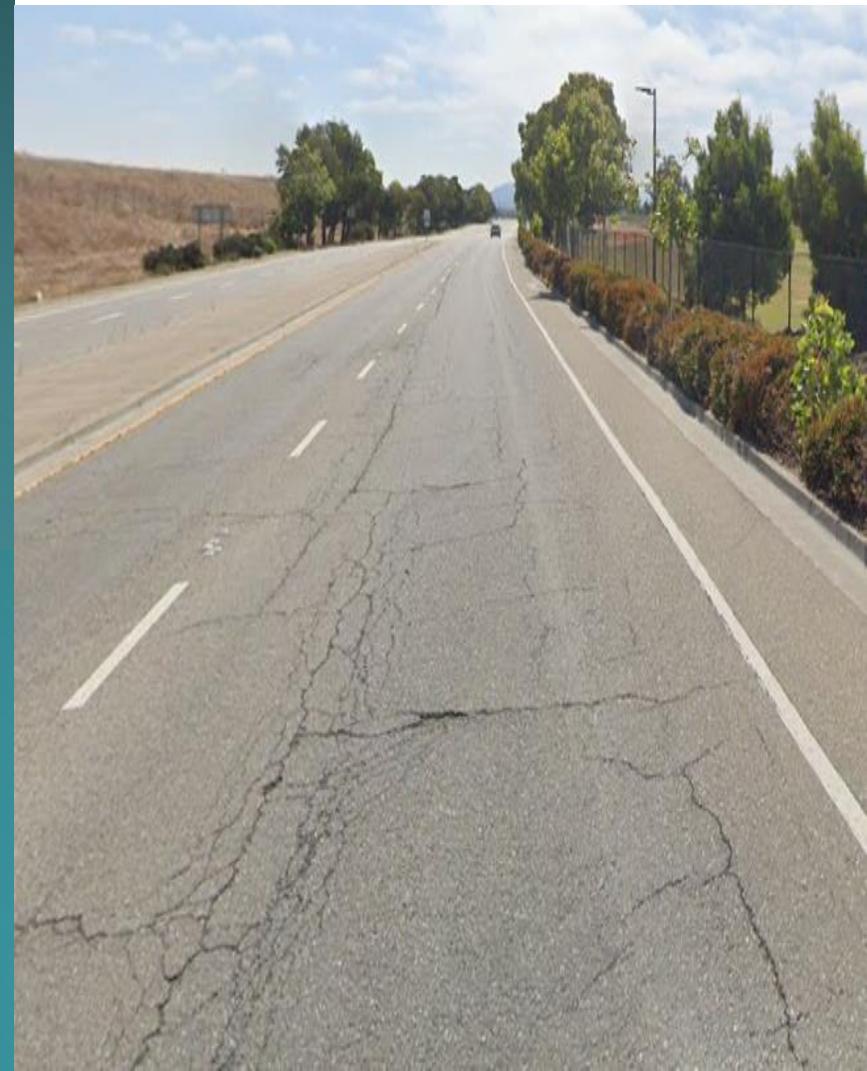




EA 04-2Q720 Capital Preventative Maintenance (CAPM) Project on SR-61

August 28, 2024

Exhibit 1 6-C
Transportation Commission
8-28-24



Project Title & Location

