THIS PRINT COVERS CALENDAR ITEM NO.: 11

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Streets

BRIEF DESCRIPTION:
Approving the implementation of transportation safety, connectivity, and accessibility improvements, including establishing new Class IV protected bikeways on 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street, as part of the 13th Street Safety Project.

SUMMARY:

- The 13th Street Safety Project proposes new protected bikeways, pedestrian safety improvements, accessibility upgrades, signal upgrades, traffic lane reconfiguration, curb extensions, and parking and loading changes.
- The proposed Class IV protected bikeways on 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street address a gap in the citywide bike network and provide connectivity to those traveling to and from the Mission District, Design District, Mission Bay, and South of Market neighborhoods.
- The 13th Street Safety Project implements recommendations from the SF Planning Department's Market-Octavia Plan Amendment (the Hub) and the SF County Transportation Authority's SoMa Freeway Ramps Intersection Safety Study.
- Additional changes such as daylighting, stop signs, raised crosswalks, turn restrictions, upgrading crosswalks to continental crosswalks, installing advanced limit lines, and upgrading traffic signal hardware and timing are proposed, but do not require the SFMTA Board's approval.
- The Planning Department has determined that the 13th Street Safety Project is statutorily exempt from the California Environmental Quality Act (CEQA).
- The proposed action is the Approval Action as defined by the S. F. Administrative Code Chapter 31.
- Certain items listed below with a "#" are Final SFMTA Decisions as defined by Ordinance 127-18. Final SFMTA Decisions can be reviewed by the Board of Supervisors. Information about the review process can be found at https://sfbos.org/sites/default/files/SFMTA_Action_Review_Info_Sheet.pdf.

ENCLOSURES:

1. SFMTAB Resolution
2. Proposed Plan View Graphics
3. Existing and Proposed Engineering Striping Drawings

APPROVALS: **DATE**

DIRECTOR _____ October 12, 2022

SECRETARY _____ October 12, 2022

ASSIGNED SFMTAB CALENDAR DATE: October 18, 2022

PURPOSE

Approving the implementation of transportation safety, connectivity, and accessibility improvements, including establishing new Class IV protected bikeways on 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street, as part of the 13th Street Safety Project.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

This action supports the following SFMTA Strategic Plan Goals:

Goal 4: Make streets safer for everyone.
Goal 6: Eliminate pollution and greenhouse gas emissions by increasing use of transit, walking and bicycling.

This item will support the following Transit First Policy Principles:

1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods.
2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety.
4. Pedestrian areas shall be enhanced wherever possible to improve the safety and comfort of pedestrians and to encourage travel by foot.
5. Bicycling shall be promoted by encouraging safe streets for riding, convenient access to transit, bicycle lanes, and secure bicycle parking.

DESCRIPTION

Existing Conditions

The 13th Street Safety Project is proposed along 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street. In total, this project is three blocks long and borders Supervisorial District 6 and Supervisorial District 9. The US 101 Central Freeway is directly overhead 13th Street for much of the project corridor. At the ground level, 13th Street serves motor vehicle traffic traveling on and off the Central Freeway. Locally, this corridor provides a direct connection for people who walk, bike, and drive to and from the Mission District, Design District, Mission Bay, and South of Market neighborhoods.

While many travel on 13th Street to access other parts of the city and region, it is also a

destination in itself. Despite challenging conditions, many also travel on 13th Street to access essential businesses and services like Rainbow Grocery and the Division Circle Navigation Center. 13th Street is also a location of cultural significance as it shares a boundary with both the Leather & LGBTQ Cultural District and American Indian Cultural District.

13th Street is part of the city's High-Injury Network, the 13 percent of streets that disproportionately account for 75 percent of severe and fatal traffic collisions. From 2017 to 2021, 98 reported collisions occurred in the project area and resulted in injury. Over one-third of reported collisions involved bicyclists or pedestrians, and the most common collision factors were red signal violations, high speeds, and left turn conflicts.

Eastbound Duboce Avenue, starting from Valencia Street, consists of one travel lane, then becomes three lanes as it approaches Mission Street. Starting at Mission Street, eastbound 13th Street consists of three travel lanes, then becomes two lanes with two right turn lanes as it approaches South Van Ness Avenue. The two right turn lanes are in a slip lane configuration accessing either southbound South Van Ness Avenue or eastbound Central Freeway. Continuing eastbound from South Van Ness Avenue, 13th Street consists of two travel lanes, then becomes two lanes with one left turn lane and one right turn slip lane as it approaches Folsom Street.

Westbound 13th Street, starting from Folsom Street, consists of three lanes, then becomes one through lane, one combined through and right lane, and two left turn lanes at South Van Ness Avenue. Continuing westbound from South Van Ness Avenue, 13th Street consists of two travel lanes. The right turn from southbound South Van Ness Avenue onto westbound 13th Street is a slip lane. Westbound Duboce Avenue, starting at Mission Street consists of three travel lanes.

Eastbound and westbound travel are separated by a concrete median. A service lane is present in each direction of 13th Street between South Van Ness Avenue and Folsom Street. The following intersections are signalized:

- Duboce Avenue / Valencia Street
- 13th Street / Mission Street / Otis Street
- 13th Street / South Van Ness Avenue
- 13th Street / Folsom Street

There are currently no bike facilities on the 13th Street and Duboce Avenue corridor between Folsom Street and Valencia Street. Bike facilities are located along Folsom Street, Valencia Street, and on 13th Street east of the project extents. People traveling by bike along 13th Street in the project vicinity currently do so in mixed traffic.

Sidewalks are generally 10 feet wide except on the south side of 13th Street immediately west of Folsom Street, where it ranges between approximately 12 to 26 feet wide. Sidewalks are narrower (approximately 5 feet wide) on the north side of 13th Street immediately west of South Van Ness Avenue and at locations where freeway support columns are present. In the segment between South Van Ness and Folsom Street, sidewalks are located between the service road and adjacent land uses.

There is no transit service along Duboce Avenue and 13th Street within the project extents. Existing Muni bus stops for lines 14 and 49 are located on Mission Street near the 13th Street intersection.

Project Elements

Bicycle Safety and Connectivity Improvements

The project proposes to improve connectivity and safety for people traveling by bicycle on 13th Street and Duboce Avenue by creating a dedicated space on the roadway for travel using this mode. This project would install protected bikeways in both directions of 13th Street and Duboce Avenue between Valencia Street and Folsom Street. In addition to the protected bikeways, a channelized bikeway would be constructed at the US-101 off ramp at Mission Street to keep people who bike north of the vehicles traveling westbound from the US-101 off ramp to Duboce Avenue.

