property as “open space,” irrevocably dedicating the park as open space under the California Public Resources Code, recording a permanent deed restriction over the mitigation area, and posting signage identifying the mitigation area as an "Endangered Species Mitigation Plant Preserve."

After reviewing MPRPD and City records, it appears the mitigation project was only partially completed, the required exclusion fencing and signage is no longer present, and MPRPD did not finalize the parcel merger, record the deed restriction, or formally dedicate the property. After speaking with California Department of Fish and Wildlife (CDFW) regarding the status of the mitigation project, CDFW stated that it considered the site a protected mitigation area, is assuming that Sand Gilia are present, and are requesting that MPRPD follow through with the commitments outlined in its 2001 letter (**ATTACHMENT 7**).

Citizens For Sustainable Marina Projects

In 2015, volunteers from Citizens for Sustainable Marina (C4SM) begin manually watering approximately 30 oak trees that were originally installed by MPRPD in 2013 on the former Isakson property but were in poor health due to lack of water. In response, the City of Marina installed a new water line to the oak woodland area around 2017, and C4SM raised funding from MC Gives to construct a garden shed at the site to support stewardship of the oak plantings and additional native planting around the oak woodland site.

In 2020, C4SM received approval from MPRPD management to relocate raised garden beds from Fort Ord to the Oak Woodland site. Shortly after, MPRPD helped purchase materials for C4SM to expand the garden beds in the oak woodland, resulting in the installation of 12 raised garden beds. By 2023, the area was increasingly referred to as the “Oak Woodland *Community Garden*,” reflecting the evolving perception of the oak woodland project area as a community garden space due to the garden bed improvements. That year, C4SM obtained a Special Use Permit from MPRPD to construct four additional raised garden beds, 230 feet of decomposed granite pathway, and three sitting benches throughout the oak woodland (**ATTACHMENT 8**). C4SM’s request included a proposed term of up to 10 years and described the improvements as “non-permanent, easy to modify or remove.” MPRPD’s The special use permit was issued to C4SM conditioned upon on the “development of a simple site maintenance

plan and agreement with C4SM and the City of Marina to ensure that these improvements are adequately maintained after they are constructed."

C4SM volunteers continue to regularly use and steward the site and have incrementally expanded the footprint of their work areas. This includes the planting of fruit trees along the periphery of the original oak woodland and native species planting within the 3.55-acre Holiday Inn Mitigation Area site. While some MPRPD staff have been generally aware of these activities, no formal maintenance plan or agreement with C4SM or the City of Marina has been developed or executed for the site that outline the scope of the allowed activities amongst the parties.

Dr. Marin Luther King Jr Statue Plaza

In April 2023, MPRPD issued a 25-year encroachment permit to the City of Marina for the construction of a statue plaza honoring Dr. Martin Luther King Jr. (**ATTACHMENT 9)** The MLK Plaza was constructed in a location outlined in the 2005 Master Plan for built facilities, including a constructed playground and ADA accessible parking stalls. The encroachment permit outlined that the City will be responsible for all site maintenance and repair activities and the site will be the subject of an updated park management MOU that would be developed in collaboration with the City and executed by both parties by November 2023. The site is currently maintained by the City of Marina, but no management MOU has been developed or agreed to.

Asian Community Garden

The City of Marina and members of the community, notably the group Asian Community of Marina (ACOM), have expressed interest in incorporating a landscaped Asian Garden within the Park. In October 2024, the MPRPD Board held a public meeting to discuss potential improvements at the Park, including the Asian Garden proposal. During that meeting, the Board requested additional information regarding the specifics of the proposal.

At a joint Board meeting in April 2025, a conceptual site plan for an Asian Community Garden was shared (**ATTACHMENT 10**). The plan proposed locating the garden on MPRPD property within the area of the former Isakson property, which was identified as a "large open greensward" in the 2005 Master Plan. The Garden Concept outlined a garden that would include a mixture of native and non-native ornamental species—such as bamboo, Chinese pistache, ginkgo, plum trees, and Monterey cypress—as well as a constructed pavilion and meandering walking path with bridges crossing a constructed stream leading to a reflection pond, separate from the Park's existing pond. MPRPD staff's understanding is that the City is interested in advancing the Asian Garden as a City led project and has budgeted funding to facilitate a public planning process to determine the feasibility, siting, conceptual design, and requirements to permit, construct and maintain the proposed improvement.

Current Conditions at the Park

Today, the Park is predominantly in another cycle of decline. Aging infrastructure, including restrooms, picnic areas, trails, and interpretive areas has further deteriorated. In addition, vegetation at the Park is generally viewed as overgrown and unmaintained, obstructing park views, including views of the pond, and providing space for human encampments in high brush and cover areas. Although, areas such as the Oak Woodland and C4SM Community garden bed area are generally seen as more inviting and better maintained than other portions of the Park, a 2024 community survey found that while residents valued the Park, most rated its current condition as poor or very poor, concluding that the Park remains a valuable asset, but one in need of consistent maintenance, and renewed investment (**ATTACHMENT 11**).

Management and Ownership of the Park

Action is required by both the City and MPRPD to ensure maintenance and alignment with adopted plans and agreements. Although the original collaboration anticipated long-term City management, ongoing lapses in regular upkeep raise concerns about capacity. Meanwhile, new projects continue to be advanced that could strain already limited resources.

Both agencies have allocated funds for updated management planning and maintenance. Staff recommend continuing to review property records and completing resource surveys while developing updated interim management guidelines and schedules focused on:

- Reestablishing/increasing routine maintenance of existing public facilities
- Protecting sensitive resources
- Basic vegetation management
- Clarifying the scope and maintenance responsibilities for recent projects (e.g., MLK Plaza, Oak Woodland)

This work should run parallel to the development of a comprehensive Park management plan addressing more complicated and long-term management activities that will inform a detailed long range Park maintenance program, including associated costs for activities such as:

- Long-term natural resource management
- Wetland and aquatic vegetation control
- Invasive species removal and habitat restoration
- Removal of derelict structures (e.g., former Walton radio towers)
- Replacement or retrofit of existing park facilities

Because many of these activities require state or federal approvals, staff recommend that projects be scoped to qualify for permit streamlining programs for voluntary restoration projects to expedite permit delivery and reduce costly mitigation requirements otherwise required for projects.

The comprehensive Park management plan should also identify zones of the park that are appropriate for more built out improvements, such as the proposed Asian Garden Concept, identifying where more active or developed recreational improvements can be factored into larger park use and management planning, while also acknowledging those improvements would likely require a separate and more complicated environmental review, approval, and fundraising process.

Recognizing that the original Lease is now expired and that all lands outlined in the original Wetland Enhancement Plan have now been acquired, this is an opportunity to reevaluate if MPRPD and the City wish to enter into another Lease, License, or other form of agreement, or to potentially consider transfer of MPRPD's property to the City subject to terms and conditions that ensure that the Park's conservation values are protected and park amenities are maintained, while also formalizing the City's role as the Parks long term manager.

What is central to all this work is seeking confirmation that City and MPRPD roles in the original MOU are still understood and confirming that MPRPD and the City are able to provide sufficient resources for the management and maintenance of existing Park amenities and resources management backlogs.