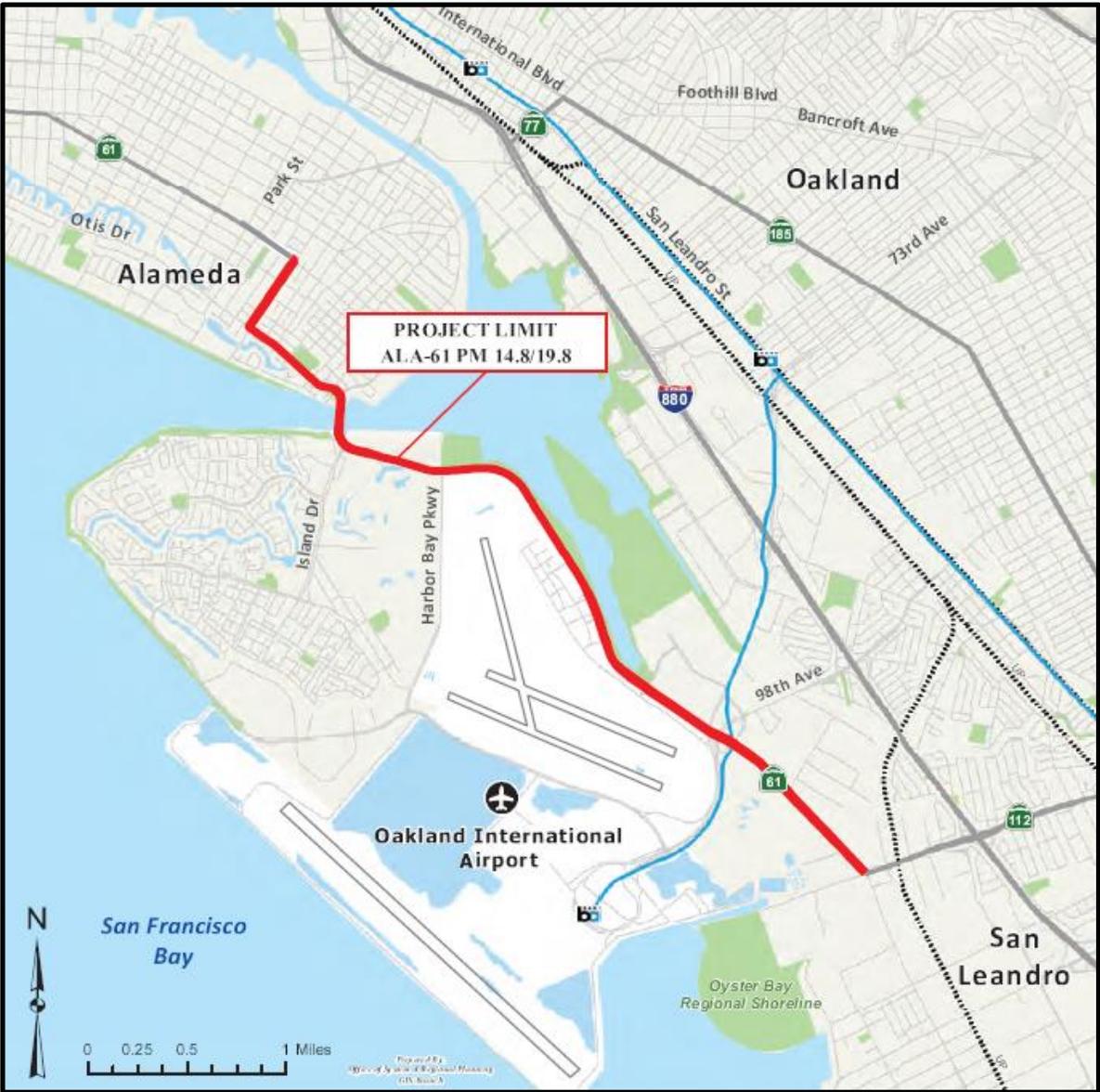


*Caltrans
Bay Area*

In the cities of San Leandro, Oakland, and Alameda, from Route 112 (Davis Street) to Encinal Avenue.

Following Streets will be affected during construction:

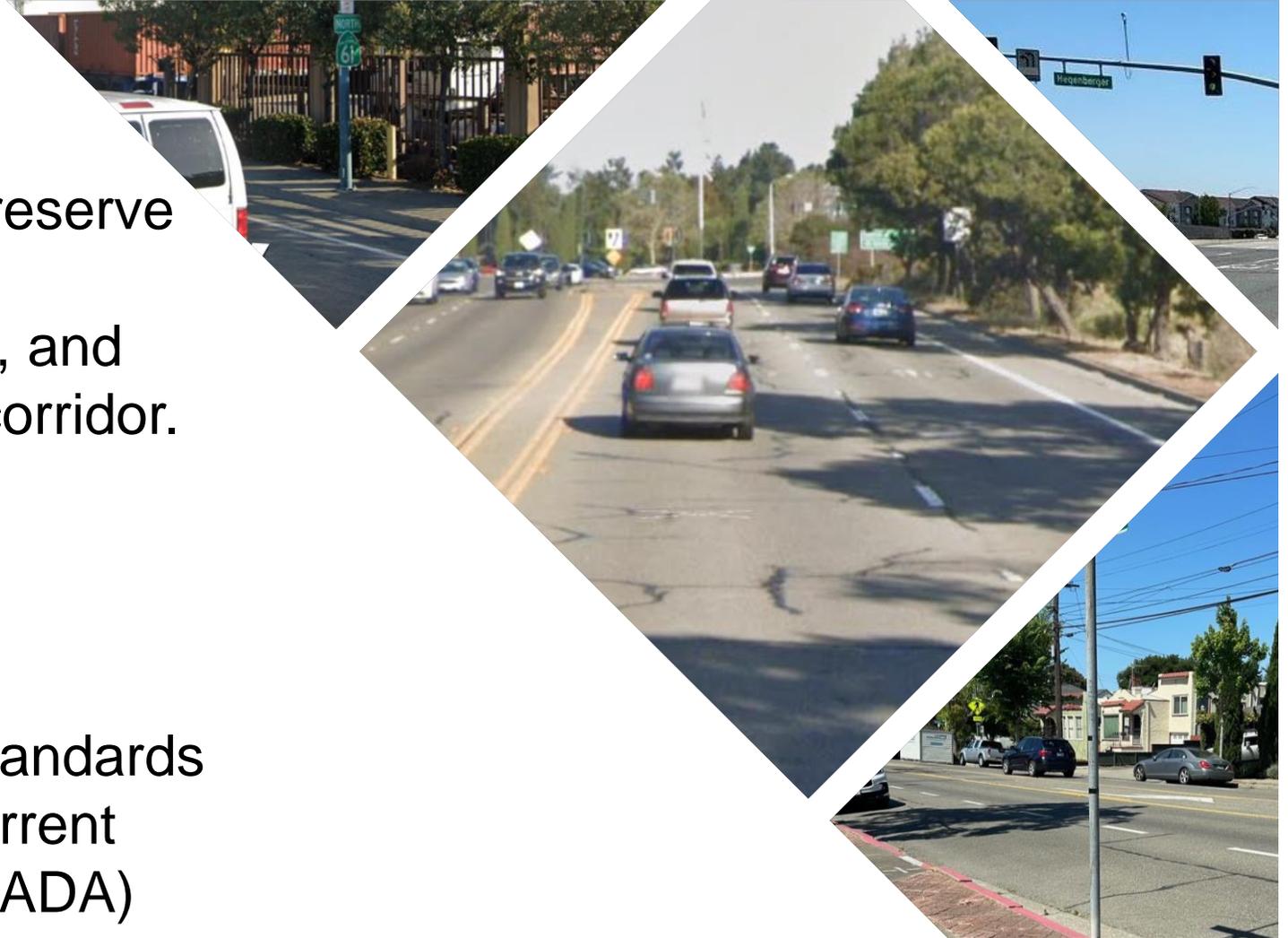
Broadway, Otis Dr. and Doolittle Dr.



Project Scope

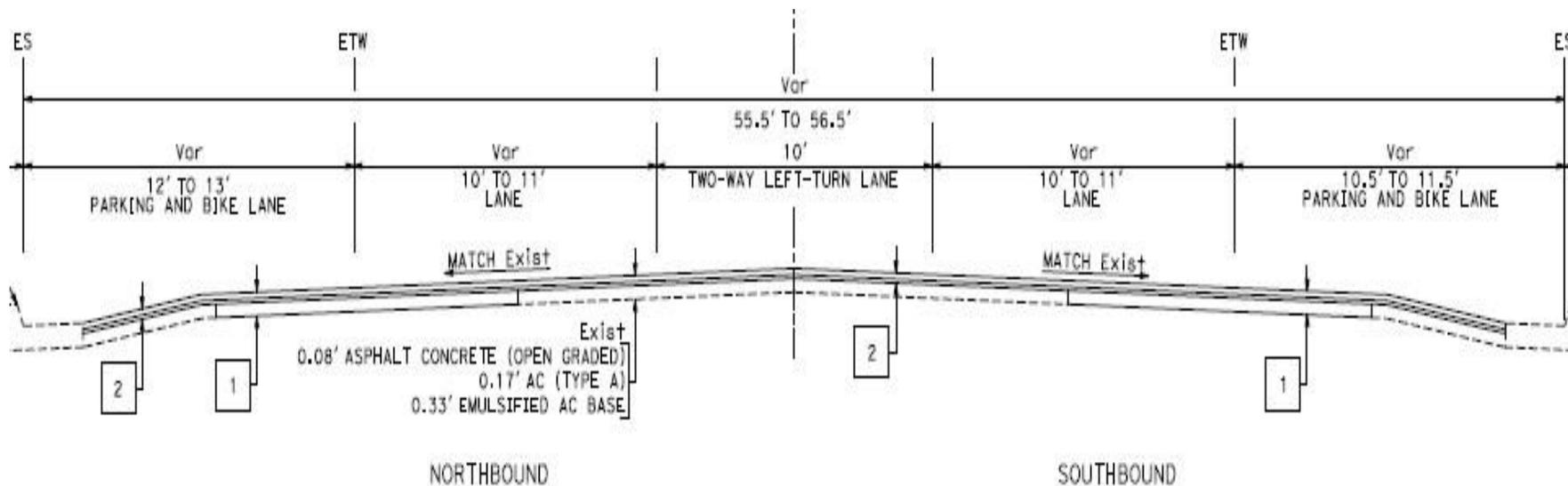
The purpose of the project is to preserve and extend the life of the existing pavement, improve its ride quality, and enhance traffic safety within this corridor. The project scope includes:

- Pavement rehabilitation
- Drainage system rehabilitation
- Guardrail upgrades to current standards
- Curb ramp upgrades to meet current Americans with Disabilities Act (ADA) standards



Pavement Rehabilitation

- Design life – up to 10 years



LEGEND:

- | | |
|---|--|
| 1 | DIGOUT 0.5' HMA (TYPE A) |
| 2 | 0.25' COLD PLANE AC PAVEMENT
0.15' RHMA-G/GPI/0.10' HMA
0.10' RHMA-G |

TRAFFIC DATA

ROUTE	COUNTY	PM	LOCATION DESCRIPTION	* BACK_AADT	* AHEAD_AADT
061	ALA	14.8	SAN LEANDRO, JCT. RTE. 112 EAST		23,200
061	ALA	15.9	OAKLAND, HEGENBERGER ROAD/98TH AVENUE	23,200	22,400
061	ALA	16.1	OAKLAND, AIRPORT/HEGENBERGER ROADS	22,400	22,600
061	ALA	18.5	ALAMEDA, ISLAND DRIVE	22,600	43,000
061	ALA	18.6	ALAMEDA, SAN LEANDRO BRIDGE **	43,000	43,000
061	ALA	19.4	ALAMEDA, BROADWAY **	43,000	10,200
061	ALA	19.8	ALAMEDA, BROADWAY/ ENCINAL AVENUE	10,200	8,500
061	ALA	21.3	ALAMEDA, CENTRAL AVENUE/ SHERMAN STREET	8,500	9,200

2022 Two-Way Average Annual Daily Traffic (AADT)

** Ala-61 Otis Drive is from PM 18.9/19.4

*Back: Traffic entrance

*AHEAD: Traffic exit

Collision Data

Table 4-6: Comparison of Actual Collision Rates on Mainline SR 61 from PM 14.98 to 19.840 with Average Collision Rates for Similar Facilities Statewide (January 1, 2017, to December 31, 2019)

Segment	Total No. of Collisions	Actual Collision Rates (col/mvm) ⁽¹⁾			Average Collision Rates for Similar Facilities Statewide (col/mvm)		
		F	F + I	Total ⁽²⁾	F	F + I	Total ⁽²⁾
Combined Directions	72	0.015	0.23	0.54	0.012	0.46	1.02
		ALL	ALL	ALL	ALL	ALL	ALL
Mainline, SR 61, PM 14.98 to 19.840	17	0.000	0.04	0.13	0.005	0.18	0.39
		DARK	DARK	DARK	DARK	DARK	DARK
	8	0.375	1.12	1.50	0.037	1.47	3.26
		WET	WET	WET	WET	WET	WET

1. **Bold** indicates actual collision rates that are higher than their corresponding average collision rate for similar facilities statewide.

2. All reported collisions (includes PDO collisions).

Notes:

col/mvm = collision(s) per million vehicle-miles

F = fatal collision(s)

I = injury collision(s)

PDO = Property Damage Only

PM = post mile(s)

SR = State Route

Collision Data

Table 4-7: Types of Collisions Within the Project Limits by ALL, DARK, and WET Collisions (January 1, 2017, to December 31, 2019)

Type of Collision	ALL Combined Directions Mainline SR 61 PM 15.000/19.840		DARK Combined Directions Mainline SR 61 PM 15.000/19.840		WET Combined Directions Mainline SR 61 PM 15.000/19.840	
	No. of Collisions	Percentage (%)*	No. of Collisions	Percentage (%)*	No. of Collisions	Percentage (%)
Head-On	3	4.2	1	5.9	1	12.5
Rear End	19	26.4	1	5.9	0	0.0
Sideswipe	18	25.0	7	41.2	3	37.5
Broadside	14	19.4	6	35.3	2	25.0
Hit Object	10	13.9	1	5.9	0	0.0
Auto-Pedestrian	4	5.6	1	5.9	0	0.0
Overturn	1	1.4	0	0.0	1	12.5
Other	3	4.2	0	0.0	1	12.5

* Percentages may not add to 100.0% because of rounding.