A protected bikeway offers people biking a dedicated space physically separated from motorized traffic. The eastbound protected bikeway would be located along the south side of the street and the westbound protected bikeway would be located along the north side of the street. Physical separation from moving vehicular traffic is reinforced using concrete medians, plastic delineators, or a row of on-street parking. Concrete medians are prioritized in the buffer space between bicycle and vehicle travel where possible. In locations with utility and large vehicle turn constraints, plastic delineators will be used. Where the buffer space is located between bicycle travel and on-street parking or loading, the buffer space will feature painted hatch mark areas for people to enter and exit their vehicles.

In addition to protected bikeways, the project proposes to install bike signals at major intersections for people traveling by bike. Bike signals installed with bike-only signal phases clarify when bicyclists may enter an intersection and are usually paired with restricting conflicting vehicle movements. Bike boxes and two-stage turn boxes are also included in the proposal at intersections where intersecting bike routes are present to facilitate turn movements onto or off those routes.

The new protected bikeways would close an important gap in the city's bicycle network between Folsom Street and Valencia Street. Previous efforts on 13th Street and Division Street improved walking, biking, and driving between Townsend Street and Folsom Street. The 13th Street Safety Project will further expand the bike network by extending protected facilities on 13th Street west to Valencia Street.

Vehicle Travel Lane Reconfiguration and Circulation Changes

To accommodate the new protected bikeways, one vehicle travel lane will generally be removed in each direction. Lane reductions will allow a reallocation of roadway space to better serve the complex needs of 13th Street while also providing a better sense of safety for all users. Lane reductions have also been shown to reduce the likelihood of vehicle speeding.

The project proposal also involves a southbound left-turn restriction at the intersection of 13th Street and South Van Ness Avenue to reduce the potential for conflicts between people traveling northbound on South Van Ness Avenue and drivers turning left from southbound South Van Ness Avenue onto eastbound 13th Street.

Based on traffic analysis using traffic counts prior and during the COVID-19 pandemic, the proposed travel lane reductions will continue to accommodate peak hour traffic. To address concerns around congestion, the proposal includes traffic signal retiming to improve the flow of traffic. The project team will continue to monitor traffic counts and conditions following the implementation of the project.

Traffic Signal Upgrades

The project proposal includes traffic signal timing and hardware upgrades. Where possible, existing traffic signals mounted near freeway columns will be replaced with larger sizes in order to improve its visibility to drivers. New poles and mast arms will also be installed to provide space for mounting traffic signal heads, bike signals, and accessible pedestrian signals. Traffic signal timing will be customized to accommodate traffic flow at different times of the day, week, and direction.

Accessibility Upgrades

This project proposes to install features that will improve accessibility in the project area, including new accessible pedestrian signals and curb ramps. Accessible pedestrian signals (APS) are pedestrian push buttons that communicate when to cross the street in a non-visual manner, such as audible tones, speech messages, and vibrating surfaces. SFMTA's policy is to install APS at signalized intersections undergoing a major signal upgrade. Also, curb ramps will be reconstructed to current standards. Certain existing curb ramps currently do not have detectable warning surfaces and will be upgraded with high-visibility truncated domes.

Pedestrian Safety Improvements

The project proposal includes a lane reduction of generally one lane in each direction, as well as curb extensions. Both of these treatments reduce the likelihood of vehicular speeding and exposure of pedestrians to moving traffic. Bulbouts are proposed at certain intersection corners to provide a larger space for people waiting to cross the street, limit exposure of pedestrians to moving traffic, and increase their visibility to all other road users. Bulbouts and curb extensions reduce the length of crossings for pedestrians and reduces the amount of time they are in the roadway. At the same time, bulbouts and curb extensions reduces the turning radius for vehicle travel and encourage drivers to complete turns more slowly.

At the intersection of 13th Street and Folsom Street, drivers currently traveling on eastbound 13th Street may turn right onto southbound Folsom Street using a slip lane, which is a movement that can be made at high speeds. This project proposal would eliminate the vehicle slip lane by expanding the existing traffic islands and constructing a channelized bikeway onto Folsom Street. This corner modification would create more space for people who walk and bike and

eliminate a conflict point between pedestrians and motorists. Drivers can still turn right from eastbound 13th Street onto southbound Folsom Street in the new configuration. Bulbouts are also proposed for the northwest and southeast corners of the intersection.

At the intersection of 13th Street and South Van Ness Avenue, a stop sign is proposed for drivers turning right from southbound South Van Ness Avenue onto westbound 13th Street. This is expected to improve yielding to people walking across the street. The median islands located between frontage road and 13th Street will feature curb extensions that can accommodate new ADA curb ramps where there currently are none. On the north side of 13th Street immediately west of the intersection, the project proposal includes sidewalk widening to be in alignment with the rest of the block. At the southwest corner, a new median will be constructed to provide additional protection for people crossing the west leg of the intersection.

At the intersection of 13th Street, Mission Street, and Otis Street, bulbouts are proposed for the southeast and southwest corners. Existing crosswalk thumbnail islands will be expanded to create more space for people crossing 13th Street using the east and west leg crosswalks. The existing median separating vehicle traffic from the US 101 freeway and westbound 13th Street vehicle traffic will be expanded for people walking and will create a channelized bikeway to minimize conflicts between westbound bicyclists and vehicles traveling westbound on 13th Street and from the US-101 off-ramp.

Paint installations like red curbs and advanced limit lines will be also installed at intersections to provide more visibility for all road users. All crosswalks in the project extents would be upgraded to continental marks.

Parking and Loading Changes

This project proposes parking and loading changes to accommodate existing land uses and business needs. Color curbs can be used to designate space for commercial and passenger loading activities. In total, this project will increase the number of commercial loading zones by one within the project area from Valencia to Mission Streets. Of the 15 marked, unmetered on-street motorcycle parking spaces that currently exist on the south side of Duboce Avenue between Valencia Street and Woodward Street, 14 will be maintained. Of the existing ten metered parking spaces on the south side of 13th Street between South Van Ness Avenue and Folsom Street, approximately ten will be maintained and one additional blue zone will be added. This project will also relocate one existing blue zone to a nearby location. All 33 unregulated parking spaces will be removed as part of the proposal.

Proposed Project Parking and Traffic Modifications

Items A, B, E, F, and K require SFMTA Board Approval. Further, although Transportation Code, Division II, Section 201 subsection (a) delegates to the City Traffic Engineer the authority to install color curb markings, including commercial loading zones, the City Traffic Engineer recommends that the SFMTA Board approve Items C, D, G through J, and L through S as part of the 13th Street Safety Project.

