



February 29, 2024

San Rafael City Council
1400 Fifth Avenue
San Rafael, CA 94901

Mayor Kate Colin
Vice Mayor Eli Hill
Councilmember Maika Gulati
Councilmember Maribeth Bushey
Councilmember Rachel Kertz

RE: March 4, 2024 City Council Meeting Agenda Item 5.A

Dear San Rafael City Council,

We write to you today about the Golden Gate Bridge, Highway, and Transportation District's San Rafael Transit Center Relocation Project. Our letter covers the following three topics:

1. The alignment of the North – South Greenway through downtown San Rafael
2. The connection between the Canal neighborhood and the Transit Center
3. Separation of bicycles and pedestrians within the Transit Center

1. NORTH – SOUTH GREENWAY ALIGNMENT

The San Rafael Transit Center Relocation Project (“the Project”) will complete half of the 4-block long gap in the North – South Greenway in Downtown San Rafael (“the Downtown Greenway Gap”). The Project includes two blocks of the Downtown Greenway Gap (also known as the “SMART Pathway” or the “Great Redwood Trail”) between Second Street and Fourth Street.

The other half of the Downtown Greenway Gap is between Fourth Street and Mission Avenue. The northern part of the Downtown Greenway Gap connects at Mission with the existing Puerto Suello Hill Pathway. The Mission to Puerto Suello Hill Greenway segment was completed by Caltrans in 2010 as part of the Highway 101 HOV Gap Closure Project and connects Downtown San Rafael to Los Ranchitos, Terra Linda, the Marin Civic Center, and Novato.

South of the Transit Center segment, the Second Street to Andersen segment of the North – South Greenway was completed in 2020 and connects Downtown San Rafael and the Canal neighborhood via the Cal Park Hill Tunnel to Greenbrae and Southern Marin.

The Downtown San Rafael segments of the North – South Greenway are of the utmost importance, linchpins a countywide and regionwide interconnected network of pathways. The utility and robustness of this network depends entirely on its completeness and connectedness.

With the Second to Fourth Street segment coming into focus and in the process of being designed by the Golden Gate Bridge, Highway, and Transportation District, the next critical step in closing the Downtown Greenway Gap from Fourth Street to Mission. Earlier iterations of the Transit Center plans showed a Pick-Up/Drop-Off zone along West Tamalpais Avenue north of



Fourth Street, which is exactly where the future North – South Greenway alignment is supposed to be. We want to thank the GGBHTD for modifying its plans based on feedback from the community in 2021-2022. The new plans no longer locate the Pick-Up/Drop-Off facilities in the path of the North – South Greenway.

We have attached for your reference a conceptual drawing showing one possible alignment for the North -South Greenway along West Tamalpais Avenue between Fourth Street and the existing Puerto Suello Hill Pathway at Mission Avenue (see **Appendix Exhibit A**). In this concept, the North – South Greenway would take the form of a Class IV cycle track at street level. The cycle track would be protected from the SMART railroad right-of-way by fencing, and from traffic on West Tamalpais Avenue by a 3-foot striped buffer with vertical bollards.

On-street parking on West Tamalpais Avenue would be preserved in this design. However, West Tamalpais Avenue would need to be converted from its existing condition as a two-way street to a one-way street. We recommend converting West Tamalpais Avenue between Fourth Street and Mission Avenue one-way in the southbound direction, with East Tamalpais Avenue converted to a one-way street in the northbound direction. This way, motorists would have both northbound and southbound options between the two parallel Tamalpais Avenues.

2. CANAL – TRANSIT CENTER CONNECTION

At the SMART Board of Directors meeting on February 21, 2024, one of the consultants presenting the Transit Center project to the SMART Directors commented on the importance of San Rafael’s Canal neighborhood as an origin and destination for Transit Center users. The shortest route between the Canal neighborhood and the future Transit Center is along East Francisco Boulevard, Grand Avenue, and Third Street. Since Third Street is a heavy-volume busy arterial, and the location of numerous accidents between cars and pedestrians, WTB-TAM recommends the slightly longer route along Fourth Street, which is a calmer street than Third Street (see **Appendix Exhibit B**). We call this the “Canal-Grand Avenue-Fourth Street connection to the Transit Center.”