Notes:

PM = post mile(s)

SR = State Route

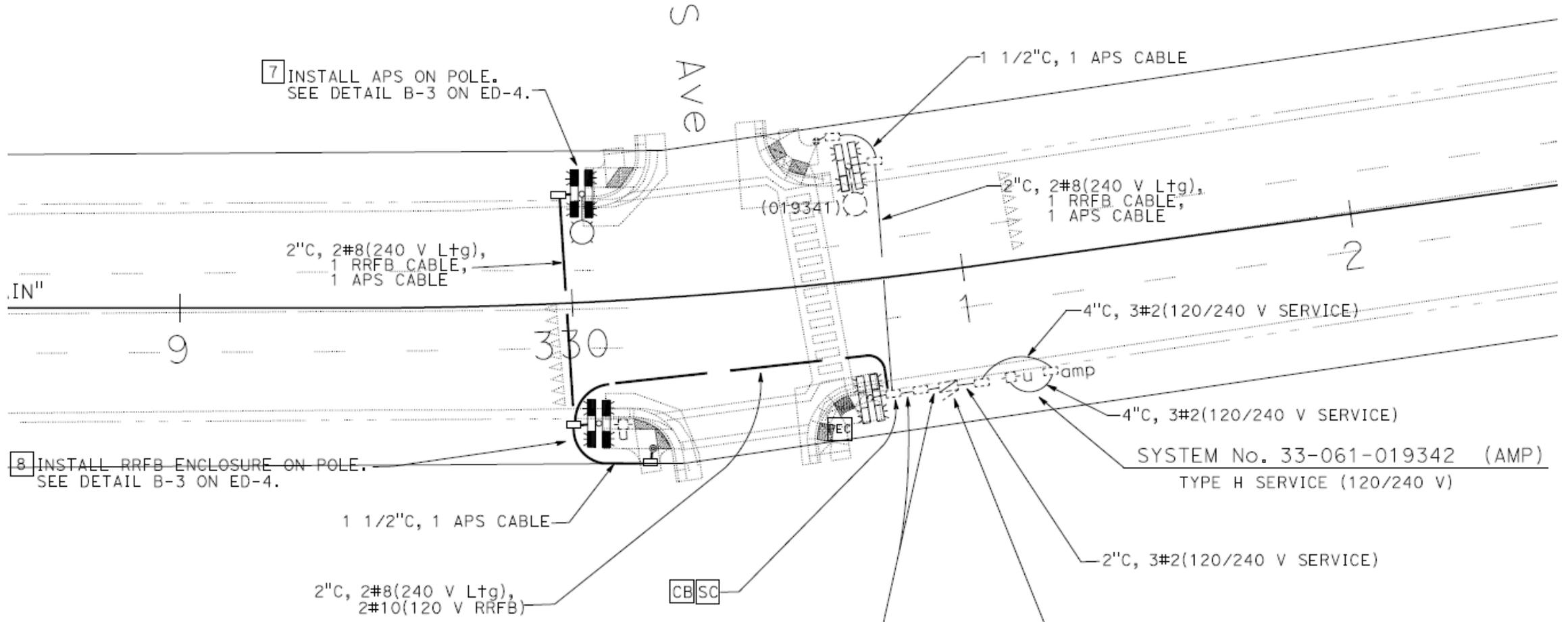
Safety Enhancements

- Install additional pedestrian crossing enhancements features (bulb-outs and RRFBs at the Mound Street/Otis Drive intersection on the south side and RRFBs at the Versailles Avenue/Otis Drive intersection) in the City of Alameda.
- Place additional signs, roadside delineators, guardrail delineators, and object markers, if missing and as needed.
- Install wet-night enhanced (high-visibility) striping, including bicycle pavement markings
- Upgrade or install Accessible Pedestrian Signals (APSs) and safety lighting at all intersections wherever feasible