A. ESTABLISH – CLASS IV BIKEWAY – Duboce Avenue, westbound, north side, between Valencia Street and Otis Street; Duboce Avenue, eastbound, south side, between Valencia Street and Mission Street; 13th Street, westbound, north side, between Mission Street and Isis Street; 13th Street, eastbound, south side, between Mission Street and Folsom Street

B. ESTABLISH – TOW-AWAY, NO STOPPING ANYTIME
– Mission Street, west side, from Duboce Avenue to 48 feet southerly (7-foot bulb); Mission Street, east side, from 13th Street to 30 feet southerly (7-foot bulb); 13th Street (north frontage road), north side, from South Van Ness Avenue to 35 feet easterly (7-foot bulb); 13th Street, north side, from Folsom Street to 25 feet westerly (4-foot bulb); 13th Street, south side, from Folsom Street to 19 feet easterly (7-foot bulb)

C. ESTABLISH – SIDEWALK WIDENING – 13th Street, south side, from Folsom Street to 61 feet westerly; Folsom Street, west side, from 13th Street to 32 feet southerly

D. ESTABLISH – NEW CURB RADIUS – 13th Street at Folsom Street, southeast corner

E. ESTABLISH – TOW-AWAY, NO STOPPING ANYTIME – Duboce Avenue, north side, from Valencia Street to Stevenson Street; Duboce Avenue, south side, from Valencia Street to 124 feet easterly; Duboce Avenue, south side, from Mission Street to 117 feet westerly; 13th Steet, north side, from Mission Street to South Van Ness Avenue; 13th Street, south side, from Mission Street to South Van Ness Avenue; 13th Street, north side, from 25 feet to 75 feet west of Folsom Street; 13th Street, north side, from South Van Ness Avenue to 425 feet east of South Van Ness Avenue; 13th Street, south side, from Folsom Street to 280 feet westerly; 13th Street, north side, from Folsom Street to Isis Street

F. ESTABLISH – TOW-AWAY, NO PARKING ANYTIME – Duboce Avenue, south side, from Woodward Street to 34 feet easterly

G. ESTABLISH – RED ZONE – Stevenson Street, east side, from Duboce Avenue to 12 feet northerly; Duboce Avenue, south side, from 173 feet to 230 feet east of Valencia Street; Duboce Avenue, south side, from 71 feet to 102 feet west of Woodward Street; Duboce Avenue, south side, from Woodward Street to 50 feet westerly; Mission Street, west side, from 113 feet to 123 feet south of Duboce Avenue; 13th Street, south side, from South Van Ness Avenue to 19 feet easterly; 13th Street, south side, from 220 feet to 228 feet east of South Van Ness Avenue

H. ESTABLISH – LEFT LANE MUST TURN LEFT – 13th Street, eastbound, at Folsom Street

I. ESTABLISH – NO TURN ON RED, EXCEPT BICYCLES – Duboce Avenue, westbound, at Valencia Street; Duboce Avenue, eastbound, at Mission Street; Otis Street, southbound, at Duboce Avenue; Mission Street, northbound, at 13th Street; South Van Ness Avenue, northbound, at 13th Street; South Van Ness Avenue, northbound, at 13th Street ;13th Street,

westbound, at South Van Ness Avenue; Folsom Street, southbound, at 13th Street; Folsom Street, northbound, at 13th Street; 13th Street, westbound, at Folsom Street; 13th Street, eastbound, at Folsom Street

J. ESTABLISH – NO LEFT TURN – South Van Ness Avenue, southbound, at 13th Street

K. ESTABLISH – GENERAL METERED PARKING, 2-HOUR TIME LIMIT, 9 AM TO 6 PM, MONDAY THROUGH SATURDAY – Mission Street, west side, from 92 feet to 113 feet south of Duboce Avenue

L. ESTABLISH – YELLOW METERED LOADING ZONE, 7 AM TO 4 PM, WHITE ZONE, PASSENGER LOADING 4 PM TO 2 AM, MONDAY THROUGH SATURDAY – Mission Street, west side, from 48 feet to 92 feet south of Duboce Avenue

M. ESTABLISH – YELLOW COMMERCIAL LOADING ZONE, 8 AM TO 6 PM, MONDAY THROUGH SATURDAY – Duboce Avenue, south side, from 230 feet to 250 feet east of Valencia Street; Duboce Avenue, south side from 50 feet to 71 feet west of Woodward Street; Duboce Avenue, south side from 34 feet to 54 feet east of Woodward Street

N. ESTABLISH – BLUE ZONE – Stevenson Street, east side, from 12 feet to 32 feet north of Duboce Avenue; 13th Street, south side, from South Van Ness Avenue to 19 feet easterly

O. ESTABLISH – UNMETERED MOTORCYCLE PARKING – Duboce Avenue, south side, from 124 feet to 173 feet east of Valencia Street

P. ESTABLISH – RECTANGULAR RAPID FLASHING BEACON – US-101 Northbound Off-Ramp at Mission Street

Q. ESTABLISH – TRAFFIC SIGNAL – US-101 Southbound On-Ramp at South Van Ness Avenue, 200 feet south of 13th Street

R. ESTABLISH – CROSSWALK – US-101 Southbound On-Ramp at South Van Ness Avenue, 200 feet south of 13th Street

S. ESTABLISH – STOP SIGN – South Van Ness Avenue, southbound right turn slip-lane, at 13th Street #

Designs Alternatives Considered

The project team assessed design alternatives prior to recommending a protected bikeway in each direction of 13th Street and Duboce Avenue between Folsom Street and Valencia Street. The following description details the alternative options considered and the associated tradeoffs and constraints.

Westbound Bicycle Travel on 13th Street Approaching Mission Street and Otis Street
The project team explored three options for how bicyclists may travel westbound on 13th Street and through the intersection of Mission Street and Otis Street.

- *Option 1: Protected bikeway located south of US 101 off-ramp.* The project team considered a design concept that provides a bicycle signal phase for people traveling westbound through the 13th Street, Mission Street, and Otis Street intersection by bike. Westbound bicyclists approaching the intersection would stop at the limit line if encountering a red signal. If encountering a green signal, westbound bicyclists would travel through the intersection at the same time as westbound vehicular traffic on 13th Street. Drivers turning right from westbound on 13th Street onto northbound Mission Street would have a separate signal timing phase and right turns on red would be prohibited to prevent right-hook conflicts with bicyclists traveling through. Vehicles traveling westbound from the US-101 off-ramp to westbound Duboce Avenue would encounter a red signal while bicyclists were permitted through the intersection. While this signal phasing has been implemented successfully at other intersections in San Francisco, the project team found it less suitable at this location due to the complexity of multiple intersecting streets, the presence of a major freeway off-ramp to the right of bicyclists, and the need to maintain transit signal priority along Mission Street for the 14 Mission bus route. Signal timing changes necessary for this design option would reduce green time for vehicles in all directions and affect the on-time performance and travel time for transit along Mission Street.
- *Option 2: Protected bikeway located north of US 101 off-ramp.* To minimize impacts to signal timing for all phases at all times of day at this intersection, the project team created a design concept that uses a channelized bikeway that routes westbound bicyclists to be positioned north of westbound vehicle traffic traveling from the US 101 off-ramp. In this configuration, westbound bicyclists can cross the intersection at the same time as westbound vehicular traffic traveling from the US 101 off-ramp and westbound on 13th Street. This option would increase costs associated with reconfiguring curbs to provide a bike channel, a larger curb extension, and any utility relocation required in the process.
- *Option 3: No build.* The project team considered the option to provide no dedicated bicycle facilities for people traveling westbound on 13th Street through the intersection of Mission Street and Otis Street. However, this option does not meet SFMTA Strategic Plan Goals or Transit First Policy Principles.