Most of the above route has been recently improved thanks to San Rafael Public Works Department projects. In 2021, the San Rafael DPW widened the sidewalks on East Francisco Boulevard to 10 feet and the City Council passed an ordinance making them bicycle legal. al. This way, Canal residents can walk or bicycle north on Grand Avenue from the Canal somewhere other than on the freeway frontage road sharing the lane with speeding cars and trucks. The route continues north on Grand Avenue, on the multi-use pathway bridge across San Rafael Canal completed by DPW in 2019. Immediately north of the Grand Avenue bridge, DPW is currently finishing construction of the Grand Avenue Cycle Track, a two-way Class IV facility between Second Street and Fourth Street.

The final gap between facilities that the San Rafael DPW has built or will soon have built and the new Transit Center is along Fourth Street. Though safer than Third Street, Fourth Street is not very well designed for people on bicycles. It is currently designated a Class III shared route,



where cyclists are expected to “take the lane” and share it with vehicle traffic, because there is no space set aside as a “bike lane.” Class III facilities are sufficient for confident and experienced cyclists, but they are anathema to “all ages and abilities” bicycle users, a broad-based spectrum of users that includes children and senior citizens.

San Rafael and the residents of the Canal neighborhood need a safer walking and bicycle route on the final segment of the route from the Canal to the Transit Center, along Fourth Street from Grand Avenue to the new Transit Center. At the intersection of Grand Avenue and Fourth Street, WTB-TAM recommends a protected intersection, also known as a “Dutch intersection” (see **Appendix Exhibit C**). Such a protected intersection could be implemented at low cost using “Quick Build” methods (i.e. paint and plastic).

Along Fourth Street, WTB-TAM recommends following international best practices by building unidirectional Class IV cycle tracks on each side of Fourth Street, next to sidewalks for pedestrians (see **Appendix Exhibit D**). In San Rafael’s case, this would not require “re-inventing the wheel.” The City is already building a Class IV cycle track on Grand Avenue. This would merely extend this existing cycle track the rest of the way to the Transit Center.

Class IV cycle tracks provide two different kinds of separation. First, separation between bicyclists and cars by placing a horizontal and vertical buffer between the bike lanes and car lanes. Second, separation of bicyclists and pedestrians on the (existing) sidewalks. Giving bicyclists their own space to ride also benefits pedestrians and users of sidewalks by reducing the bicyclist-pedestrian collisions and conflict that occur when bicyclists who do not feel comfortable riding in the street ride on sidewalks instead.

3. BICYCLE – PEDESTRIAN SEPARATION

At the Dec. 6, 2023, Public Workshop, the GGBHTD displayed three bike lane configurations (see **Appendix Exhibit E**). WTB-TAM strongly endorses *Option 1*. We will describe our reasons for endorsing *Option 1* in more detail below, but first we will explain why we do NOT recommend *Options 2* and *3*.

Option 2 channelizes the bicycle path below the adjacent sidewalk and bus stop. This poses safety hazards both to bicyclists in the channelized path, and to pedestrians and transit riders needing to cross the bicycle path. Bicyclists not accustomed to riding within a channelized path risk colliding against the curb and crashing. The recessed curb poses a hazard to pedestrians, transit riders, and persons with disabilities attempting to cross between the sidewalk and bus stop. Although level crossings would be provided for pedestrians, human nature tells us that many pedestrians will inevitably cross outside the designated crossing and therefore still risk tripping. The National Association of City Transportation Officials (NACTO) recommends raised cycle tracks that are separated from the street and “flush with the sidewalk” (NACTO, 2024).

Option 3 combines the sidewalk and bicycle path into a single multi-use path. We strongly recommend against this design, in which bicyclists and pedestrians would share the same space.



This may be acceptable in “low density areas where pedestrian volumes are anticipated to be fewer than 200 people per hour” (Alameda County Public Works Agency, 2018). However, separated pedestrian and bicycle facilities “are preferable in higher density areas, adjacent to commercial and mixed-use development, and near major transit stations or locations where anticipated pedestrian volumes are higher” (ibid). NACTO also advises that “in zones with high pedestrian volumes and frequent buses” bicyclists and pedestrians should be provided separate, not shared, spaces (NACTO, 2024).

