Appendix C-2

Errata for the West Oakland Link

FEHR PEERS

DRAFT MEMORANDUM

Date: November 30, 2020

To: Rich Walter and Diana Roberts, ICF

From: Kathrin Tellez and Rob Rees, Fehr & Peers

Subject: Errata for the West Oakland Link

WC12-2992

Fehr & Peers prepared a transportation impact assessment for the San Francisco–Oakland Bay Bridge Regional Bicycle/Pedestrian Connection (proposed project), now known as the West Oakland Link (Link), in October 2014 (2014 TIA). That document was incorporated into a draft Environmental Document that was approved by the California Department of Transportation (Caltrans), but never circulated for public review. Since the preparation of the 2014 TIA, the City of Oakland updated their Transportation Impact Review Guidelines, and the California Environmental Quality Act (CEQA) guidelines were updated to identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate the environmental effects of a project from a transportation perspective and prohibited the use of delay-based metrics for the purposes of identifying transportation impacts under CEQA.

The purpose of this review is to identify changes to the proposed project that could result in changed analysis conclusions from those presented in the 2014 TIA and review the updated CEQA criteria to determine if new or changed impacts could result from the proposed project. Specifically, this memorandum focuses on VMT, plan consistency, and safety.

PROJECT DESCRIPTION

The proposed project includes developing new Class I facilities and connecting on-street facilities and a parking lot located in the City of Oakland, Alameda County, near the Interstate (I)-880 and I-80 interchange and the East Span of the Bay Bridge. The Class I facility would extend between Mandela Parkway to the east and the Bay Bridge Trail to the west and would be an elevated structure for most of this distance, providing access across existing freeways, railways, and industrial

areas. The proposed project is an independent structure, except over the railroad tracks, where it would be located on the existing West Grand Avenue overcrossing structure.

The proposed project also includes on-street bicycle facilities that would connect surrounding streets to the Class I facility and provide access to a 100-space parking lot on Wood Street. The proposed project description is generally unchanged from the proposed project as evaluated in 2014, except for creating a dead end at Campbell Street on the southern side of West Grand Alley.

SIGNIFICANCE CRITERIA

The determination of significance for project impacts is based on applicable policies, regulations, goals, and guidelines defined by the Lead Agency. Although the lead agency for this proposed project is Caltrans, City of Oakland criteria were used because the proposed project is largely within the City of Oakland. When the 2014 TIA was prepared, vehicle level of service (LOS), amongst other metrics, was used to identify potentially significant impacts. The purpose of this review is to determine if previously identified impacts and associated mitigation measures would no longer be necessary under the new criteria, and if new potential impacts could occur. Based on the updated CEQA criteria, and the City of Oakland Transportation Impact Review Guidelines, the Project would have a significant impact on the environment if it would:

1. Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure. Specifically,
    - For residential uses, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent.
    - For office uses, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
    - For retail uses, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
    - For retail projects greater than 80,000 square feet, a project would cause substantial additional VMT if it results a net increase in citywide total VMT per service population.[1]

[1] Although this is not a stated significance criterion in the City of Oakland, it is used here because it is consistent with OPR guidance that recommends that "agencies should analyze the effects of a retail project by assessing the change in total VMT, because retail projects typically re-route travel from other destinations."

2. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile LOS or other measures of vehicle delay).

3. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas; i.e., adding new mixed-flow lanes or adding new roadways to the network.

VEHICLE MILES TRAVELED

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) updated CEQA guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, and after several rounds of public review and feedback, final proposed Guidelines were published on November 27, 2017, with an associated *Technical Advisory Document on Evaluating Transportation Impacts in CEQA* dated December 2018. That process identified VMT as the most appropriate metric for evaluating the environmental effects of a project from a transportation perspective and prohibited the use of delay-based metrics for the purposes of identifying transportation impacts under CEQA.

The City of Oakland has established VMT thresholds for typical development projects, such as residential, office, or retail uses. Transportation projects are typically evaluated to determine if they could result in induced travel. For example, adding a lane to a congested portion of the highway could result in additional travel as time barriers to travel are reduced. Guidance from OPR, as documented in the December 2018 Technical Advisory[2], specifies "that the addition of new or enhanced bicycle bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way and the addition of Class I bicycle paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel" is not likely to increase VMT and should not be required for conducting an induced travel analysis. Therefore, the Class I and Class II facility portions of the proposed project can be presumed to have a less-than-significant impact on VMT, and no further analysis is required.