The project team chose Option 2. Although this option has an associated cost increase, it provides for an established method for bicyclists to travel through the intersection, a larger curb extension that shortens the pedestrian crossing on the east leg of the intersection, and maintains minimal impacts to green signal time for Muni service along Mission Street.

Eastbound Bicycle Travel Between Valencia Street and Folsom Street
The project team explored two options for how people may travel eastbound by bike in the project vicinity.

- *Option 1: Build.* The project team proposes to provide a protected bikeway facility in the eastbound direction on 13th Street and Duboce Avenue. This facility would connect to

Valencia Street on the western end and to Folsom Street on the eastern end. The roadway geometry of 13th Street and Duboce Avenue is unique and complex due to the presence of medians, frontage roads, traffic islands, and freeway support columns. Each block and intersection of the project area is different and requires a tailored design to meet the challenges of each location.

- *Option 2: No build.* Due to intersection design complexities in providing a protected facility for people traveling eastbound by bike on 13th Street, the project team considered providing only a westbound-only protected bikeway. Eastbound bicycle travel may use 14th Street, which is currently already part of the bicycle network. Between the same extents, from Valencia Street to Folsom Street, 14th Street features an eastbound Class II bikeway (bike lanes) with a bicycle green wave, which is traffic signal coordination that favors constant, typical bicycle travel speeds of 13 miles per hour.

The project team chose Option 1. A Class IV bikeway (protected bikeway) is preferable to a Class II bikeway as it offers upgraded protection for people traveling by bike and limits their exposure to moving vehicular traffic. Also, eastbound bicycle facilities on 14th Street end at Harrison Street. By comparison, eastbound bicycle facilities on 13th Street directly continue as more protected bikeways are provided along 13th Street and Division Street east of Folsom Street. For these reasons, the project team recommends the installation of Class IV bikeways on 13th Street in the eastbound direction in addition to the westbound direction.

Class IV Protected Bikeway

As discussed above, a Class IV protected bikeway is proposed on 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street. A Class IV bikeway is a bikeway for the exclusive use of bicycles and includes required separation between the bikeway and vehicle traffic. The project will use a combination of concrete medians, plastic delineators, and parking lanes as physical separation.

Section 891 of the Streets and Highways Code provides that agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted may utilize minimum safety design criteria other than those established by Section 890.6 if all of the following conditions are met:

1. The alternative criteria are reviewed and approved by a qualified engineer with consideration for the unique characteristics and features of the proposed bikeway and surrounding environs;
2. The alternative criteria, or the description of the project with reference to the alternative criteria, are adopted by resolution at a public meeting, after having provided proper notice of the public meeting and opportunity for public comment; and
3. The alternative criteria adhere to guidelines established by a national association of public agency transportation officials.

The proposed protected bikeways on 13th Street and Duboce Avenue meet these three conditions. The alternative criteria for the protected bikeway design have been reviewed and approved by a qualified engineer before installation. The alternative criteria for the project are to discourage motor vehicles from encroaching or double parking in the bicycle lane, provide a more inviting facility and a greater sense of comfort for bicyclists, and provide a greater perception of safety for bicyclists. The SFMTA Board of Directors will adopt these alternative criteria as part of this duly noticed calendar item with opportunity for public comment. Lastly, the project's alternative criteria adhere to guidelines set by the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, Federal Highway Administration Separated Bike Lane Planning and Design Guide, and California Department of Transportation Design Bulletin Information Number 89 Class IV Bikeway Guidance. The NACTO guidelines state that parking-protected bikeways require the following features:

- Like a bike lane, a separated bikeway is a type of preferential lane as defined by the Manual on Uniform Traffic Control Devices (MUTCD).
- Bicycle lane word, symbol, and/or arrow markings shall be placed at the beginning of a cycle track and periodic intervals along the facility based on engineering judgment.
- If pavement markings are used to separate motor vehicle parking lanes from the preferential bicycle lane, solid white lane line markings shall be used. Diagonal crosshatch markings may be placed in the neutral area for special emphasis. Raised medians or other barriers can also provide physical separation to the cycle track.

The separated bikeways for 13th Street and Duboce Avenue will conform to these NACTO design guidelines. The separated bikeways will also conform to best practices and design standards, including design guidelines developed jointly by the SFMTA, Mayor's Office on Disability, and San Francisco Public Works to ensure accessibility for all street users. It was also reviewed by the San Francisco Fire Department and San Francisco Police Department.

Emergency Access

To maintain appropriate emergency access for the San Francisco Fire Department (SFFD), San Francisco Police Department (SFPD), and other first responders, the project team has submitted proposed street designs for interdepartmental reviews. In working with SFFD staff, the project team has adjusted lane widths, limit lines, buffer areas, and curb features per their feedback. Large vehicle and custom SFFD vehicle turning templates were also used to determine dimensions in the conceptual design.

Stakeholder Engagement

The SFMTA conducted outreach with community stakeholders throughout the course of the planning, outreach, and conceptual design phases of the project. Initial outreach, in fall 2021 to spring 2022, began with an initial feedback survey to the public. The initial feedback survey sought information on how people currently use 13th Street, their sense of safety while traveling on the corridor, and reasons why they may feel that way. The results of this survey allowed staff to gain a better understanding of challenges people face while traveling on 13th Street and

Duboce Avenue. Staff also conducted site visits with businesses to introduce the project and learn about individual loading and operational needs through a survey. Staff visited businesses door-to-door with a paper survey and informational materials. The loading survey was also offered online and were either collected in-person or submitted through e-mail.

Due to ongoing health and safety concerns associated with COVID-19, the project team also conducted outreach and engagement using online methods. Meetings, presentations, and correspondences were made to the District 6 Supervisor Office, District 9 Supervisor Office, San Francisco Bicycle Coalition, Walk San Francisco, California Department of Transportation (Caltrans), Division Circle Navigation Center, Rainbow Grocery, and other businesses. The project team sent mailers to over 2,200 addresses in the project vicinity to spread awareness of the project and to inform the public of an open house event. Throughout the project, staff also posted physical notices along the corridor and sent e-mail updates to subscribers to promote upcoming events related to the project.