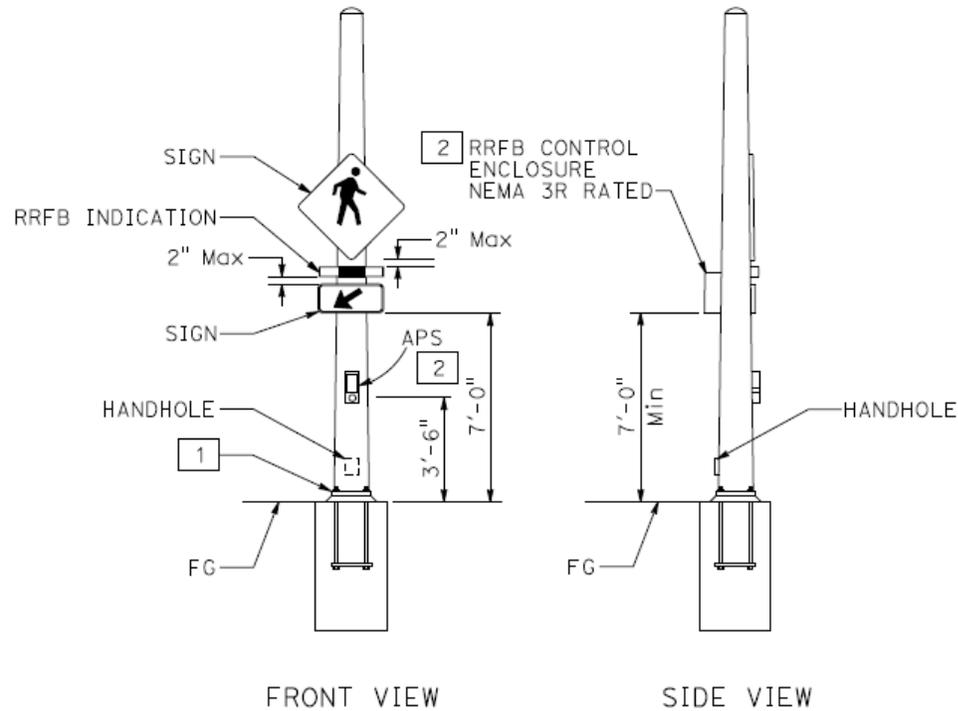
Safety Enhancements

- Upgrade 76 curb ramps to conform to current ADA standards and drainage modifications.
- Install flexible post delineators along southbound SR 61 between Old Earhart Road and the tangent section of the curve (City of Oakland).
- Install guardrail upgrades along northbound SR 61 from PM 17.44 to PM 17.52 (City of Oakland).
- Install two flashing beacons with curve warning signs along SR 61 (at PM 17.5 in the northbound direction and at PM18.0 in the southbound direction in the City of Oakland).
- Install guardrail in the southbound direction between Swan Way and Langley Street (from PM 16.47 to PM 17.02 in the City of Oakland).

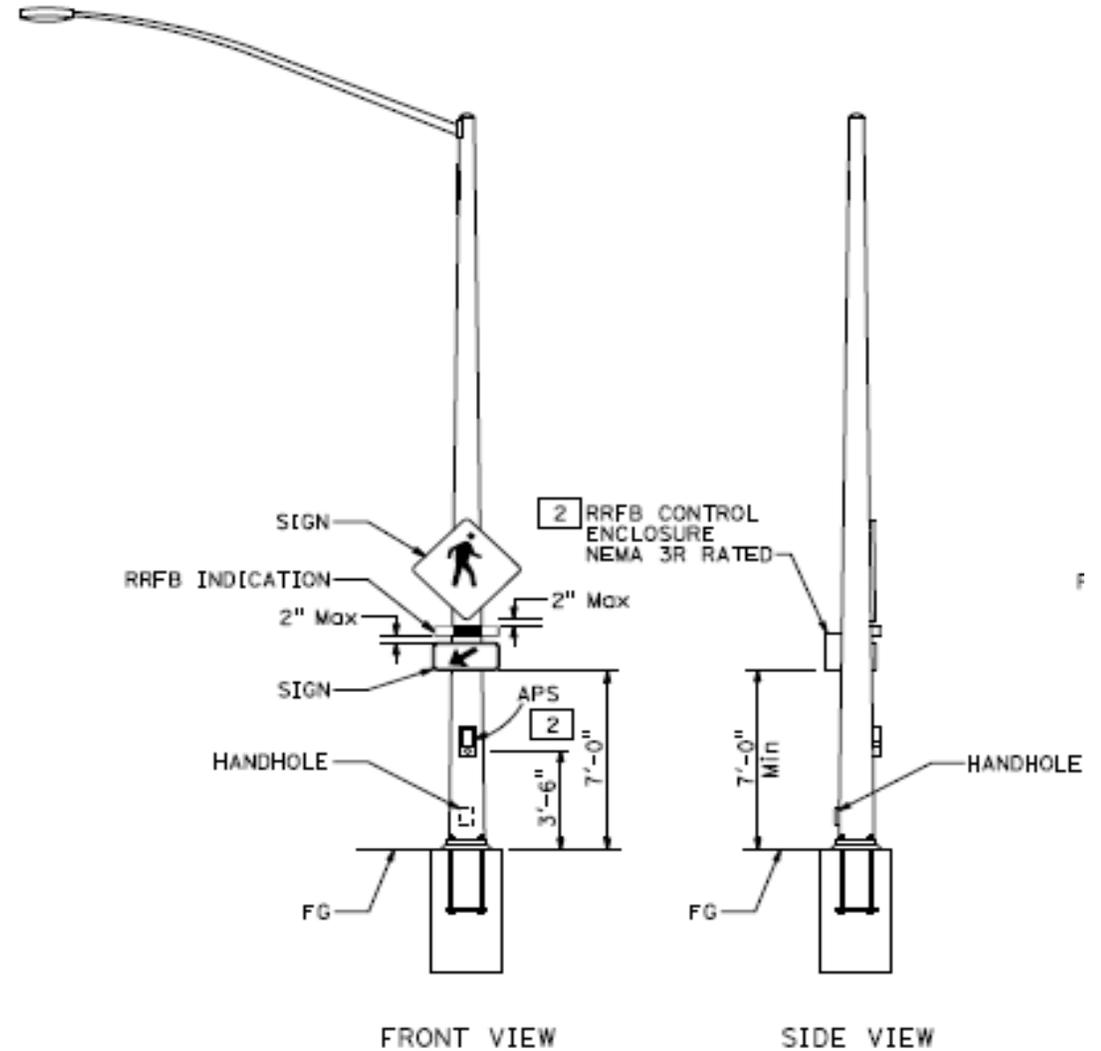
Ala-61(Otis Dr.)/Versailles St.