RECOMMENDED ACTION

Staff recommend that the Committee provide staff with feedback on proposed next steps regarding improving conditions of the Park.

ATTACHMENTS

1. 1987 Wetlands Enhancement Plan
2. City of Marina / MPRPD Memorandum of Understanding
3. City / MPRPD Lease Agreement
4. 1994 Coastal Wetland/Vernal Pond Management Plan
5. 2005 LPWCP Master Plan
6. 2012 LPWCP Implementation Plan
7. 2001 Holiday Inn Mitigation Commitment Letter
8. 2023 MLK Statue Plaza Encroachment Permit
9. 2023 C4SM Special Use Permit
10. 2025 Asian Community Garden Concept
11. 2024 LPWCP Marina Resident's Report

AGENDA ITEM 4A

Locke Paddon Wetland Community Park

Presenters: Jake Smith: Planning & Conservation Program Manager

June 11, 2025

Real Property / Land Use Management Committee Meeting

BACKGROUND
VISION & MOU

MEMORANDUM OF UNDERSTANDING
Proposed KIDD Wetlands Park

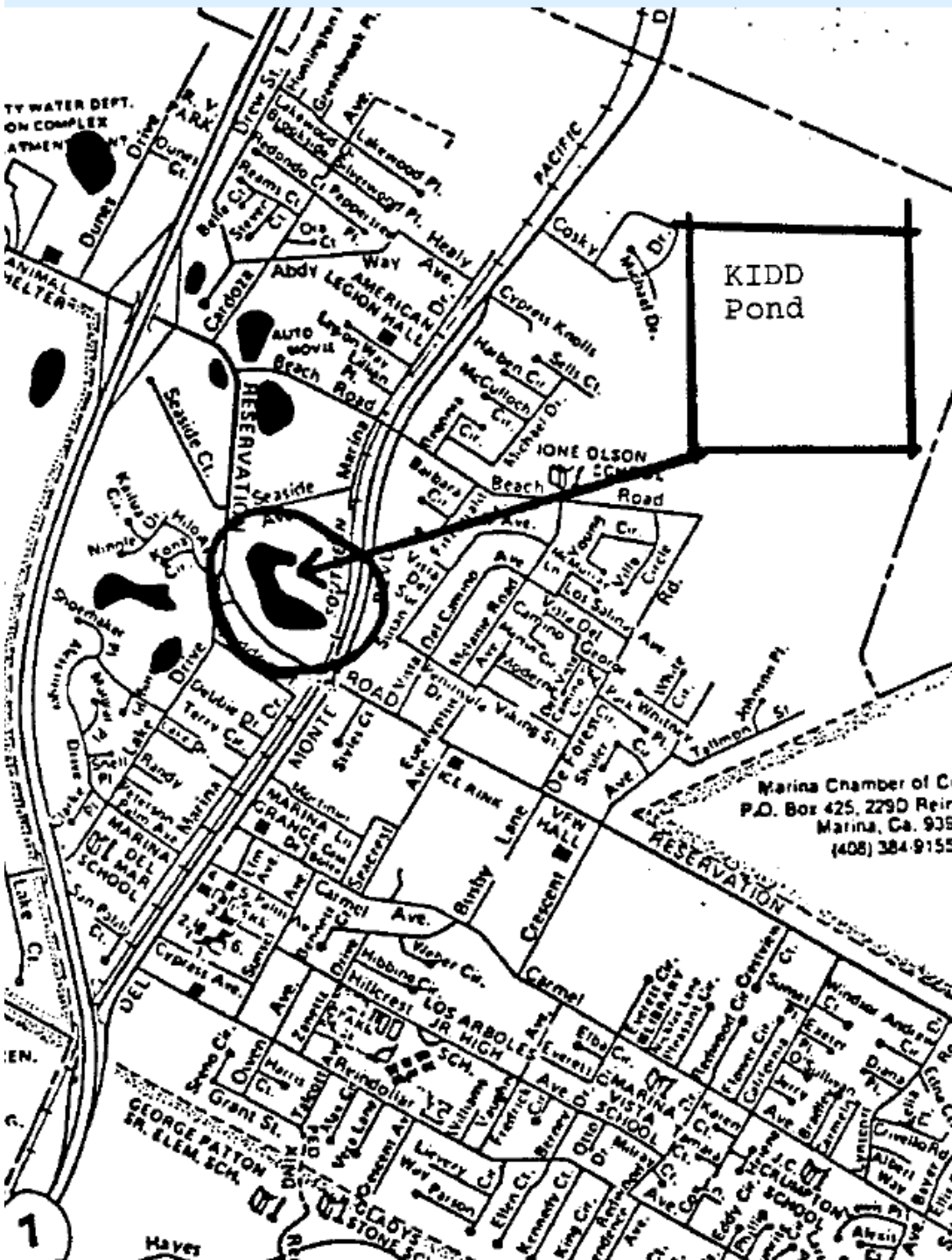
PURPOSE: The City of Marina and the Monterey Peninsula Regional Park District wish to setforth an understanding and roles of their respective agencies in order to pursue their mutual goal of establishing a Wetlands Park at the site known as the KIDD vernal pond and agree to the following joint approach:

PLANNING: The Wetlands Enhancement Plan prepared for the City of Marina, dated November 6, 1986, will serve as the "master plan" for the proposed Wetlands Park project when said Plan is accepted in its final form by the City, District and California Coastal Conservancy.

ACQUISITION: District, in coordination with the City, will attempt to acquire property as recommended in the Plan. Funding for acquisition will come from District revenue, Coastal Conservancy and state/federal grant sources.

DEVELOPMENT: City and District will jointly improve the project according to the Plan. City and District will jointly and separately seek outside grants for said improvements. In this regard, District may request a long-term lease of the City's 1.9 acre parcel, A.P. #33-121-4, in order to qualify as an applicant for a 1984 Park Bond Act grant for park development.

OPERATION AND MAINTENANCE: It is the intent of the parties that the City will assume responsibility for the operation and maintenance of this project.



BACKGROUND

Lease

This lease is made August 3, 1987, 1987, between the Monterey Peninsula Regional Park District ("Landlord"), a special district of the State of California, whose address is P.O. Box 935, Carmel Valley, CA 93924, and the City of Marina ("Tenant"), a California municipal corporation whose address is 211 Hillcrest Ave., Marina, CA 93933. Landlord and Tenant, in consideration of the mutual promises contained herein, agree as follows:

1. **Recitals.** Landlord and Tenant wish to preserve, improve and enhance certain wetlands located in the City of Marina in accordance with the City of Marina Revised Wetlands Enhancement Plan adopted by the City in February 1987. Tenant is willing to perform the work necessary to implement said Plan; Landlord intends to apply for reimbursement for $100,000 toward the costs of said work from the funds available under the California Park Bond Act of 1986.

6. **Maintenance.** Tenant at its cost shall maintain, in good condition, all portions of the premises, including, without limitation, all Tenant's personal property. Tenant shall keep the leased premises and structures in a neat and safe condition and repair, satisfactory to Landlord.