Virtual Open House

Following the initial feedback survey and loading survey, a two-week virtual open house was held in spring 2022 to provide an opportunity for the public to learn more about proposed changes on 13th Street and Duboce Avenue. From April 18 to 30, project staff hosted a dynamic webpage using ArcGIS Online StoryMaps to share project details, showcase conceptual designs, and solicit feedback through the use of a survey regarding the proposed changes. The virtual open house and accompanying materials were offered in English, Spanish, and Chinese. These pages in total gained over 1,100 views and are still available for viewing.

The virtual open house was paired with office hour sessions to provide more opportunities for the public to ask questions and discuss details directly with project staff. Four online office hour sessions were offered over the two-week period at different times of day and days of week to provide a variety of availability. Multilingual translation was offered as well. Additionally, the project team also offered two in-person office hour sessions to provide information, discuss project proposals, and collect survey responses on-site. One event was hosted outside of Rainbow Grocery on a weekend morning (April 23, 2022) and one event was hosted at the SoMa West Dog Park and Skate Park on a weekday evening (April 28, 2022).

The project team received over 80 survey responses as part of the open house. The majority of respondents favored the overall suite of improvements including curb extensions, signal upgrades, and protected bikeway. Additional themes included concerns around congestion with the lane reduction, concerns with on-street parking availability, and interest in adding more treatments oriented towards pedestrian and bicyclist protection.

Public Hearing

An engineering public hearing was held on August 19, 2022 to consider proposed protected bikeways, curb extensions, signal modifications, lane reductions, and on-street parking and loading modifications for the 13th Street Safety Project. Public participants were invited to submit comments on the proposed changes both in advance of the hearing by e-mailing or

mailing their comments or during the public hearing event by joining online or by phone. Project staff received 54 e-mails providing public hearing comment prior to the event. The majority of e-mails were supportive of the overall project but requested that additional treatments be added in detailed locations to further protect and encourage yielding to people walking and biking. The project team also received feedback in regards to the lack of clarity of travel lanes to and from the Central Freeway. Results of the public hearing were posted online within a week of the event based on all feedback received.

In addition to hosting the virtual open house and public hearing events, the project team also held in-depth discussions with stakeholders, performed site visits with specific businesses, and reviewed e-mails, voice comments, and survey results throughout the course of the project. Through the public outreach process, the project team considered and adjusted proposed designs to better address issues and concerns that were raised. Additional design elements were adjusted based off community feedback, including revising bike lane markings and median extensions, as well as adding more traffic calming features.

FUNDING IMPACT

Funding for the proposed traffic modifications is provided by several funding sources. The total project cost is broken down into the following project phases and sources:

Funding Source	Planned/ Programmed	Phases
Developer Fees (IPIC)	$123,100	Planning & Design
Affordable Housing and Sustainable Communities Program (AHSC) Cycle 3	$149,522	Planning & Design
	$337,378	Detailed Design
	$1,813,100	Construction
SB1 Local Partnership Program (LPP) Formula	$550,000	Construction
SHOPP Complete Streets Reservation	$2,115,000	Construction
Local Funds (Proposition B)	$45,000	Planning & Design
	$733,000	Detailed Design
Additional Capital Funds (e.g., Proposition K, Proposition B, etc.)	$3,521,900	Construction
TOTAL	$9,388,000	

ENVIRONMENTAL REVIEW

The proposed 13th Street Safety Project is subject to the California Environmental Quality Act (CEQA). CEQA provides a statutory exemption from environmental review for pedestrian and bicycle facilities, including new facilities, and the associated maintenance, repair, relocation, replacement, or removal of any utility infrastructure pursuant to Public Resources Code Section 21080.25.

The Planning Department determined, on August 17, 2022, that the proposed 13th Street Safety Project (Case Number 2022-005736ENV) is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.25.

The proposed action is the Approval Action as defined by the S.F. Administrative Code Chapter 31.

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and may be found in the records of the Planning Department at https://sfplanninggis.org/pim/?tab=Planning+Applications&search=2022-005736ENV and 49 South Van Ness Avenue, Suite 1400 in San Francisco, and is incorporated herein by reference.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

The City Attorney has reviewed this report.

RECOMMENDATION

SFMTA staff recommend that the SFMTA Board approve the implementation of transportation safety and connections improvements, as set forth in Items A through R above, including establishing new Class IV protected bikeways on 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street as part of the 13th Street Safety Project.

SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
BOARD OF DIRECTORS

RESOLUTION No. _____

WHEREAS, The San Francisco Municipal Transportation Agency is committed to achieving the Vision Zero goal of eliminating transportation related fatalities; and

WHEREAS, The San Francisco Municipal Transportation Agency is committed to making San Francisco a Transit First city that prioritizes non-private automobile transportation; and

WHEREAS, The San Francisco Municipal Transportation Agency is committed to creating a network of protected bikeways citywide; and

WHEREAS, The San Francisco Municipal Transportation Agency has proposed the installation of a protected bikeway and parking and traffic modifications along 13th Street from Folsom Street to Mission Street and Duboce Avenue from Mission Street to Valencia Street as follows:

A. ESTABLISH – CLASS IV BIKEWAY – Duboce Avenue, westbound, north side, between Valencia Street and Otis Street; Duboce Avenue, eastbound, south side, between Valencia Street and Mission Street; 13th Street, westbound, north side, between Mission Street and Isis Street; 13th Street, eastbound, south side, between Mission Street and Folsom Street
B. ESTABLISH – TOW-AWAY, NO STOPPING ANYTIME – Mission Street, west side, from Duboce Avenue to 48 feet southerly (7-foot bulb); Mission Street, east side, from 13th Street to 30 feet southerly (7-foot bulb); 13th Street (north frontage road), north side, from South Van Ness Avenue to 35 feet easterly (7-foot bulb); 13th Street, north side, from Folsom Street to 25 feet westerly (4-foot bulb); 13th Street, south side, from Folsom Street to 19 feet easterly (7-foot bulb)
C. ESTABLISH – SIDEWALK WIDENING – 13th Street, south side, from Folsom Street to 61 feet westerly; Folsom Street, west side, from 13th Street to 32 feet southerly
D. ESTABLISH – NEW CURB RADIUS – 13th Street at Folsom Street, southeast corner
E. ESTABLISH – TOW-AWAY, NO STOPPING ANYTIME – Duboce Avenue, north side, from Valencia Street to Stevenson Street; Duboce Avenue, south side, from Valencia Street to 124 feet easterly; Duboce Avenue, south side, from Mission Street to 117 feet westerly; 13th Steet, north side, from Mission Street to South Van Ness Avenue; 13th Street, south side, from Mission Street to South Van Ness Avenue; 13th Street, north side, from 25 feet to 75 feet west of Folsom Street; 13th Street, north side, from South Van Ness Avenue to 425 feet east of South Van Ness Avenue; 13th Street, south side, from Folsom Street to 280 feet westerly; 13th Street, north side, from Folsom Street to Isis Street
F. ESTABLISH – TOW-AWAY, NO PARKING ANYTIME – Duboce Avenue, south side,