RECTANGULAR RAPID FLASHING BEACON (RRFB)

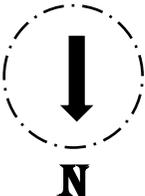


**RRFB WITH APS
TYPE 15-FBS STANDARD
WITH FIXED BASE
DETAIL B**



**RRFB WITH APS
TYPE 15TS STANDARD
DETAIL A**

Pavement Delineation



Harbor Bay Pkwy.

Doolittle Dr.



Pavement Delineation

Doolittle Dr.

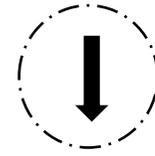


Island Dr.



Pavement Delineation

Peach
St.



High
St.



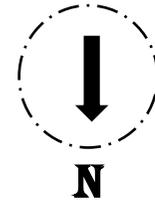
Fernside
Blvd.

Pavement Delineation

High
St.

Fountain
St.

Court
St.



Mound
St.

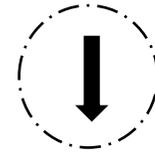


Pavement Delineation

Mound St.

Versailles Ave.

Pearl St.



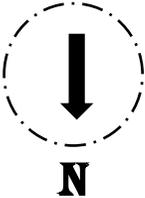
Broadway



Pavement Delineation

Broadway

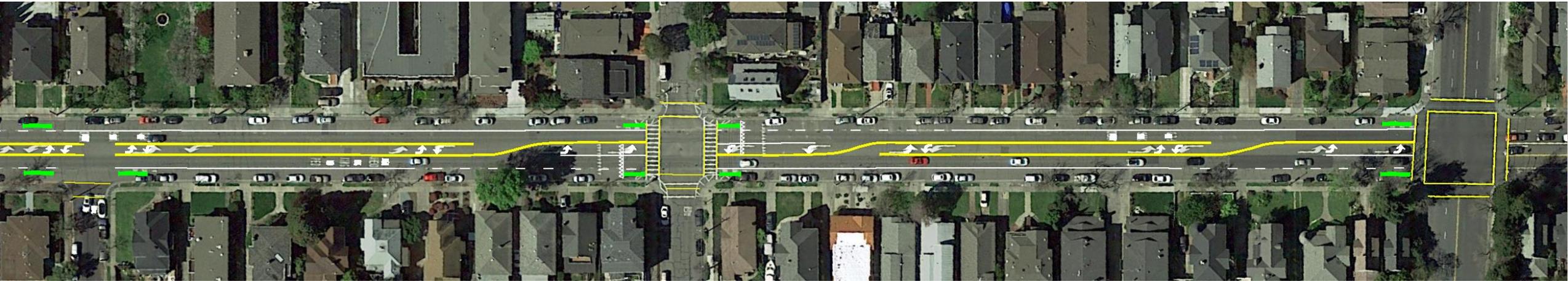
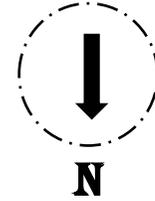
Calhoun
St.



Washington
St.