BACKGROUND

Park Properties & Ownership

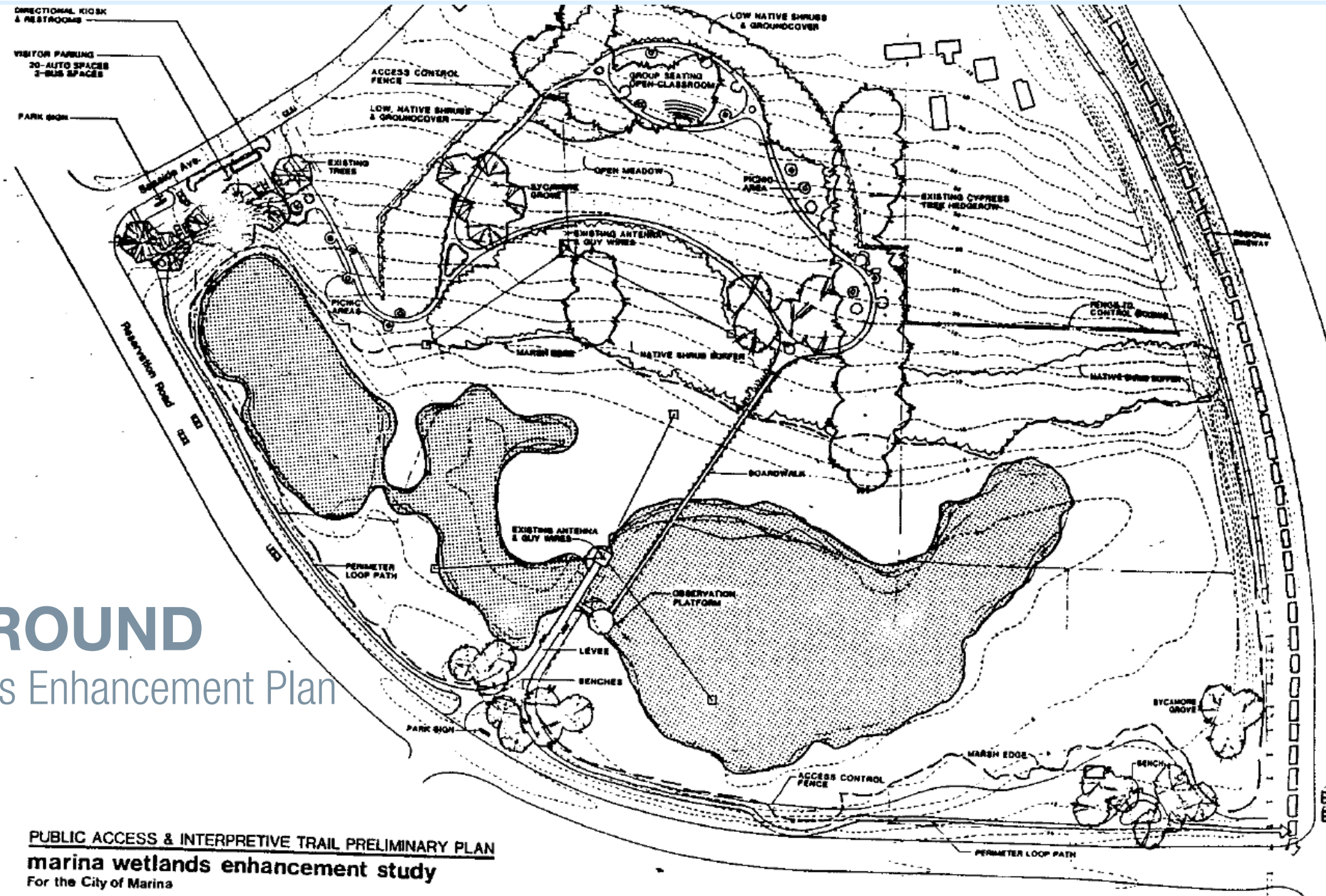
Property	Year Acquired	Owner	APNs	Acres
2-acre	1973	City	033-121-004	1.9
Walton Radio	1987	MPRPD	033-121-005, -006	12
Austin	1987	City/MPRPD	033-132-002	1.8
MRWPCA	1987	City	033-132-003	2
Crivello	1991	MPRPD	033-121-101	1.8
Crivello (Library)	2001	City	033-121-009	2.7
Isakson	2004	MPRPD	033-121-002	6.5

PROJECT DESCRIPTION: Acquisition of the Isakson property to preserve the land in its natural condition for fish and wildlife conservation, habitat preservation, and access by establishing a public park to be publicly managed by a future management plan designed to keep the land in a natural condition and preserve open space.