from Woodward Street to 34 feet easterly

G. ESTABLISH – RED ZONE – Stevenson Street, east side, from Duboce Avenue to 12 feet northerly; Duboce Avenue, south side, from 173 feet to 230 feet east of Valencia Street; Duboce Avenue, south side, from 71 feet to 102 feet west of Woodward Street; Duboce Avenue, south side, from Woodward Street to 50 feet westerly; Mission Street, west side, from 113 feet to 123 feet south of Duboce Avenue; 13th Street, south side, from South Van Ness Avenue to 19 feet easterly; 13th Street, south side, from 220 feet to 228 feet east of South Van Ness Avenue
H. ESTABLISH – LEFT LANE MUST TURN LEFT – 13th Street, eastbound, at Folsom Street
I. ESTABLISH – NO TURN ON RED, EXCEPT BICYCLES – Duboce Avenue, westbound, at Valencia Street; Duboce Avenue, eastbound, at Mission Street; Otis Street, southbound, at Duboce Avenue; Mission Street, northbound, at 13th Street; South Van Ness Avenue, northbound, at 13th Street; South Van Ness Avenue, northbound, at 13th Street ;13th Street, westbound, at South Van Ness Avenue; Folsom Street, southbound, at 13th Street; Folsom Street, northbound, at 13th Street; 13th Street, westbound, at Folsom Street; 13th Street, eastbound, at Folsom Street
J. ESTABLISH – NO LEFT TURN – South Van Ness Avenue, southbound, at 13th Street
K. ESTABLISH – GENERAL METERED PARKING, 2-HOUR TIME LIMIT, 9 AM TO 6 PM, MONDAY THROUGH SATURDAY – Mission Street, west side, from 92 feet to 113 feet south of Duboce Avenue
L. ESTABLISH – YELLOW METERED LOADING ZONE, 7 AM TO 4 PM, WHITE ZONE, PASSENGER LOADING 4 PM TO 2 AM, MONDAY THROUGH SATURDAY – Mission Street, west side, from 48 feet to 92 feet south of Duboce Avenue
M. ESTABLISH – YELLOW COMMERCIAL LOADING ZONE, 8 AM TO 6 PM, MONDAY THROUGH SATURDAY – Duboce Avenue, south side, from 230 feet to 250 feet east of Valencia Street; Duboce Avenue, south side from 50 feet to 71 feet west of Woodward Street; Duboce Avenue, south side from 34 feet to 54 feet east of Woodward Street
N. ESTABLISH – BLUE ZONE – Stevenson Street, east side, from 12 feet to 32 feet north of Duboce Avenue; 13th Street, south side, from South Van Ness Avenue to 19 feet easterly
O. ESTABLISH – UNMETERED MOTORCYCLE PARKING – Duboce Avenue, south side, from 124 feet to 173 feet east of Valencia Street
P. ESTABLISH – RECTANGULAR RAPID FLASHING BEACON – US-101 Northbound Off-Ramp at Mission Street
Q. ESTABLISH – TRAFFIC SIGNAL – US-101 Southbound On-Ramp at South Van Ness Avenue, 200 feet south of 13th Street
R. ESTABLISH – CROSSWALK – US-101 Southbound On-Ramp at South Van Ness Avenue, 200 feet south of 13th Street
S. ESTABLISH – STOP SIGN – South Van Ness Avenue, southbound right turn slip-lane, at 13th Street #

WHEREAS, Although the City Traffic Engineer has the authority to install color curb markings, the SFMTA Board is requested to approve color curb markings for Items G, and L through N, as part of the 13th Street Safety Project; and

WHEREAS, The public has been notified about the proposed modifications and has been given the opportunity to comment on those modifications through the public hearing process; and

WHEREAS, The proposed 13th Street Safety Project is subject to the California Environmental Quality Act (CEQA); CEQA provides a statutory exemption from environmental review for pedestrian and bicycle facilities, including new facilities, and the associated maintenance, repair, relocation, replacement, or removal of any utility infrastructure pursuant to Public Resources Code Section 21080.25; and

WHEREAS, the Planning Department determined on August 17, 2022 that the proposed 13th Street Safety Project (Case Number 2022-005736ENV) is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.25; and

WHEREAS, The proposed action is the Approval Action as defined by the S. F. Administrative Code Chapter 31; and

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors, and may be found in the records of the Planning Department at https://sfplanninggis.org/pim/?tab=Planning+Applications&search=2022-005736ENV and 49 South Van Ness Avenue, Suite 1400 in San Francisco, and is incorporated herein by reference; now therefore be it

RESOLVED, That the San Francisco Municipal Transportation Agency Board of Directors approves the proposed parking and traffic modifications associated with the 13th Street Safety Project listed as Items A-S above.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of October 18, 2022.

_____

Secretary to the Board of Directors
San Francisco Municipal Transportation Agency

Enclosure 2: Proposed Plan View Graphics

13th Street Safety Project

PROPOSED CHANGES

VISION ZERO SF

SFMTA

Accessible Pedestrian Signals

Accessible pedestrian signals (APS) are pedestrian push buttons that communicate when to cross the street in a non-visual manner, such as audible tones, speech messages, and vibrating surfaces. SFMTA's policy is to install APS at signalized intersections undergoing a major signal upgrade.

Curb Ramps

Older curb ramps could be upgraded with yellow truncated domes to provide a tactile surface that is more visible and detectable. This serves people walking with a better warning about where there is a roadway crossing.

Curb Extensions

Long intersection crossings can be shortened with curb extensions. Curb extensions from median islands can add extra protection for people waiting to cross the street. Curb extensions can also form bikeway channels that provide protected space for bicyclists to approach intersections.

Sidewalk Widening

Due due to the placement of freeway support columns and historic street widening, the sidewalk on the north side of 13th Street west of South Van Ness Avenue is inadequately wide. This project proposes to restore the sidewalk to a more sufficient width, in alignment with the rest of the block.

Protected Bikeway

People traveling by bike along 13th Street currently do so in mixed traffic. This project proposes to install protected bikeways in both directions of 13th Street and Duboce Avenue between Valencia Street and Folsom Street. The new protected bikeway would close a gap in the city's bicycle network between Folsom Street and Valencia Street. A protected bikeway offers people biking a dedicated space physically separated from motorized traffic. The physical separation is reinforced using concrete medians, plastic delineators, or a row of on-street parking.

