



Public Works Department

DATE: February 26, 2025

TO: Bicycle/Pedestrian Advisory Committee

FROM: Nancy Chen, Assistant Engineer

Joy Houghton, Senior Civil Engineer Robert Gonzales, Principal Civil Engineer

Edward Arango, Assistant Public Works Director/City Engineer

VIA: Jennifer Ng, Public Works Director

SUBJECT: Moffett Boulevard Complete Streets, Project 24-03

RECOMMENDATION

Receive an update on the design concept for Moffett Boulevard Complete Streets, Project 24-03.

BACKGROUND

Moffett Boulevard, between Middlefield Road and the northerly extent, is a four-lane street with two travel lanes in each direction separated by landscaped medians. Class II bike lanes exist through portions of the road between State Route 85 (SR 85) and Clark Road, with Class II striped buffered bike lanes in the northbound direction between SR 85 and Leong Drive. The roadway segment includes approaches to U.S. 101, SR 85, and the Stevens Creek Trail entrance. There is an existing sidewalk gap on the east side of Moffett Boulevard between the Stevens Creek trail entrance and Leong Drive (see Figure 1).

The City's Comprehensive Modal Plan (AccessMV) identified Moffett Boulevard as a high-stress facility with a bicycle level of traffic stress (BLTS) of 4 out of 4, where 4 represents the most stressful condition for bicyclists, including high-stress freeway crossings at U.S. 101 and SR 85.

The project area overlaps with facilities and rights-of-ways with third party agencies, including Caltrans, San Francisco Public Utilities Commission (SFPUC), Federal lands, and PG&E.



Figure 1: Project Limits





Figure 2: Sidewalk Gap Location

Figure 3: Sidewalk Gap Looking North

The <u>AccessMV Comprehensive Modal Plan</u>, approved by Council on <u>May 25, 2021</u>, identified this segment of Moffett Boulevard as a Tier 2 priority corridor for transportation improvement projects proposing Class IV separated bikeways. Identification as a priority corridor indicates that the corridor is ripe for consideration in relation to investment and improvements in multimodal transportation projects at a corridor level.

In 2015, the City contracted with BKF Engineers (BKF) to conduct a Bikeway Feasibility Study (Feasibility Study) for this corridor and evaluated conceptual cross-sections for implementing Class IV bikeways within the existing curb line and right-of-way.

A virtual community meeting was held on June 21, 2022, in anticipation of the Complete Streets projects on Moffett Boulevard and Middlefield Road to gather public input on alternatives for bikeway options. Residents ranked their preferred bikeway alternatives as follows:

- 1. Protected bikeway (Class IV) with trees and ground cover
- 2. Protected bikeway (Class IV) with concrete median
- 3. Protected bikeways (Class IV) with flexible posts, and
- 4. Restriping existing conditions

Staff evaluated the costs associated with the preferences to identify an appropriate scope for the project design phase based on available budget.

On <u>June 29, 2022</u>, BPAC was presented the Complete Streets Checklist for the third round of the One Bay Area Grant (OBAG 3) grant application for review and comments prior to submittal of the grant application by the City. In July 2022, the City submitted for the OBAG 3 grant applications to Valley Transportation Authority (VTA) including Moffett Boulevard Complete Streets. The scope of work in the grant application for Moffett project included:

Resurfacing the roadway to improve the pavement condition.

- Installing Class IV bicycle lanes between Middlefield Road and the RT Jones/Clark Road intersection, and Class II bicycle lanes at pinch points.
- Closing a sidewalk gap on the east side of Moffett Boulevard between the Stevens Creek trail and Leong Drive.

On January 25, 2023, the City was awarded \$3.5 million for the Moffett Boulevard Complete Streets Project (Project) by the Santa Clara Valley Transportation Authority (VTA) from the OBAG 3 grant program. To secure the grant, on <u>February 14, 2023</u>, Council adopted <u>Resolution No. 18761</u> providing local support and authorizing staff to file an application to the Metropolitan Transportation Commission, committing matching funds in the amount of \$1.1 million, and state assurance to complete the Project.

On <u>June 25, 2024</u>, Council approved a professional services agreement with BKF for design services for the Project.