The 100-space parking lot portion of the proposed project may not be exempt from VMT analysis. As there are no published guidelines or criteria to evaluate VMT for a parking lot that serves as a trailhead for a Class I facility, guidance presented in the City of Oakland Transportation Impact Review Guidelines and the concepts presented in the Technical Advisory were applied to the parking lot portion of the proposed project, considering the intent of SB 743 which is to "promote

[2] https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

The Guidelines suggest the use of "screening criteria" that can be applied to a project to determine whether that project can be presumed to cause a less-than-significant amount of VMT, in which case the proposed project could be screened out of doing further VMT analysis. The City of Oakland criteria includes the ability to screen out small projects, defined those that generate fewer than 100 vehicle trips per day. As detailed in the 2014 TIA, the parking lot portion of the proposed project could generate up to 400 vehicle trips per day. Many of those trips are likely already on the roadway system and not new vehicle trips. Many people who ride bicycles on the Bay Bridge Path have been observed to park in other locations in the vicinity, including the Ikea and Target parking lots and parking areas off Burma Road. However, the extent of this usage has not been quantified, and providing a trail facility parking facility in combination with the new bicycle facilities could generate new bicycle travel demand that could backfill parking demand shifts in the area.

Another screening method recommended by the City of Oakland and the OPR Technical Advisory is map-based screening, in which geographic areas that generate low levels of VMT are identified, because projects located in those areas are presumed to exhibit similarly low levels of VMT and thus can be screened out of doing further VMT analysis. This type of screening is recommended for residential and for office (i.e., employment) uses. The Metropolitan Transportation Commission (MTC) has prepared VMT maps that characterize the current (year 2020) VMT per Capita by Place of Residence[3] and VMT per Capita by Place of Work[4] for all areas of the nine-county San Francisco Bay Area region, summarized at the geographic level of the Transportation Analysis Zone (TAZ).

The parking lot portion of the proposed project is located in an area that experiences low levels of VMT per capita by place of residence, meaning that people who live in this area tend to travel shorter distances for their daily needs. Although employment uses in this area tend to have higher levels of VMT, this is largely a function of the primarily industrial jobs located in the area.

Although the parking lot portion of the proposed project is expected to generated some new VMT, it is expected to be at a low level on a per capita basis, as the people who live in the general vicinity tend to travel at levels at least 15 percent below existing regional averages per household. If the parking lot portion of the proposed project were not constructed, trail users that drive to the area

[3] https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=5dac76d69b3d41e583882e146491568b
[4] https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689

would likely still continue to drive and park in non-designated areas and use roadway facilities connecting to the trail that do not provide adequate bicycle facilities. Therefore, if the parking lot were not constructed, there would not likely be an appreciable change in overall VMT, and there could be worse safety outcomes.

Based on the review of VMT per capita levels in the area, and the types of trips that are expected to be generated by the proposed project—primarily residential based trips for recreational purposes—the parking lot portion of the project is expected to have a ***less-than-significant impact*** on VMT, and no mitigation measures are required.

PLAN CONSISTENCY

Since the preparation of the 2014 TIA, the City of Oakland and other agencies adopted several plans that influence the West Oakland Area, including *Let's Bike Oakland (*July 2019), *Oakland Walks!* (2017), *West Oakland Truck Management Plan* (April 2019), the *West Oakland Community Action Plan* (October 2019), and the *AC Transit Service Adjustment Plan*. Additionally, the West Oakland Specific Plan was reviewed.

Let's Bike Oakland

The City of Oakland bike plan identifies a new protected bicycle lane on West Grand Avenue from Maritime Street east through Downtown Oakland and beyond. Within the project area, Wood Street is designated as a future neighborhood bicycle route, and buffered bicycle lanes are proposed to be provided on 14th Street, 18th Street, and Mandela Parkway.

The proposed project would advance the provision of protected bicycle facilities on West Grand Avenue by completing the portion of the proposed project between Mandela Parkway and Maritime Street. The proposed project would also provide Class II bicycle lanes on the following roadways:

- Grand Avenue Alley (westbound), from Mandela Parkway to Wood Street
- 20th Street, from Mandela Parkway (one block south of West Grand Avenue) to Wood Street
- Wood Street, from 20th Street to 24th Street
- Willow Street, from 20th Street to West Grand Alley

- Campbell Street, from 20th Street to West Grand Alley
- Wood Street Parking Lot

These lanes would provide additional bicycle facilities beyond those identified in the City's Bike Plan and would not preclude the provision of additional bicycle facilities as identified in the Plan.