Future users of the new San Rafael Transit Center will engage in a wide variety of activities, amongst them buying tickets, checking schedules, parking one’s bike, drinking a coffee, lingering, socializing, and going to and fro. This is too much activity for pedestrians to be sharing the same space as moving bicycles. When slow users compete with cyclists for space, and especially when pedestrians must cross cyclists’ path of travel, conflict is bound to occur (Jay, 2014). “The potential for conflict on shared paths is exacerbated by the differences in type, abilities and movements of users such as pedestrians, cyclists, joggers, in-line skaters, skateboarders, dogs, and babies in prams” (Grzebiet, 2011).

Option 1 lacks the problematic channelization of *Option 2* and provides the much-needed separation between bicycles and pedestrians missing in *Option 3*. By providing separation of bicycles and pedestrians, *Option 1* avoids the conflict inherent in the maxim that “cyclists do not like to ride among pedestrians, and pedestrians do not like to walk among cyclists” (European Regional Development Fund, 2024). Providing bicyclists with their own separated bikeway means fewer bicyclists riding on sidewalks, which in turn makes the sidewalk safer for pedestrians (Jay, 2014).

We recommend that the project designers follow NACTO’s guidance that bikeways flush with the sidewalk should use “color, pavement markings, and textured surfaces” to clearly signal to all users that the bikeway is intended for bicycles only, and “to discourage pedestrian use of the cycle zone” (NACTO, 2024). These recommendations are illustrated in Walk San Francisco and the San Francisco Vision Zero Coalition’s 2018 design manual *Getting to the Curb - A Guide to Building Protected Bike Lanes That Work for Pedestrians* (see **Appendix Exhibit F**).

Finally, we have included photographs of separated bicycle and pedestrian facilities from around the United States and the world for reference and as examples of implemented best practices (see **Appendix Exhibit G**).