DISCUSSION

BKF and staff have taken the findings from the Feasibility Study and OBAG 3 grant application scope and requirements and begun preliminary design. The evaluation includes applying Class IV bike lanes along the corridor. The preliminary design includes all the elements of the OBAG 3 grant application scope, including:

- Class IV vertical separated bike lanes with Class II bike lanes at pinch points, including green markings at conflict areas with driveways and bus stops (vertical separation devices include delineators and rubber curbs, with examples shown in Figure 4);
- Sidewalk gap closure on the east side of Moffett Boulevard between the Stevens Creek trail and Leong Drive;
- Minimum 11' width travel lanes to accommodate truck and bus routes; and
- Median changes to accommodate bike lanes, buffers and vertical elements





Figure 4: Example Delineators and Rubber Curbing

In order to accommodate bike lanes on the east side of Moffett Boulevard, adjacent to the Willow Park apartment complex located between Middlefield Road and SR 85, on-street parking will need to be removed. From August 3, 2024 through August 9, 2024, a parking study was conducted by the City for the removal of approximately 18 parking spaces at this location (see Figure 5). The peak on-street parking utilization rate throughout the study period was less than 1 percent (one vehicle). More than adequate vacant off-street parking was available, which indicates that no on-street parking availability concerns were identified.



Figure 5: Parking Removal Location on Moffett Blvd (shown in red)

The sections below provide specific design information of the six segments of the project. For each segment there is a figure showing the plan view with the new improvements, a cross section of the existing configuration, and a cross section with the new improvements.

Segment A—North of Middlefield Road to SR 85 On-Ramp

New class IV bike lanes are proposed along Segment A with vertical separation provided with flexible post delineators within a 2' buffer (vertical delineators not shown in figure). Center median modifications and narrowed travel lanes are proposed to accommodate the addition of bike lanes and buffers. The Project does not include the intersection at W. Middlefield Road due to this intersection being incorporated with the Middlefield Road Complete Streets Project.

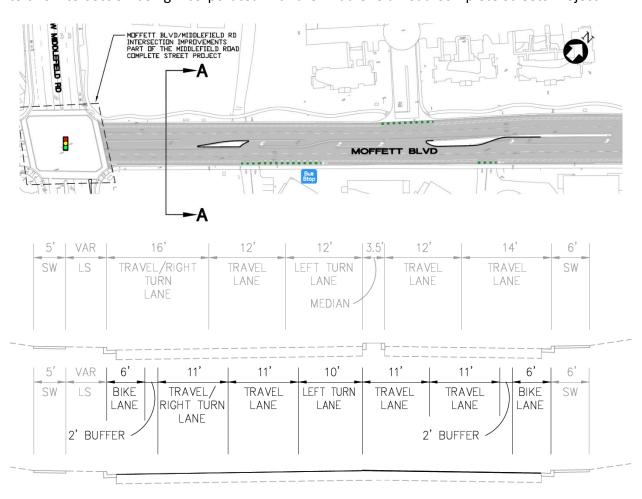


Figure 6: Segment A between W. Middlefield Road and SR 85 On-Ramp

Segment B—SR 85 On-Ramp to SR 85 Undercrossing Pinch Point

Parking will be removed in the northbound direction before the SR 85 undercrossing to implement the addition of Class IV bike lanes with rubber curb in areas where the bike buffer widens (pink area in Figure 7) and vertical delineators along other portions. An existing pinch point exists at the SR 85 undercrossing due to existing Caltrans bridge foundation structures. Center median modifications (pending Caltrans approval) are needed to accommodate a bike lane and buffer in the northbound direction.