Oakland Walks!

The City of Oakland's 2017 Pedestrian Plan identifies the project area as car-dependent, with the worst sidewalks in the City and the second-highest transportation system injury rate. The proposed project does not propose any changes at high-injury intersections. There are numerous sidewalk gaps in the area, including on Wood Street and 20th Street. As part of roadway modifications to provide Class II bicycle facilities on these roadways, sidewalks and crosswalks would be constructed, helping to close gaps in the sidewalk network. Construction of the proposed project would not preclude the construction of additional pedestrian facilities by others.

West Oakland Truck Management Plan

The *West Oakland Truck Management Plan*, prepared by the City of Oakland and the Port of Oakland, is an action plan designed to reduce the effects of truck transportation on local streets in West Oakland. The plan identifies a number of improvements in the West Oakland area, including designating additional streets as Truck Prohibited Streets, improved truck routing and wayfinding to minimize the number of trucks driving on non-industrial streets, improved safety at intersections near the port, improved traffic enforcement, changed parking regulations, and improved parking enforcement. The proposed project would not preclude the implementation of any of the plans or strategies identified in the *West Oakland Truck Management Plan*, and although it would not construct any of the safety improvements identified, the proposed project would improve bicycle facilities along Grand Avenue (a truck route), improving bicyclist safety in West Oakland.

West Oakland Community Action Plan

The *West Oakland Community Action Plan*, prepared by the Bay Area Air Quality Management District, identifies specific strategies and goals to improve air quality and reduce pollution in West Oakland. Although most of the emissions in West Oakland originate from the Port and port-related functions, there are strategies in the plan related to improving the design and safety of local streets to encourage residents to walk or ride bicycles. Because the proposed project would provide improved bicycle infrastructure in the area, it helps to further the goals in the West Oakland

Community Action plan and would not preclude the implementation of other strategies identified in the plan.

AC Transit Service Adjustment Plan

The *AC Transit Service Adjustment Plan*, prepared by AC Transit, identifies changed routes in the project vicinity, mostly to increase the frequency of specific routes and eliminate some underperforming routes. Implementation of the proposed project would not preclude planned changes to AC Transit service in the area.

West Oakland Specific Plan

The *West Oakland Specific Plan*, prepared by the City of Oakland, provides comprehensive, multi-faceted strategies for facilitating the development of selected vacant and/or underutilized commercial and industrial properties within the West Oakland community. The Plan is a tool for supporting, attracting, and developing commercial and industrial enterprises to provide jobs and services needed by the West Oakland community and the City of Oakland at large. The plan identifies the provision of bicycle facilities in the area, including Class II bicycle facilities on West Grand Avenue. The proposed project advances planned improvements by constructing a Class I bicycle facility along the West Grand Avenue corridor between Mandela Parkway and Maritime Street.

The *West Oakland Specific Plan* also identifies Wood Street as a Neighborhood Route, and intersecting streets, such as 20th Street, as a minor priority pedestrian route. A neighborhood route is a local street that connects schools, parks, recreational centers, and libraries. As such, neighborhood routes are intended to be used for active transportation, as well as recreation, and provide safe walking at night. The proposed project would improve a portion of Wood Street and intersecting streets, helping to achieve *West Oakland Specific Plans* goals. Implementation of the proposed project would not preclude the implementation of other goals and policies articulated in the plan.

Based on our review of applicable Plans, the Link project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. This is a ***less-than-significant*** impact, and no mitigation measures are required.

SAFETY

The following traffic safety thresholds were reviewed:

1. Directly or indirectly cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent and substantial transportation hazard due to a new or existing physical design feature or incompatible uses
2. Directly or indirectly result in a permanent substantial decrease in pedestrian safety
3. Directly or indirectly result in a permanent substantial decrease in bicyclist safety
4. Directly or indirectly result in a permanent substantial decrease in bus rider safety
5. Generate substantial multi-modal traffic traveling across at-grade railroad crossings that cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent and substantial transportation hazard

The proposed project would increase motor vehicle traffic and pedestrian and bicycle activity in the West Oakland area, also increasing the potential for conflicts between motor vehicles and vulnerable roadway users at intersections. The Link project is not expected to attract new bus riders to the transit system in the area.