Respectfully,

Patrick Seidler
President, WTB-TAM

Matthew Hartzell
Director of Planning, WTB-TAM

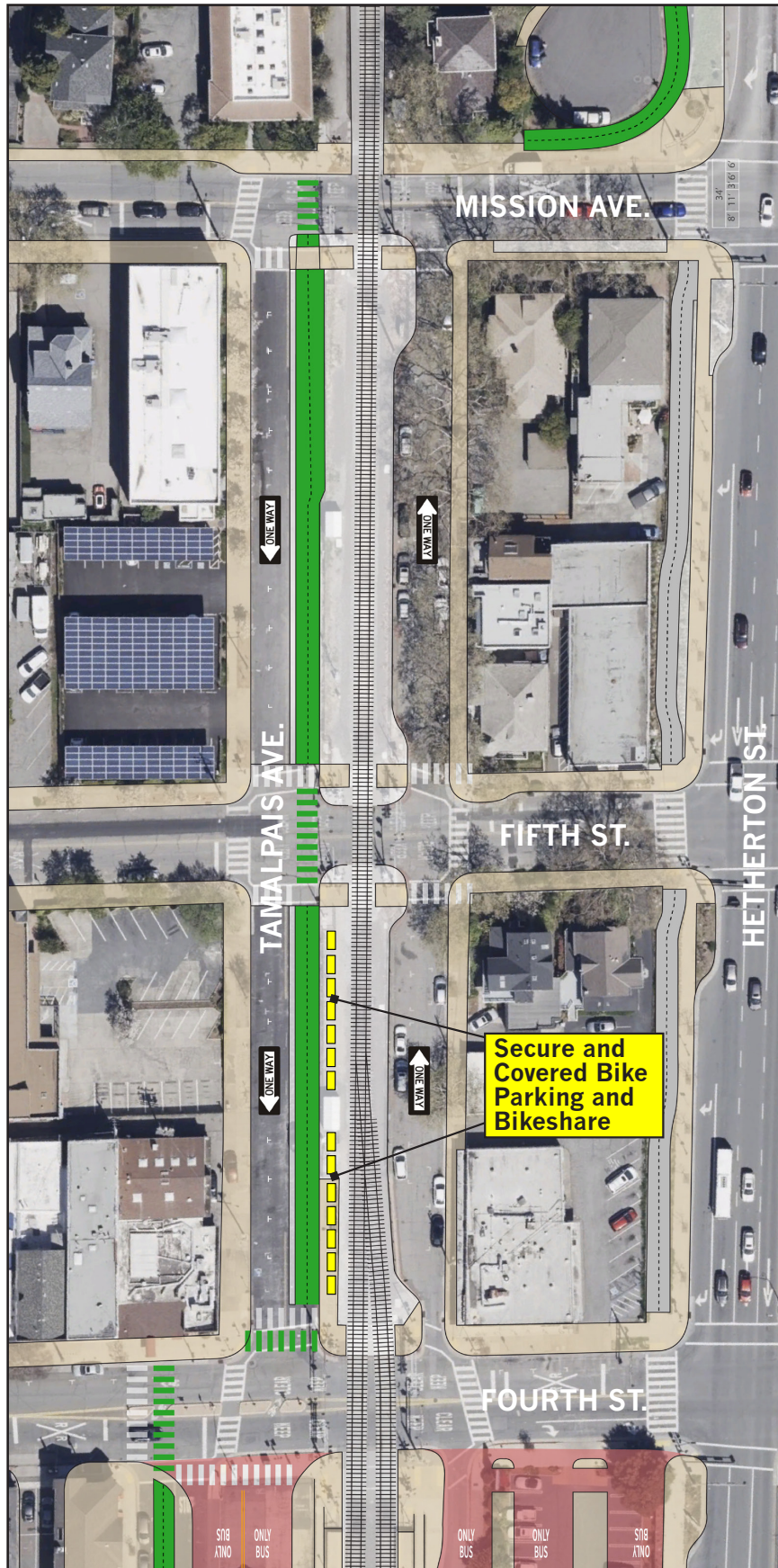


Bibliography

- Alameda County Public Works Agency. (2018) Bicycle and Pedestrians Facilities Toolkit. <https://www.acpwa.org/acpwa-assets/docs/programs-services/streets-roads/2019-Bicycle-Pedestrian-Master-Plan-Appendix-E.pdf>
- Broberg, Rolf. (2015) *What is Good Separation Between Cyclists and Pedestrians?* Trafikistan. <https://trafikistan.se/english-index/what-is-good-separation-between-cyclists-and-pedestrians/>
- European Regional Development Fund. (2024) *Separation from Pedestrians*. Cycle Highway Manual. <https://cyclehighways.eu/design-and-build/infrastructure/separation-from-pedestrians.html>
- Grzebiet, R.H, et al. (2011) Pedestrian-Cyclist Collisions: Issues and Risk. *Australasian College of Road Safety National Conference*. Melbourne. https://www.academia.edu/12709289/Pedestrian_cyclist_collisions_issues_and_risk
- Jay, S. (2014). *How are Pedestrians in Vancouver Being Impact by Separated Bike Lanes?* Master's Thesis, Simon Fraser University. <https://www.sfu.ca/urban/research/research-summaries/how-are-pedestrians-being-impacted-by-separated-bike-lanes-.html>
- National Association of City Transportation Officials. (2024) *Cycle Tracks*. Urban Bikeway Design Guide. <https://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/>
- San Francisco Vision Zero Coalition. (2018) *Getting to the Curb: A Guide to Building Protected Bike Lanes That Work for Pedestrians*. <https://walksf.org/wp-content/uploads/2019/12/getting-to-the-curb-report-final-walk-sf-2019.pdf>