Monterey Peninsula
Regional Park District

BACKGROUND

1987 Wetlands Enhancement Plan



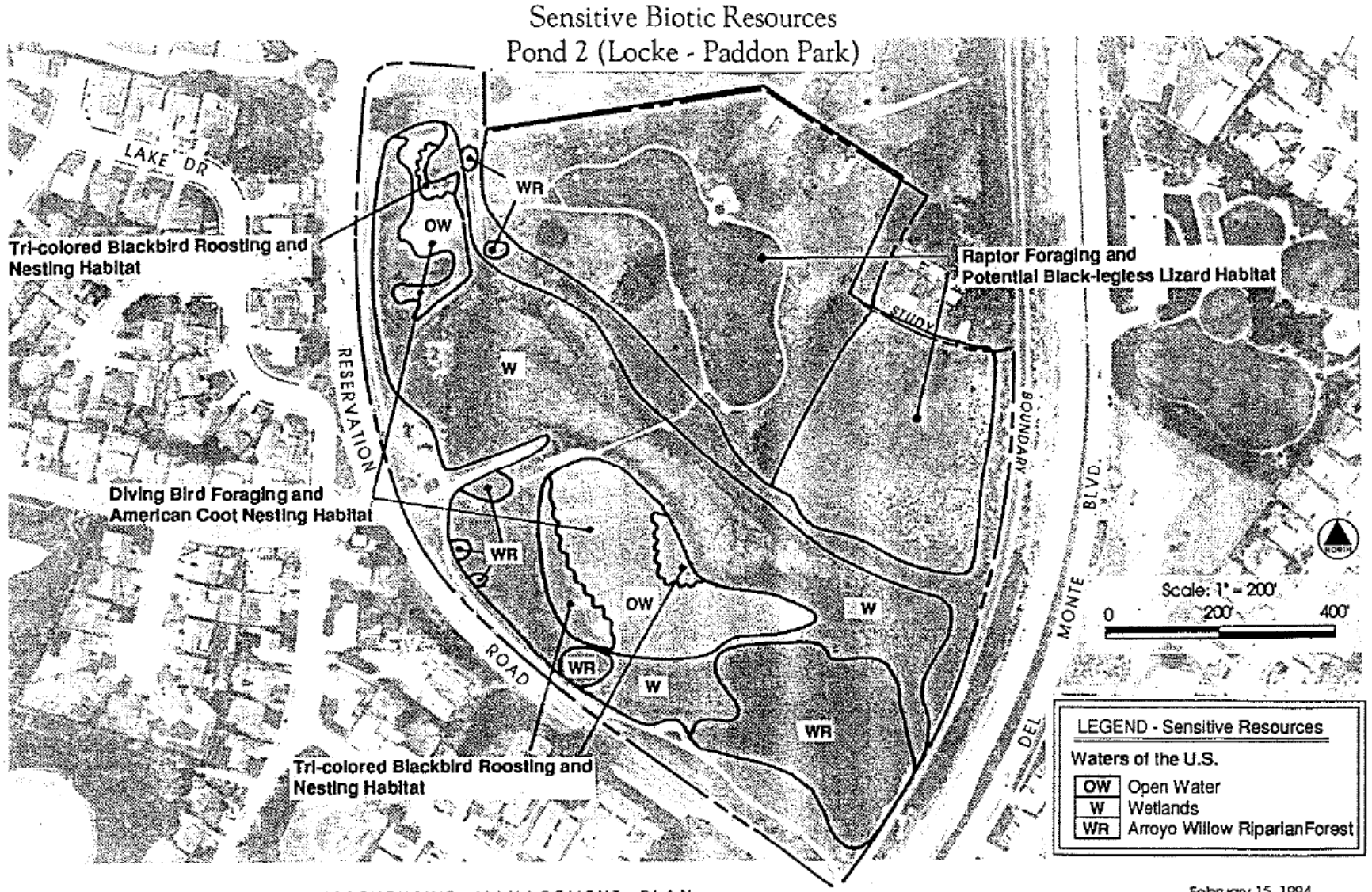
PUBLIC ACCESS & INTERPRETIVE TRAIL PRELIMINARY PLAN

marina wetlands enhancement study

For the City of Marina

BACKGROUND

1994 Coastal Vernal Pond Comprehensive Management Plan



COASTAL/VERNAL POND COMPREHENSIVE MANAGEMENT PLAN

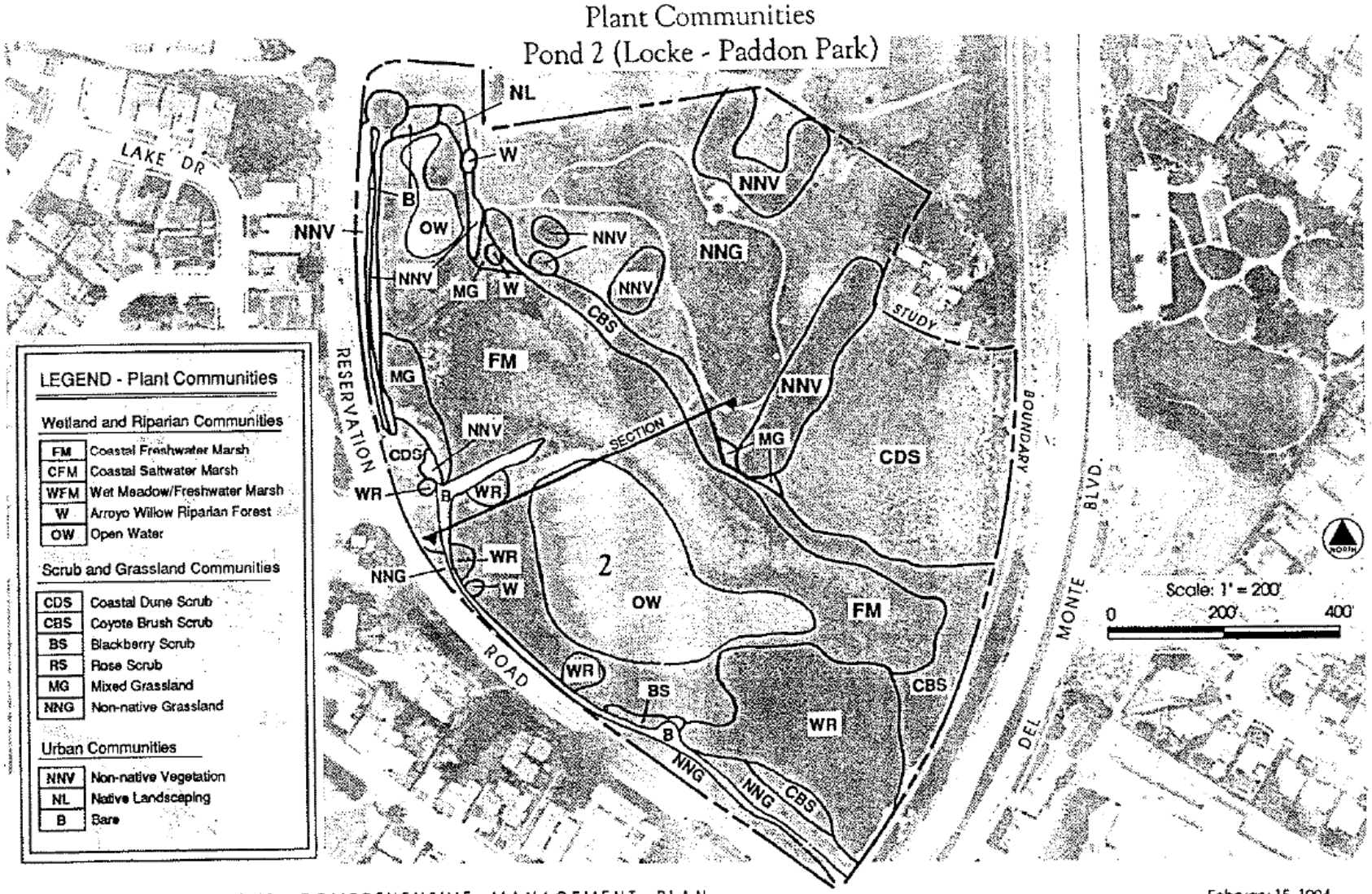
February 15, 1994

The Habitat Restoration Group • Mitchell Swanson & Associates

Figure 4-7

BACKGROUND

1994 Coastal Vernal Pond Comprehensive Management Plan



COASTAL/VERNAL POND COMPREHENSIVE MANAGEMENT PLAN

February 15, 1994

The Habitat Restoration Group • Mitchell Swanson & Associates

Figure 4-2

BACKGROUND

1994 Coastal Vernal Pond Comprehensive Management Plan

Table 7-3. Implementation Tasks for Pond 2 - Locke Paddon Park/KIDD Pond

Enhancement and Management Action	Implementation Mechanism	Responsible Party	Funding Sources	Technical Expertise	Priority	Cost
HYDROLOGY						
H-1. Periodically monitor/clean oil/grease traps	2★, 3	DPW	6	None	1	[OM] $1,000/yr
H-2. Monitor water quality on a regular, on-going basis during periods of high and low water levels	1, 2★, 3, 4, [★ partial]	DPW	1, 2, 3, 4, 5, 6, 10	Hydrologist	2	[OM] $3,000/yr
BIOTIC RESOURCES						
B-1. Maintain portions of meadow as un-mowed as short-term management task	2★, 3	DPW	6, 11	Revegetation Specialist	7	[OM] $1,000/yr
B-2. Convert non-native grassland to native grassland as long-term management task	1, 2, 3, 4, 5	DPW	3, 6, 11	Revegetation Specialist	16	[OM] $2,000-/yr
B-3a. Provide educational signs to discourage feeding of waterfowl at observation decks (3)	1, 2, 3, 4, 5	DPW	1, 2, 3, 5, 6, 11	Biologist; Graphic Designer	4a	$1,500
B-3b. Revegetate degraded areas along shoreline with native plant species (tules, cattails, emergent plant species)	1, 2, 3, 4, 5	DPW	1, 2, 3, 4, 5, 6, 7, 8, 10, 11	Revegetation Specialist	8	[OM] $5,000 + [VH] 80-100 PH
B-4. Maintain existing ratio of marsh and open water; remove tules as needed	2, 3, 5	DPW	2, 6, 11	Revegetation Specialist	14	[OM - UC]
B-5. Remove tire nesting areas; install bat/duck/swallow nesting boxes	1, 2, 3, 4, 5	DPW	2, 6, 11	Wildlife Biologist	12	$1,000 $300 [MC]
B-6. Purchase Pozar parcel for inclusion into Park; revegetate with native scrub or grassland vegetation to enhance values	2, 5	DPW	6, 11	Revegetation Specialist	17	[UC]
B-7. Plant native trees to provide roost sites for raptors; preserve existing trees	1, 2, 3, 4, 5	DPW	2, 6, 11	Revegetation Specialist	13	$2,000
B-8. Remove invasive, non-native plant species (iceplant) from perimeter of pond; revegetate with native scrub	1, 2★, 3, 4, 5	DPW	1, 2, 3, 4, 5, 6, 7, 8, 11	Revegetation Specialist	9	[VH-OM] 50 PH/yr $2,000
B-9. Eradicate bullfrogs to reduce predation on native amphibians	2, 3, 5	DPW; CDFG	2, 6, 7, 11	Wildlife Biologist	10	$2,000
B-10. Use biological controls for mosquito abatement	6	NSVMAD	1, 2, 6	None	11	[OM-MC] $200/yr
LAND USE						
L-1. Rezone the park and wetland areas as open space	2	DPW; P	1, 9	None	20	[UC]

BACKGROUND

2005 Master Plan

BACKGROUND

2012 LPWCP Management Implementation Plan

Balance Hydrologics, Inc.

A report prepared for:

City of Marina Community Development Department
Ms. Christine di Iorio, Director
Mr. Edrie de los Santos, Project Manager
211 Hillcrest Avenue
Marina, California 93933
(831) 884-1212

Implementation Plan for the Management of Locke-Paddon Wetland Community Park and Pond, Monterey County, California