Intersection Bikeway Improvements

This project proposes to pair protected bikeways with bike signals at intersections. Bike signals installed with bike-only signal phases clarify when bicyclists may enter an intersection and is usually paired with restricting conflicting vehicle movements. Also, bike boxes are dedicated spaces where bicyclists may wait before proceeding. Bike boxes with arrows are to facilitate turns onto a perpendicular route. Bike boxes are typically painted green as a visual cue for all road users to indicate where bicyclists can be expected.

Parking and Loading Adjustments

This project proposes parking and loading changes to accommodate existing land uses and business needs. Color curbs can be used to designate space for commercial and passenger loading activities.

Bulbouts

Bulbouts are one type of curb extention that is an expansion of the sidewalk at the corner of intersections. Bulbouts provide more sidewalk space for people waiting to cross the street, encourage drivers to turn more slowly at intersections, and make pedestrians more visible to all. This project proposes bulbouts at the 13th Street intersections with Mission Street and Folsom Street.

Travel Lane Reduction

To accommodate a new protected bikeway, the number of travel lanes on 13th Street and Duboce Avenue will be reduced at certain locations. Lane reductions will allow a reallocation of roadway space to better serve the complex needs of 13th Street while also providing a better sense of safety for all users.

Traffic Signal Upgrades

Existing traffic signals mounted near freeway columns may be replaced with larger sizes in order to improve its visibility to drivers. Traffic signal timing may be customized to accommodate traffic flow at different times of the day, week, and direction. Signal timing improvements will also be made to provide people with more time to walk across intersections.

Please let us know what you think! Email us at **13thStreetSafety@SFMTA.com**

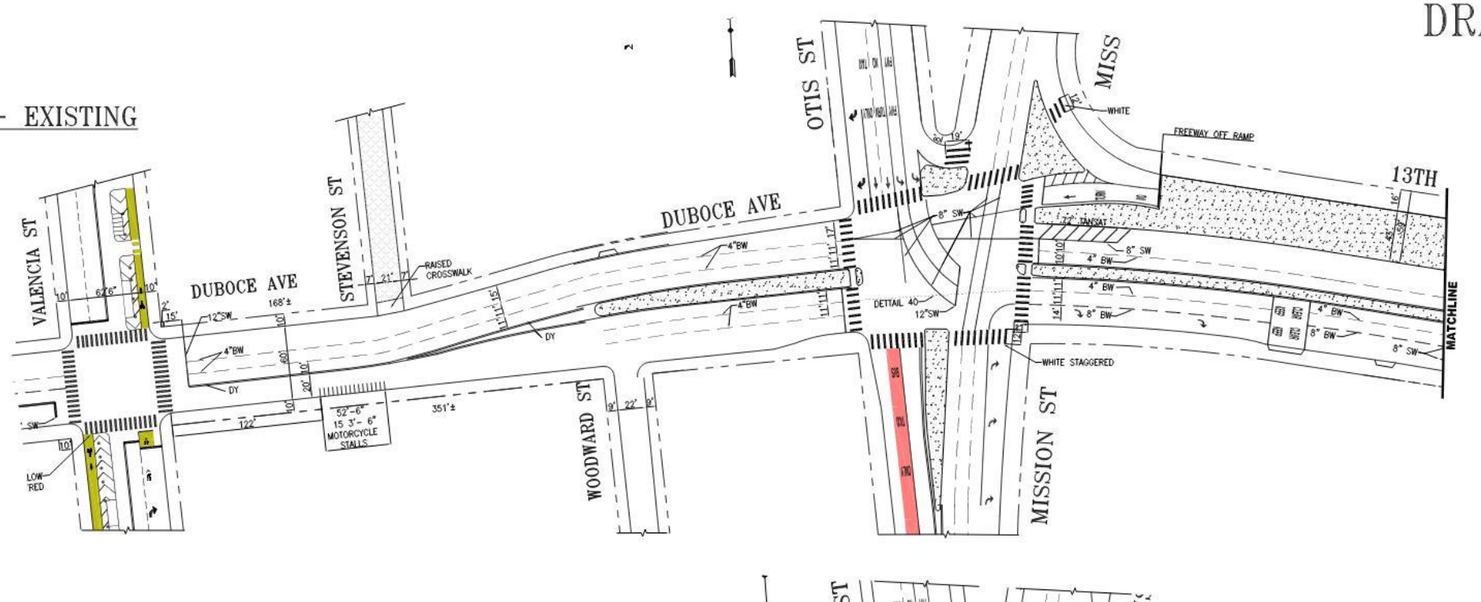
For more information about the 13th Street Safety Project, we invite you to visit: **SFMTA.com/13thStreetSafety**

311 Free language assistance / 免費語言協助 / Ayuda gratis con el idioma / Бесплатная помощь переводчиков / Libreng tulong para sa wikang Tagalog / Trợ giúp Thông dịch Miễn phí / **Assistance linguistique gratuite** / 無料の言語支援 / 무료 언어 지원 / การช่วยเหลือทาง ด้านภาษาโดยไม่เสียค่าใช้จ่าย / خط المساعدة المجاني على الرقم

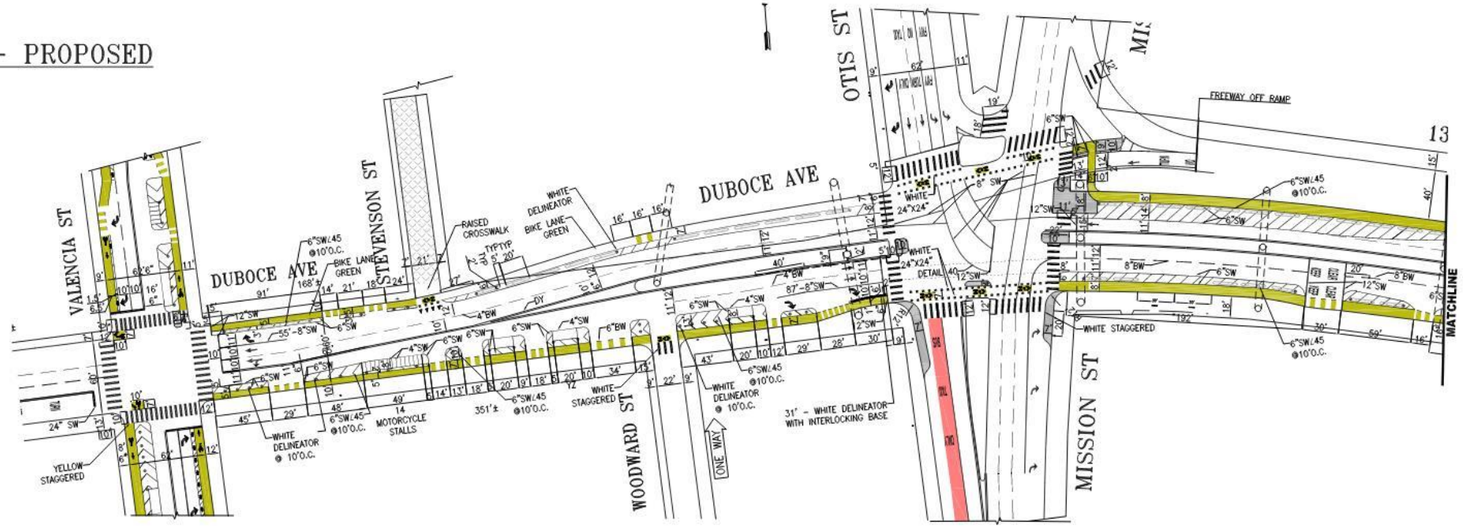
Enclosure 3: Existing and Proposed Engineering Striping Drawings