Pavement Delineation

*San Jose
Ave.*

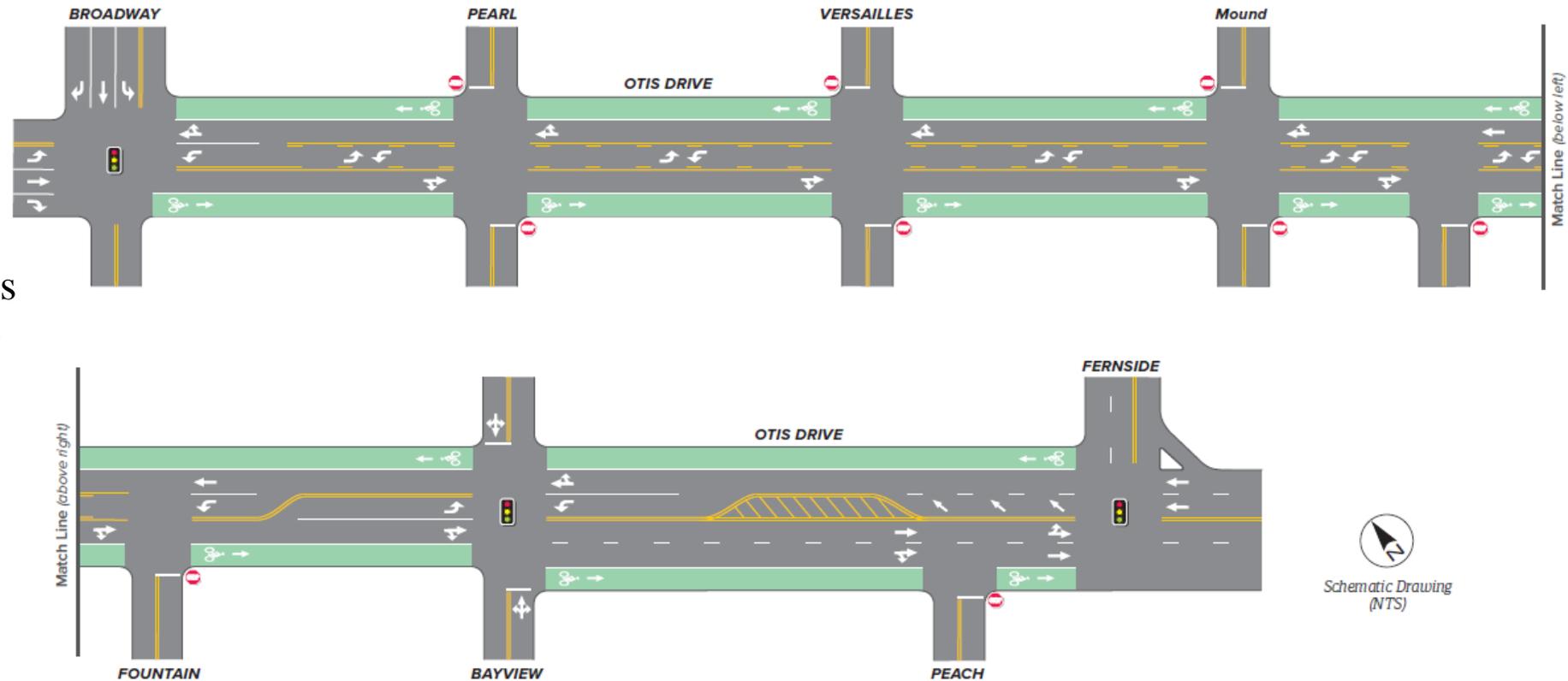


*Washington
St.*

*Encinal
Ave.*

Road Diet Study

- In July 2022, at the request from the City of Alameda, Caltrans performed a traffic operations analysis report (TOAR) for a road diet on Otis Drive between Fernside Drive and Broadway.
- The purpose of the road diet would be to improve bicycle access and enhance safety.
- The road diet would change Ala-61 (Otis Drive) from 4-lanes to 3-lanes (one lane in each direction, two-way median left turn lane, and bike lanes)



Road Diet Study - Results

- High AADT volumes (43,000 vpd) would create substantial congestion and delays (FHWA guidance recommends road diets up to 25,000 vpd)
- Other intersections (Fernside/Central and Fernside/Encinal) would be overloaded
- Traffic will divert to other local streets
- Due to narrow cross section of Otis Drive, road diet would most likely eliminate parking in one direction
- Preliminary designs show that several alternatives are possible such as Class I (two-way bike path), Class II (bike lane), and Class IV (separated bikeway)
- Requires additional studies and public involvement
- Funding deadlines & limited funding
- Caltrans concluded that road diet was not feasible for the CapM project

PROJECT SCHEDULE

Project Milestones	Milestone Date
ENVIRONMENTAL	June 26, 2023
FINAL DESIGN	September 30, 2024
BEGIN CONSTRUCTION	September 2025
COMPLETE CONSTRUCTION	January 2027

Project Funding

Phase	Programmed
CONSTRUCTION SUPPORT	\$ 3,020,000
CONSTRUCTION CAPITAL	\$ 19,587,000

Funded by the State Highway Operations and Protection Program (SHOPP)

QUESTIONS ?