© 2012 Balance Project Assignment: 209138
by

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Senior Principal Hydrologist

PROFESSIONAL GEOLOGIST
BARRY HECHT
No. 1245
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February 3, 2012

Aquatic vegetation control/removal. We would like to caution that managing aquatic vegetation on an annual or more frequent interval can be costly, and can easily fall off the radar of Park management elements as City personnel changes over time. If management of aquatic vegetation is deemed important (which would be evident to monitoring biologists and botanists; see section 6.3 below), the pond vegetation boundaries need to be defined and minimized to a point that both improves habitat as well as provides an aesthetic relief to the site. The vegetation to water ratio would be developed from agency and consultant input, with an emphasis on establishing or meeting a City budget. Control of aquatic vegetation in this manner is an added cost,

Water quality control. To further combat the water quality problems associated with public feeding of waterfowl, we suggest that the pond periphery, notably the northern pond periphery, be completely enclosed by tules and cattails. This will discourage public feeding of waterfowl by restricting access, while at the same time restricting waterfowl from accessing the shoreline for feeding. A complete circumferential boundary of reedy vegetation may also encourage migratory bird usage (as opposed to resident waterfowl usage) because the tall reeds create a sense of separation and protection from the shoreline and upland areas where humans and "predators" would typically be found. Increased migratory bird usage is consistent with goals and objectives pertaining to creation and maintenance of natural habitat.

Public use alternatives. Although we suggest that the Park remain a native and natural resource environment for public enjoyment, public participation and usage may improve if a small turf and picnic area is established between the library and parking lot. Care would need to be taken to minimize the environmental impact of such a facility and its maintenance.

In terms of water quality, Locke-Paddon Pond serves as a City-scale sink for urban runoff. As such, the evolving water quality will be dependent on the quality of waters from City storm drains and any control measures currently in place or anticipated. Additionally, resident waterfowl contribute to water quality indices (for example, bacterial concentrations) that often achieve levels inconsistent with public and environmental safety. This latter issue is exacerbated by a public that recreates at the Pond by feeding the waterfowl.

BACKGROUND

Holiday Inn Mitigation Area

To ensure that the mitigation has long-term protection, The Park District will complete the following actions within one-year of the issuance of the Section 10 permit:

1. Apply to the City of Marina for an extinguishment of all legal parcels within the property so as to create a single parcel;
2. Request the City to re-zone the entire ensuing Park parcel to "Open Space";
3. Formally and irrevocably *Dedicate* the Park as open space pursuant to Article 13 Section 8 of the California State Constitution and Public Resources Code Section 5540;
4. Record a *Deed Restriction* on the Park property identifying the mitigation area and its perpetuity; and
5. Signing and posting the mitigation area as an *endangered species mitigation plant preserve*.