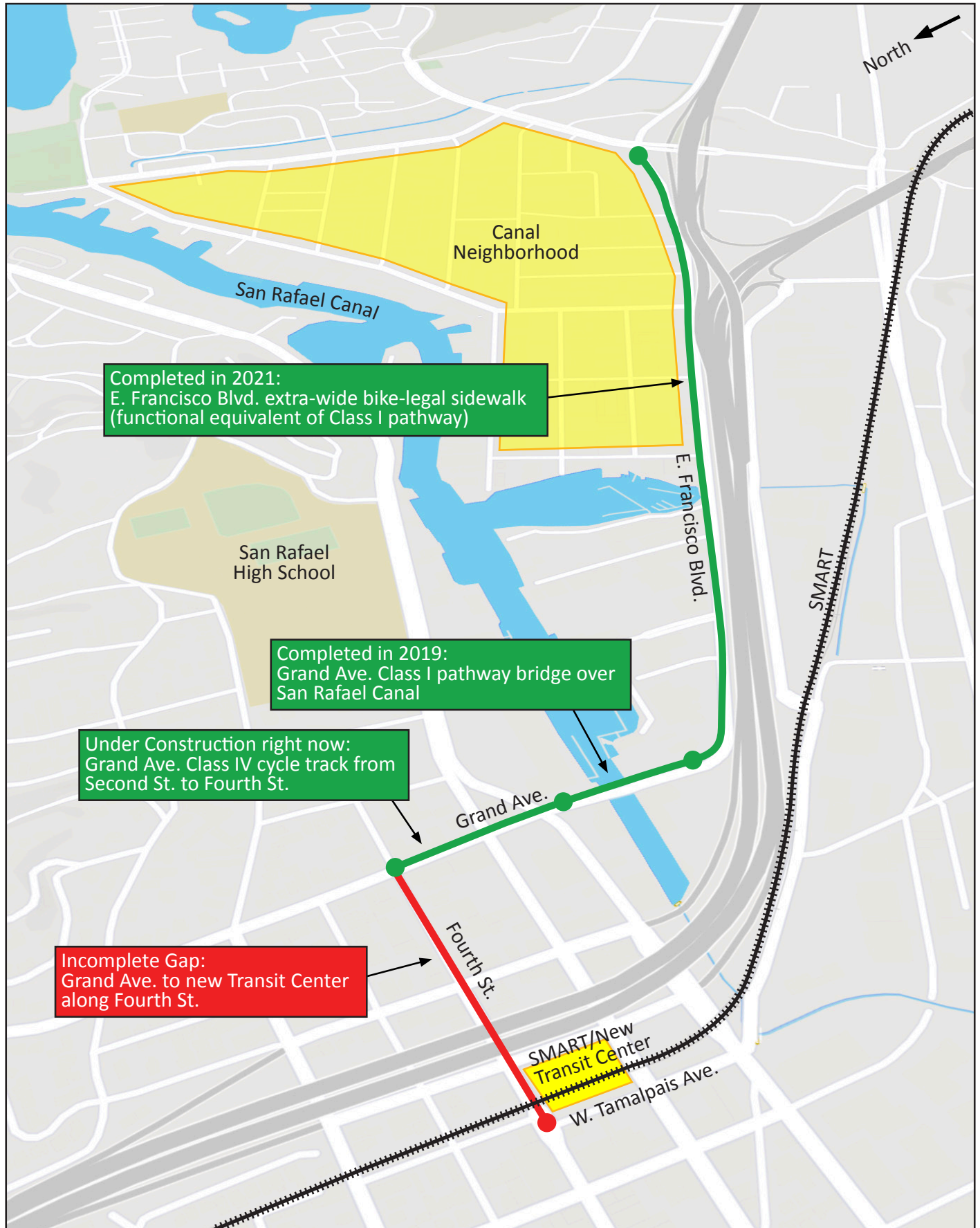
Appendix Exhibit A

WTB-TAM conceptual plan showing the North - South Greenway as a Class IV cycle track between Fourth Street and the existing Puerto Suello Hill Pathway at Mission Avenue