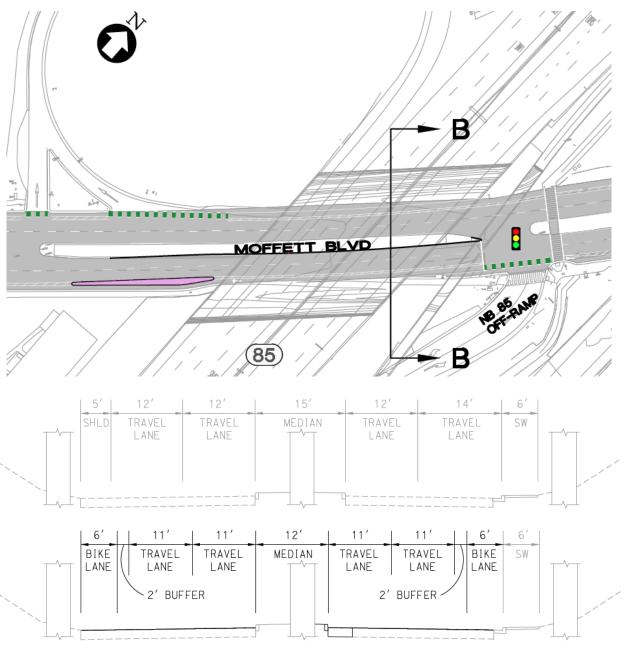


Figure 7: Segment B between SR 85 On-Ramp and SR 85 Undercrossing

Segment C—SR 85 Undercrossing to Leong Drive

A new concrete sidewalk will close the existing sidewalk gap between Stevens Creek Trail and Leong Drive on the east side of Moffett Blvd. Class IV bike lanes with flexible post delineators will be added on both sides of the roadway, except where the right turn conflict exists at Leong Dr.

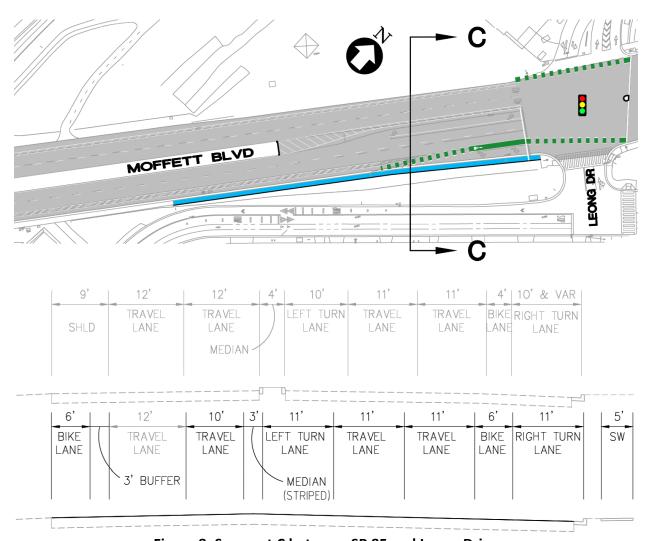


Figure 8: Segment C between SR 85 and Leong Drive

Segment D—Leong Drive to U.S. 101

The right shoulder of the southbound direction of the segment will be converted to a Class IV bike lane with flexible post delineators except where a bus stop conflict exists. In the northbound direction, rubber curbing in areas where the bike buffer widens (pink area in Figure 9) provides physical separation along with flexible post delineators along other portions, except where there are conflicts with the bus stop and turning movements.

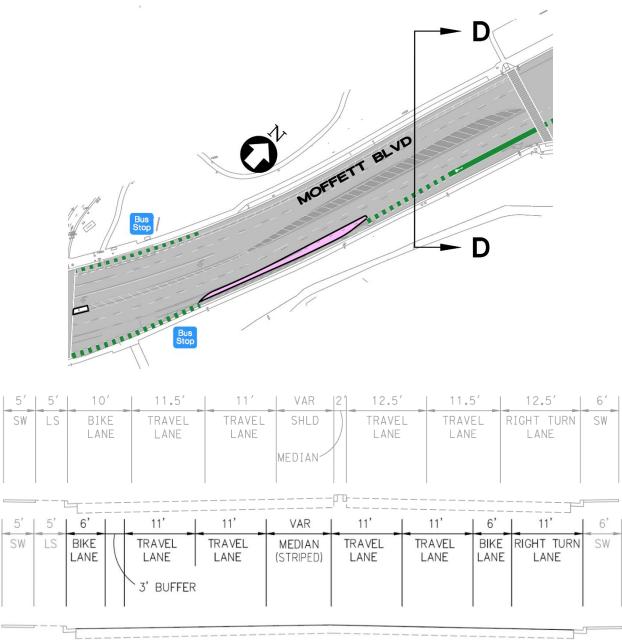


Figure 9: Segment D between Leong Drive and U.S. 101

Segment E—U.S. 101 Overcrossing

New Class IV bike lanes with flexible post delineators will be installed along Segment E except at the Caltrans overpass bridge. The existing pinch point at the bridge narrows the available roadway width allowing only Class II bike lanes. Green conflict striping will be extended through the turn pocket of the U.S. 101 ramps.