DRAFT 091122

PLAN – EXISTING



PLAN – PROPOSED



NO.	DATE	DESCRIPTION	BY	APP
		TABLE OF REVISIONS CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION		

SFMTA

DRAWN: DATE:

CHECKED: DATE:

APPROVED

SENIOR ENGINEER DATE:

CITY TRAFFIC ENGINEER DATE:

SCALE: 1" = 50'

SHEET/SHEETS:

PROPOSED DESIGN

DUBOCE AVENUE & 13TH STREET
VALENCIA STREET TO OTIS/MISSION STREET

CONTRACT NO.

DRAWING NO.

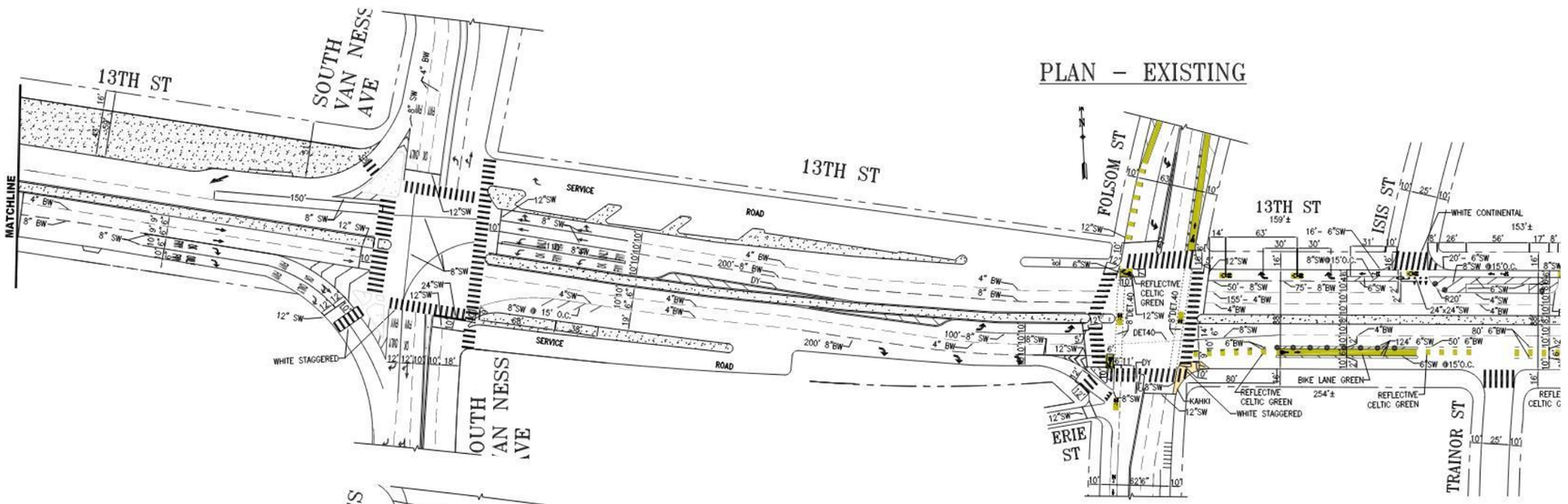
FILE NO.

REV. NO.

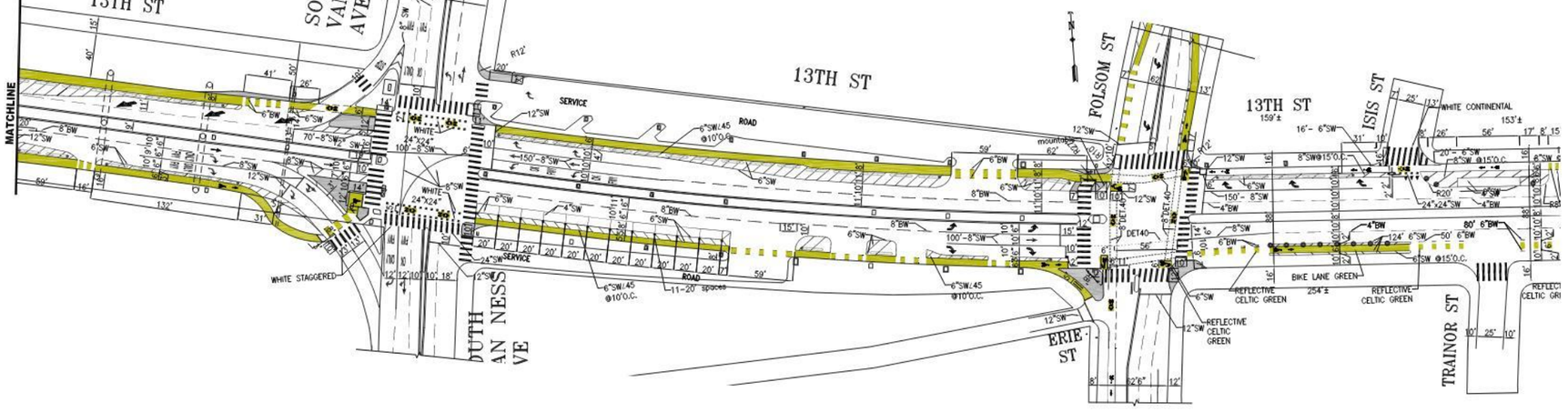
FILE NAME:
DATE: --/--/--

DRAFT 091122

PLAN – EXISTING



PLAN – PROPOSED



NO.	DATE	DESCRIPTION	BY	APP
		TABLE OF REVISIONS CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION		

SFMTA

DRAWN: DATE:

CHECKED: DATE:

APPROVED

SENIOR ENGINEER DATE:

CITY TRAFFIC ENGINEER DATE:

SCALE: 1" = 50'

SHEET/SHEETS:

PROPOSED DESIGN

13TH STREET
OTIS/MISSION STREET TO FOLSOM STREET

CONTRACT NO.

DRAWING NO.

FILE NO.

REV. NO.

FILE NAME:
DATE: --/--/--