Sincerely,

JOSEPH DONOFRIO
General Manager

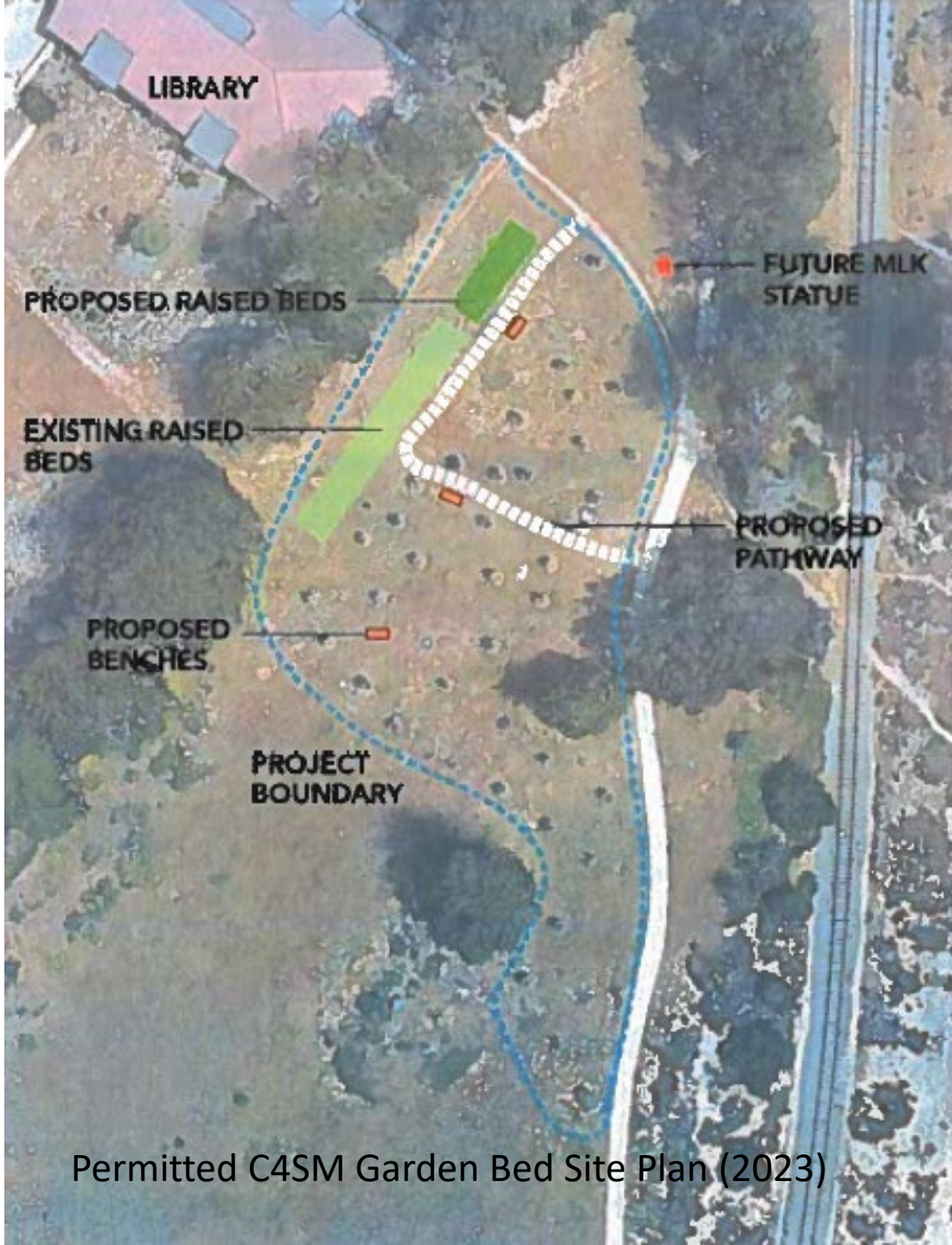
Cc: Debra Hillyard, DFG
Mike Wilson, CCC
Jeff Dack, Marina
Bart Bruno, MPE

Legend

- Sensitive Habitat on the BT Development Company L.L.C. Property and Easements - 1.52 acres
- BT Development Company L.L.C. Property with Slope and Road Easements - 1.78 acres
- Dune Scrub Restoration Area - 3.55 acres
- Locke-Paddon Park
- Monterey Spineflower (Chorizanthe pungens var. pungens) within restoration area to be protected
- Carex dominated native swale to be protected form heavy equipment

BACKGROUND

C4SM Community Garden Beds



Permitted C4SM Garden Bed Site Plan (2023)

BACKGROUND

Dr. Martin Luther King Jr. Statue Plaza

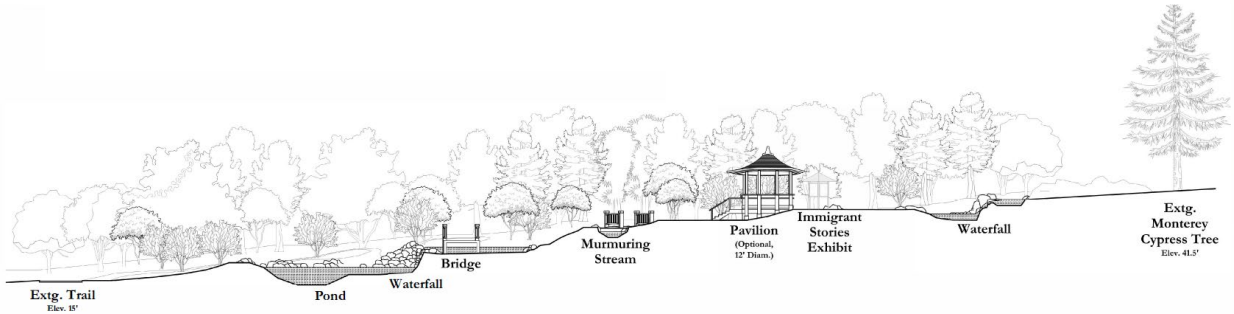
Dr. Martin Luther King, Jr. Sculpture

MARINA, CALIFORNIA — FEBRUARY 15, 2022

5. The City will be responsible for all site maintenance activities and repairs and will be the subject of an updated park management MOU that MPRPD will develop in collaboration with the City and will be executed by both parties November 1, 2023.

BACKGROUND

Asian American Garden Concept



Section AA

Scale: 1/8" = 1'-0"

LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
1	OPTIONAL PAVILION (ELEVATED OBSERVATION DECK WITH SEATING, ROOF COVER, AND OPEN SIDES, 12' DIAM.)		STONE WALL
2	IMMIGRANT STORIES INTERPRETIVE PANEL		CONCRETE (ADA ACCESSIBLE)
	BRIDGE		STONE PEBBLES
	GATE/ENTRY		DECOMPOSED GRANITE (DG)
	WATERFALL/CASCADES		ELEVATED WOOD WALKWAY
	BENCH		POND
	NATURAL BOULDER (SMALL)		STREAMBED
	NATURAL BOULDER (MEDIUM)	19	MECHANICAL EQUIP/SERVICE AREA
	NATURAL BOULDER (LARGE)		
	STONE		

MONTEREY PENINSULA REGIONAL PARK DISTRICT

BACKGROUND

Current Park Conditions

- The park is predominantly in another cycle of decline.
  - Current condition as poor or very poor, concluding that the Park remains a valuable asset, but one in need of consistent maintenance, and renewed investment
  - Aging infrastructure, including restrooms, picnic areas, trails, and interpretive areas has further deteriorated
  - Vegetation at the Park is generally viewed as overgrown and unmaintained, obstructing park views, including views of the pond.
  - Space for human encampments in high brush and cover areas creating public safety concerns.
  - Desire for park clean up and renewed trail and facility maintenance.

KEY THEMES

- ❑ Expired Agreements: Need to resolve ownership/maintenance roles now that the original lease has lapsed.
- ❑ Inconsistent Oversight: Projects have proceeded without clear maintenance or land use agreements.
- ❑ Unmet Management & Legal Commitments: Holiday Inn mitigation area needs follow-through to satisfy CDFW requirements.
- ❑ Limited Maintenance Funding/Capacity: Creating tension between new project proposals that wil create new obligations and funding maintenance of existing facilities and resources.

POTENTIAL NEXT STEPS

- ❑ Short-Term: Develop interim management guidelines and maintenance schedules focused on:
  - ❑ Infrastructure repair
  - ❑ Vegetation control
  - ❑ Resource protection
  - ❑ Defining roles/responsibilities and scope of activities for park management
- ❑ Long-Term: Create a comprehensive Park Management Plan addressing:
  - ❑ Habitat restoration
  - ❑ Invasive species control
  - ❑ Capital upgrades
  - ❑ Appropriate siting/locations for future built projects
- ❑ Explore options for: New MOU, lease, or property transfer to the City with conditions protecting conservation and passive recreational values.

Thank You

Questions?