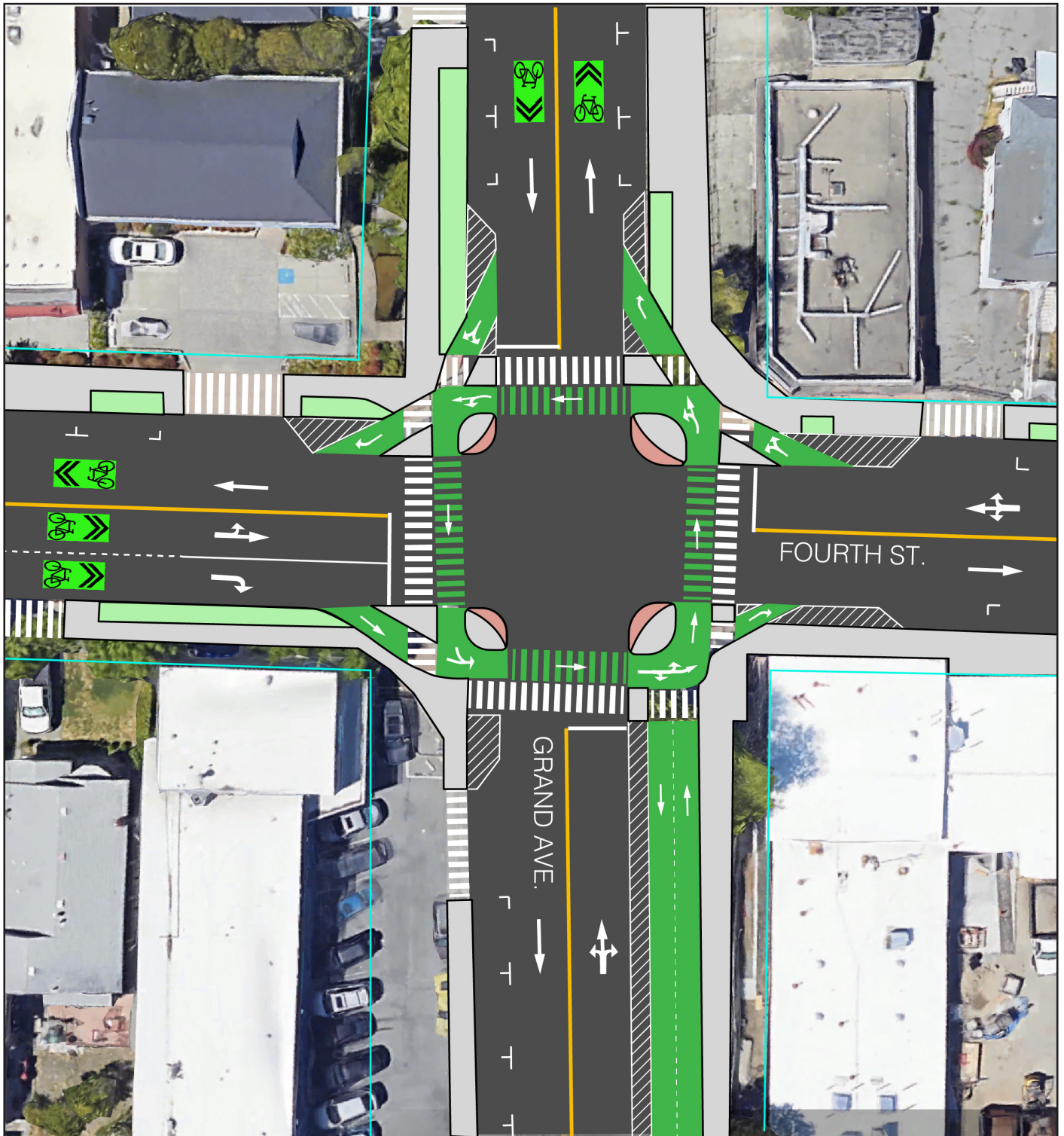
Appendix Exhibit B

Multi-modal connections between the Canal neighborhood and the new Transit Center