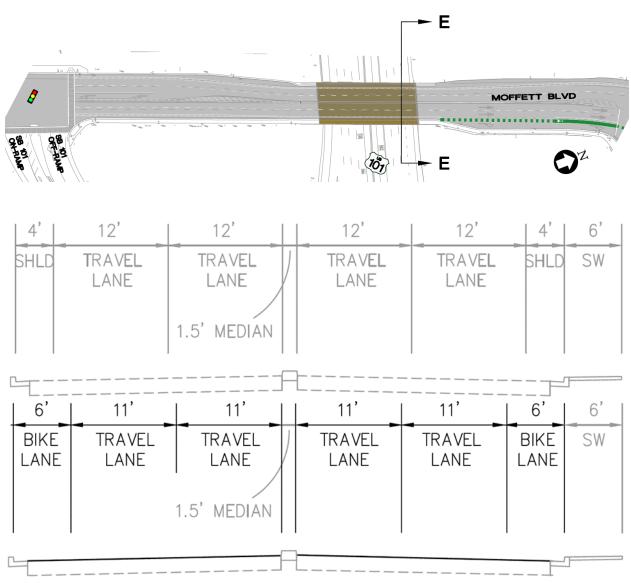


Figure 10: Segment E at U.S. 101 Overcrossing

Segment F—U.S. 101 Overcrossing to RT Jones/Clark Road Intersection

Existing Class II bike lanes will be converted to Class IV bike lanes with flexible post delineators. The project will stop on the west side of the RT Jones/Clark Road intersection. A portion of the west leg and the remainder of this intersection is owned and maintained by the Federal government, and a permit will be required to complete paving and striping in the eastbound direction.

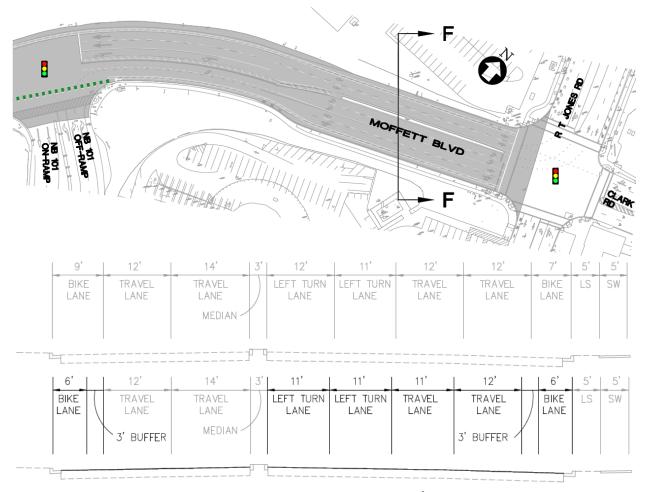


Figure 11: Segment F between U.S. 101 and RT Jones/Clark Road Intersection

NEXT STEPS

Staff will be bringing the preliminary design to the Council Transportation Commission (CTC) in March 2025 and will be sharing BPAC's feedback. Final design of the project is expected to be completed by the end of 2025. The design time frame is extended due to the required environmental clearance, Caltrans permitting for work within their right-of-ways, and Caltrans'

review of the project plans (including within the City's right-of-way) as required for the grant funding. Construction is anticipated to start in 2026 to meet the federal grant deadline.

PUBLIC NOTICING

In addition to the standard agenda posting, notices were mailed to property owners and residents within 750' of the project area.

cc: PWD—Ng, APWD—Arango, PCE—Gonzales, CTE—Lopez, SCE—Houghton, AE—Chen