Monterey Peninsula
Regional Park District

April 25, 2025 Agenda Item No. **13c**

Honorable Mayor and Members
Of the Marina City Council

City Council Meeting
of July1, 2025

CITY COUNCIL CONSIDER ADDING "CALL UP" MEASURES TO SECTION 17.70 (APPEALS) OF THE MARINA MUNICIPAL CODE (MMC), THE PROPOSED ORDINANCE IS EXEMPT FROM ENVIRONMENTAL REVIEW PERSUANT TO SECTION 1506l (b)(3) OF THE CEQA GUIDELINES.

RECOMMENDATION: It is recommended that the City Council provide the following direction to staff:

1. Amend Marina Municipal Code (MMC) Title 17, Section 17.70 relating to Appeals as directed; and
2. Find this action is exempt from environmental review pursuant to Section 15061(b)(3) of the CEQA Guidelines.

BACKGROUND

At its March 4, 2025, public hearing on MMC amendments relating to appeals, permit extensions and effective dates, and Community Development Department (CDD) Director's discretion to elevate certain administrative actions to the Planning Commission, the City Council requested that staff return with some language for consideration of adding a "Call Up" provision to the MMC.

A "Call Up" is similar to the appeal of any CDD Director (Director) or Planning Commission decision, but it is an action by the City Council itself rather than an action of an aggrieved individual. As such, there is no appeal fee required. However, there are typically explicit timeframes and majority or other stated number of Councilmembers needed to support the "Call Up" in most ordinances.

ANALYSIS

After reviewing several other jurisdictions' ordinances (linked below[1] and referenced herein as Exhibit A), staff has identified several pros and cons associated with including these provisions in the MMC.

A potential benefit to Council Call Up is that it can provide an additional opportunity for residents or parties affected by a Planning Commission or Director decision to communicate their concerns to the Council without paying the appeal fee or having to provide documentation showing that an error or abuse of discretion by the Commission occurred or that the PC decision is not supported by substantial evidence in the record. Thus, a number of Council members (the number would be specified in the ordinance) may wish to Call Up an item based on community influence or their own individual opinion that is contrary to the action of the Commission.

[1] City of Pacific Grove PGMC 23.74.040
City of Monterey https://monterey.municipal.codes/Code/38-209
City of East Palo Alto Title 18, Sec 18.116.030 pg. 8-29

A potential consequence of the Call Up provision is that the Council could intentionally or unintentionally create a scenario in which the Planning Commission or Director lose the inherent authority vested in them through implementation of the Marina Municipal Code (MMC). If aggrieved neighbors to a project can convince the required number of Councilmembers through individual lobbying to Call Up an item already approved (or disapproved) by the Planning Commission or Director, it removes a layer of confidence to the applicant as well as those who made the original decision.

There is also potential for abuse of this provision if a number of Councilmembers do not have confidence in the Planning Commission or Director. If there is a lack of confidence, the Council task should be to engage in a more robust recruitment for Planning Commission members rather than overriding the Commission's authority by calling up decisions.

Should the Council direct staff to prepare a draft Call Up ordinance, the following information should be provided to staff as part of the current discussion:

1. How many Councilmembers does it take to Call Up an item? Some local ordinances allow one (1) member, others require just less than a quorum (2 members for a 5-member Council, 3 members for a 7-member Council), and some require a majority vote.
2. What is the deadline for Council Call Up? Some municipalities allow for a specified number of days from the action. For example, within 15 business days of the Planning Commission's action. Others follow the standard appeal period (10 business days). Others require that a Call-Up occur at a regular Council meeting within a specified time period. Several of these create timing issues and require careful consideration to ensure that an applicant's due process rights are considered.
3. Should there be a standard that applies for calling up or reviewing a decision? For example, some jurisdictions state that the basis for a call up shall be "that the determination affects, impacts, or deals with matters of general policy in the City, or may have a significant environmental, economic, or physical impact on a City facility or service."

As with all ordinance amendments, the City Attorney will review the details of Council's direction and the draft ordinance prior to Council consideration.

Note: This provision only applies to decisions made by review authorities covered by Title 17; the other Commissions and subcommittees do not have quasi-judicial or legislative authority; i.e., either the CDD Director or the Planning Commission.

FISCAL IMPACT

There is no fiscal impact.

ENVIRONMENTAL REVIEW

The proposed project is exempt from the California Environmental Quality Act (CEQA) under Section 15061(b)(3) of the State CEQA Guidelines. Staff has determined that the exemption applies in this case because the proposed procedural changes would not result in a direct or a reasonably foreseeable indirect physical change in the environment and the proposed ordinance is covered by the general rule that CEQA applies only to projects which have potential for causing significant effect on the environment. Therefore, the adoption of this ordinance is exempt from CEQA, and no further environmental review is necessary.

CONCLUSION

This request is submitted for City Council consideration and direction.

Respectfully submitted,

_____

Alyson Hunter, AICP
Planning Services Manager
City of Marina

REVIEWED/CONCUR:

_____

Guido Persicone, AICP
Community Development Director
City of Marina

_____

Layne Long
City Manager
City of Marina

Exhibit A

City of Pacific Grove, Municipal Code Chapter 23.74 - Appeals and Call-Ups

Sections:

23.74.010 Purpose.
23.74.020 Appeal subjects and appeal authority.
23.74.030 Filing of appeals.
23.74.040 Call-up authority and time limits.
23.74.050 Processing of appeals and call-ups.

23.74.010 Purpose.

Determinations or actions of the chief planner, zoning administrator, site plan review committee, architectural review board, or planning commission may be appealed or called up as provided by this chapter. [Ord. 11-001 § 2, 2011].

23.74.020 Appeal subjects and appeal authority.

Determinations and actions that may be appealed, and the authority to act upon an appeal, shall be as follows:

(a) Staff Determinations. The following determinations and actions of the chief planner and department staff may be appealed to the planning commission and then to the council, except as provided in subsection (a)(5) of this section:

(1) Counter review and determinations, pursuant to PGMC 23.70.020.

(2) Determinations on the meaning or applicability of these regulations that are believed to be in error, and cannot be resolved with staff.

(3) Any determination that a permit application or information submitted with the application is incomplete, in compliance with state law (Government Code Section 65943).

(4) Any enforcement action in compliance with Chapter 23.88 PGMC (Enforcement).

(5) Determinations of the city manager, pursuant to PGMC 23.04.040(a), but such an appeal shall be heard by the council only.

(b) Decisions of Review Authorities. Appeal authorities are identified in Table 23.70.012-1. Generally, decisions of the zoning administrator, site plan review committee, architectural review board, and historic resources committee may be appealed to the planning commission, and decisions of the planning commission may be appealed to the council. When a single project requires two or more permit applications, or where final action on an application is subject to deadlines which cannot reasonably be satisfied if an application is subject to multiple appeals, any appeal of the project shall go to the higher-level appeal authority among those permits. The decision of the council shall be final. [Ord. 20-001 § 2 (Exh. A), 2020; Ord. 11-001 § 2, 2011].

23.74.030 Filing of appeals.

(a) Who May File an Appeal. An appeal may be filed by:

(1) Any person affected by an administrative determination or action by the department, as described in PGMC 23.74.020(a).

(2) In the case of a community development permit or hearing decision described in PGMC 23.74.020(b), by anyone who, in person or through an authorized representative, appeared at a public hearing in connection with the decision being appealed, or who otherwise informed the city in writing of the nature of their concerns before the hearing.