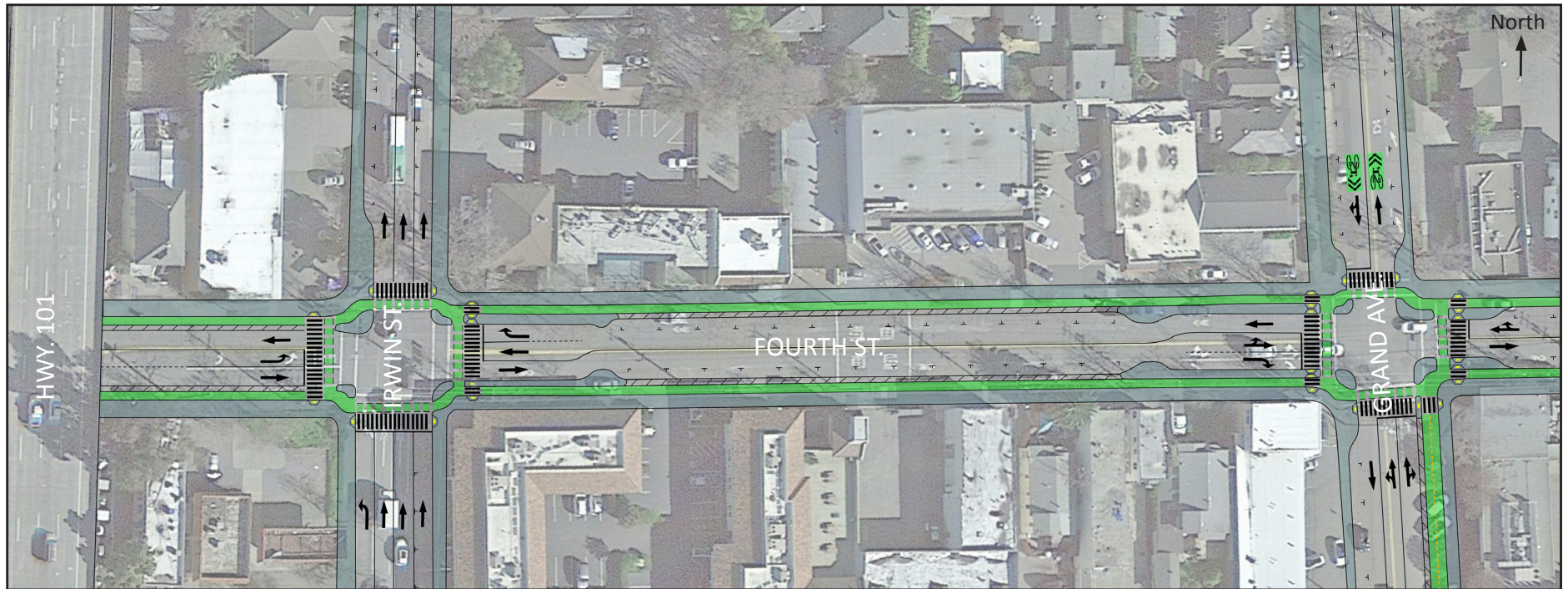
Appendix Exhibit C

WTB-TAM conceptual plan showing a protected intersection at the corner of Grand Avenue and Fourth Street



Appendix Exhibit D

WTB-TAM conceptual plan showing Class IV cycle tracks on both sides of Fourth Street between Grand Avenue and Hwy. 101

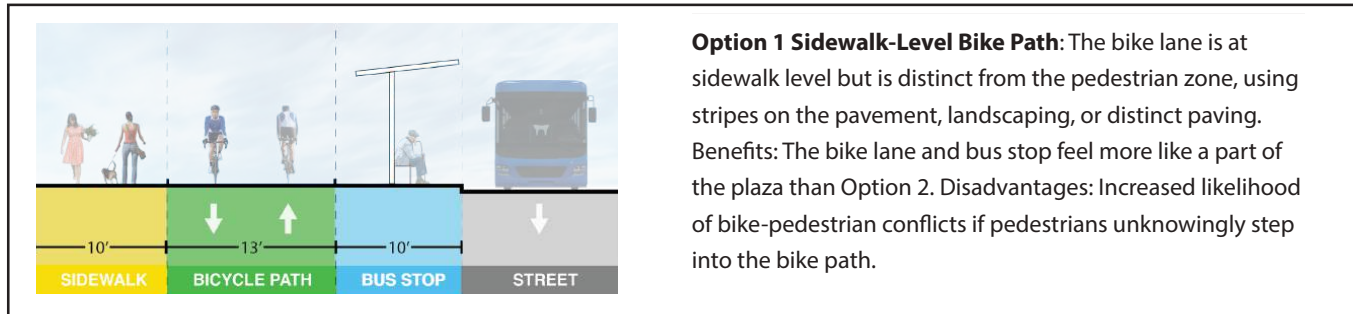


Appendix Exhibit E

Cross sections depicting 3 options for the bicycle path through the Transit Center