(b) Timing and Form of Appeal. All appeals shall be submitted in writing on a city application and shall specifically state the pertinent facts of the case and the basis for the appeal.

(1) Appeals shall be filed in the community development department or, in the case of appeals of planning commission actions, in the office of the city clerk, within 10 days following the final date of the determination or action being appealed; provided, that the time for appeal may be shortened to five days by the decision-maker whose decision is subject to appeal where final action on an application is subject to deadlines that cannot reasonably be satisfied if there is a longer appeal period.

(2) Appeals shall be accompanied by the filing fee set by the city's adopted schedule of fees, which is available in the community development department and on the city's website.

(c) Scope of Appeals. An appeal of a decision on a community development permit listed in Table 23.70.012-1 shall be limited to issues raised at the public hearing, or in writing before the hearing, or information that was not generally known at the time of the decision that is being appealed. [Ord. 20-001 § 2 (Exh. A), 2020; Ord. 11-001 § 2, 2011].

23.74.040 Call-up authority and time limits.

(a) The council may call up for review any action or decision of the planning commission or any other review authority, and make its own decision on the action or matter. The architectural review board and planning commission have the authority to call up certain actions or decisions of any review body for which they are the appeal authority, in accordance with Table 23.70.012-1.

(b) The request to call up any action or decision shall be made during the portion of the regular meeting agenda during which council announcements or general non-agenda comments are allowed by members of that board, commission or council. No separate agenda item shall be required to enable a call-up request.

(c) Notwithstanding any time limits otherwise prescribed in this code for appeal, the call-up authority shall always have until its next regularly scheduled meeting provided it convenes within 21 calendar days following the final date of the determination or action that is subject to the call-up review. If a regular or special meeting is not convened within 21 calendar days following the final date of determination, the right of call-up shall lapse.

(d) In the case of the council, planning commission, or architectural review board, the request of three members shall suffice to call up an action or matter for review. At the time a matter or action is called for review, each member stating a request for review may make a brief statement of reasons for his or her call-up request. [Ord. 16-022 § 2, 2016; Ord. 11-001 § 2, 2011].

23.74.050 Processing of appeals and call-ups.

(a) Scheduling of Hearing. After an appeal or call-up for review has been received, in compliance with PGMC 23.74.030 and 23.74.040, the matter shall be placed on the next available agenda of the appeal authority or body calling up the item.

(b) Notification of Applicant. Within one business day of receipt of an appeal or decision to call up a matter, staff shall attempt to notify the applicant.

(c) Joining an Appeal. Only those persons who file an appeal within the time limit established by PGMC 23.74.030(b) shall be considered appellants. Any person who wishes to join an appeal shall follow the same procedures for an appellant in compliance with PGMC 23.74.030(b). No person shall be allowed to join an appeal after the expiration of the time limit for appeals.

(d) Action and Findings. The appeal authority shall conduct a de novo public hearing in compliance with Chapter 23.86 PGMC (Public Meeting and Hearing Procedures). At the hearing, the appeal authority may consider any issue involving the matter that is the subject of the appeal or call-up, in addition to the specific grounds identified in the appeal.

(1) The appeal authority may affirm, affirm in part, or reverse the action, decision, or determination that is the subject of the appeal or call-up, based upon findings of fact about the particular case. The findings shall identify the reasons for the action on the appeal or call-up, and verify the compliance or non-compliance of the subject of the appeal or call-up with these regulations. Prior to approving a permit or other action, the applicable findings in Chapter 23.70 PGMC (Community Development Permit Review Authorities and Procedures) shall be made.

(2) When reviewing a decision on a community development permit, the appeal authority may adopt additional conditions of approval that may address other issues or concerns than the subject of the appeal or call-up.

(e) Effective Date of Appeal or Call-Up Decisions. A decision by any appeal authority other than the council is effective on the eleventh day after the decision, if no appeal to the decision has been filed, or until the next regularly scheduled meeting, of any body with call-up authority, whichever date is later. Because a decision by the council is final, it is effective as of the date of the decision, unless the council specifies an alternative date.

(f) Appeal Authority Also Refers to Call-Ups. All references to appeal authority in this section shall include the body calling up a matter for review.

City of Monterey, Municipal Code Section 38-209 - Appeal by City Councilmember or City Manager; Review of Projects Requiring Environmental Impact Report (EIR).

Any City Councilmember or the City Manager may appeal a subordinate decision to the City Council for review on the basis that the determination affects, impacts, or deals with matters of general policy in the City, or may have a significant environmental, economic, or physical impact on a City facility or service. The general procedures of this article shall apply, insofar as practical. However, there shall be no fee for such an appeal.

Any approved project which required certification of an Environmental Impact Report (EIR) by the Planning Commission shall be referred to the City Council for review at its next regular meeting. The City Council may elect to take no action, making the decision of the Planning Commission final, or, upon the request of any Councilmember, set the matter for hearing as an appeal, which shall be heard and determined in the same manner as other appeals taken pursuant to this article.

City of East Palo Alto, Municipal Code Section 18.116.030 – Calls for Review

A. Council Review.

1. Council. The Council may call for a review of any determination or decision rendered by the staff, the Director or the Commission.

2. Majority Vote Required. A review may only be commenced by the affirmative vote of the majority of the members present.

B. Process for Calling for a Review.

1. Initiation by Council Members.

a. One or more Council members may initiate a call for review of a determination or decision by filing a written request with the City Clerk before the effective date of the action, generally 15 days following the date of the determination or decision.

b. The Council may call directly for the review of a Director determination or decision or refer the matter to the Commission to review and take action or provide a written recommendation to the Council.

2. Consideration. The Commission or Council, as applicable, shall consider the matter at its next available regularly scheduled meeting.

3. Request for Transcript. If the Commission or Council requests a transcript for use at the review hearing, a transcript shall be prepared and a copy shall be made available for inspection by any interested party. Fees shall be collected from applicants to create transcripts. Creation of a transcript may delay the scheduling of a hearing.

4. Notice to Applicant. If the decision of a discretionary application is being reviewed, the applicant shall be informed of the aspects of the application and the determination or decision to be considered.

5. Effect of Call for Review.

a. A call for review shall stay the effective date of a determination or decision until the Review Authority can make a decision.

b. The timely filing of a call for review does not extend the time in which an appeal of a determination or decision shall be filed.

6. Filing of an Appeal Pending a Call for Review.

a. **Right to File an Appeal.** Any person may file a timely appeal even though a call for review has been filed.

b. **Effect of Filing an Appeal.** The filing of the appeal serves to protect the rights of the appellant(s).

7. Notice and Public Hearing.

a. A review hearing shall be a public hearing if the original determination or decision required a public hearing.

b. Notice of the public hearing shall be the same as for the original determination or decision.

8. Fees Not Required. Fees shall not be required in conjunction with the filing of a call for review by a member of Council.

C. Concurrent Commission Recommendations. When the Commission makes a recommendation to the Council on a legislative matter, any concurrent companion decision(s) by the Commission on an application concerning in whole or in part the same parcel(s) shall also be deemed to be timely called up for review by the Council.