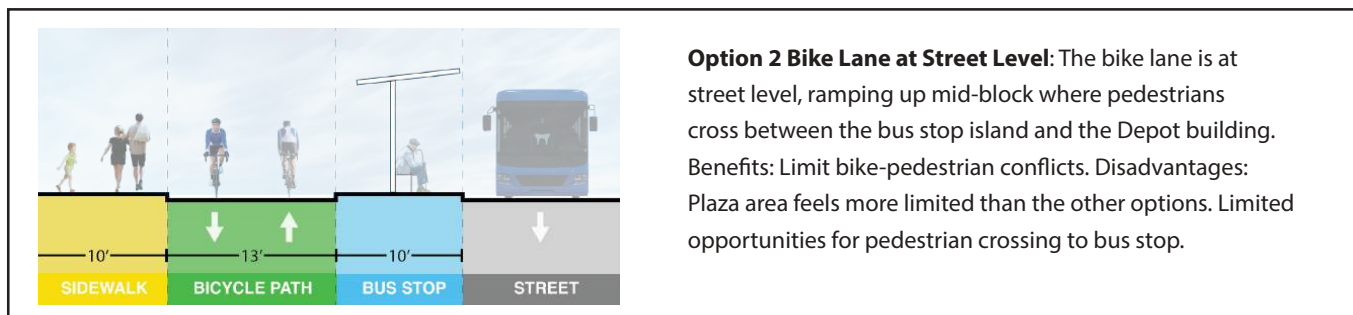
Option 1 - Sidewalk-Level Bike Path

Recommended by WTB-TAM



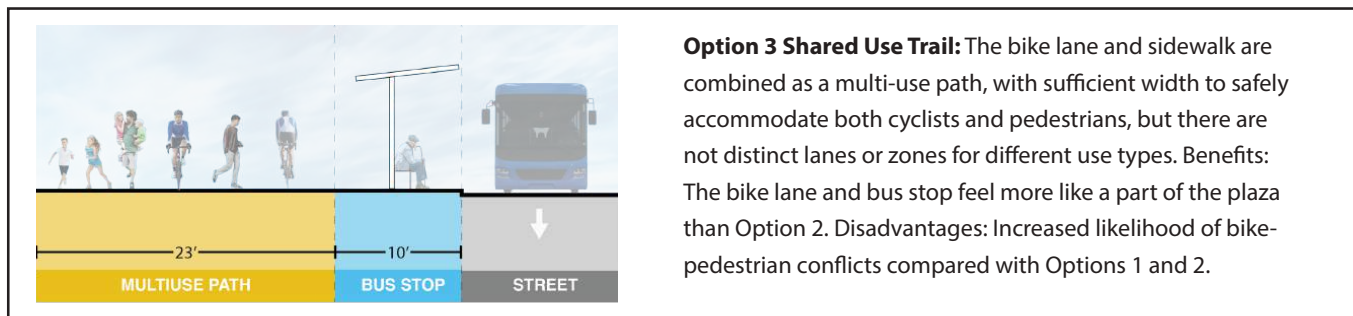
Option 2 - Bike Lane at Street Level

NOT Recommended by WTB-TAM



Option 3 - Shared Use Trail

NOT Recommended by WTB-TAM



Appendix Exhibit F

High-visibility raised cycle track with high-contrast crosswalks for pedestrian access to bus stop



Source:

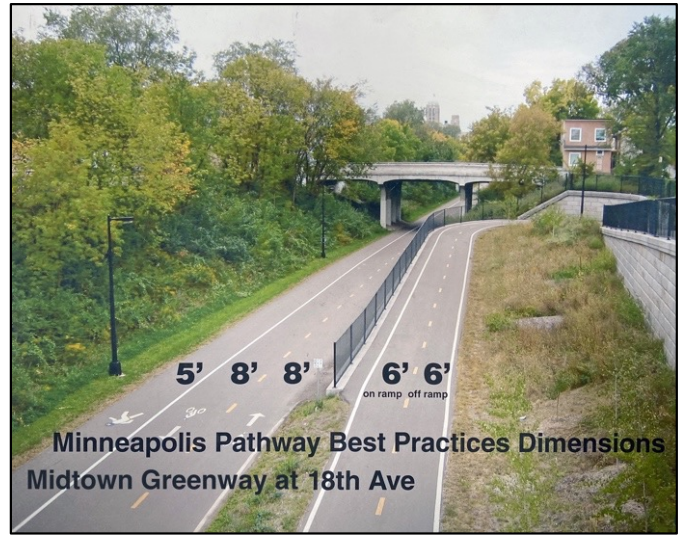
Getting to the Curb - A Guide to Building Protected Bike Lanes That Work for Pedestrians
Published by Walk San Francisco and the San Francisco Vision Zero Coalition (2018)

Appendix Exhibit G

Examples of global best practices for separated bicycle and pedestrian pathways



East Midtown Greenway, New York City



Midtown Greenway, Minneapolis, Minnesota



Vassar Street, Cambridge, Massachusetts



Raised cycle track, Nashville, Tennessee



SW Moody Avenue, Portland, Oregon



Nova Albion Way, San Rafael, California

Appendix Exhibit G (continued)

Examples of global best practices for separated bicycle and pedestrian pathways



Northgate Promenade, San Rafael, California



De Anza Boulevard, Cupertino, California



Atlantic Avenue, Boston, Massachusetts



Raised cycle track, Amsterdam, Netherlands