Transportation Hazards

The Link project is intended to separate bicycle and pedestrian travel from motor vehicle travel, reducing potential conflicts between different roadway users. Access to the Link from the east would be from West Grand Avenue at Mandela Parkway. Access to the Link from users that park within the Wood Street parking lot would be from new Class 2 bicycle lanes marked on Wood Street, 20th Street, Willow Street, and Campbell Street, connecting to the at-grade section of the path between Mandela Parkway and Campbell Street. The Link would provide a physical separation between path users (i.e., pedestrians and bicyclists) and motor vehicle traffic for most of its length, reducing hazards; however, at two intersections there could be increased bicycle and pedestrian exposure:

- West Grand Avenue/Frontage Road/I-80 Ramps
- West Grand Avenue/Mandela Parkway (Northbound)

Impact TR-1: West Grand Avenue/Frontage Road/I-80 Ramps: The proposed project would increase bicycle and pedestrian exposure to vehicles at the intersection with an increase in bicycle

and pedestrian traffic crossing the west leg of the intersection, resulting in a potentially significant impact based on the Significance Criteria.

> Mitigation Measure TR-1: Upgrade the traffic signal equipment at the intersection to provide video detection for vehicles and bicycles and provide a leading pedestrian interval. Also, consider converting the eastbound through-right shared lane to a right-turn only lane and prohibiting the eastbound right-turn movement when the pedestrian phase is activated. As part of the upgrade, Caltrans and City of Oakland should explore if providing protected left-turn movements, as compared to the 2014 spilt phase operation, would provide better operations for all users. Installing upgraded traffic signal equipment (i.e., video detection for vehicles and bicycles) and providing a leading pedestrian interval would improve operations for all roadway users, reducing the impact to a ***less-than-significant*** level.

Impact TR-2: West Grand Avenue/Mandela Parkway (Northbound): The proposed project would increase bicycle and pedestrian exposure to vehicles at the intersection, resulting in a potentially significant impact based on City of Oakland Significance Criteria.

> Mitigation Measure TR-2: Modify the eastbound approach to convert the shared left-through lane to a left-turn only lane. Install protected phasing for the eastbound and westbound left-turn movements, and upgrade the traffic signal equipment as necessary to provide bicycle video detection. With this improvement, bicycle and pedestrian travel through the intersection would be improved, reducing the project impact to a ***less-than-significant*** level.

Link Design

The Link can be divided into five sections with varying widths reflective of right-of-way constraints. Because the proposed project is intended to accommodate both bicycle and pedestrian travel, there could be some conflicts between bicyclists and pedestrians. Generally, the path is being designed to provide 10 feet for bicyclists (i.e., five-foot lanes in each direction), a five-foot area for pedestrians, and a two-foot shy area for fencing within a 17-foot cross section. Segments 2 and 3 would be 14 feet wide (i.e., a 10-foot clear area and 4 feet for shoulders to accommodate fencing). The Caltrans *Highway Design Manual* (Chapter 1000) specifies a minimum width of 8 feet for a two-way bike path, with 10 feet preferred. Where a path is on a structure, the minimum width of the path is 14 feet, to provide 10 feet for travel and a 4-foot-wide shoulder area.

The project as currently proposed would meet or exceed Caltrans standards for Class I path design. The volume of pedestrian and bicycle travel expected along the Link is expected to be less than 10 percent of the total pedestrian and bicycle traffic that is expected through the Park area and the East Span of the Bay Bridge, as presented in the 2016 TIA, with higher levels of bicycle activity than pedestrian activity. This level of activity would result in 140 to 450 Link users on a typical weekday and 430 to 830 Link users on a weekend day, with less activity during an individual hour.

A Trail Level of Service Calculator as developed by North Carolina State University and Toole Design Group, based on the Federal Highway Administration *Shared-Use Path Level of Service Calculator—A User's Guide,* July 2006, was used to assess the Pedestrian/Bicycle LOS on the Link, which considers factors such as bicyclist passing, desired buffer space between path users, and the mix of bicyclists, pedestrians, runners and child bicyclists. Based on the weekend peak hour pedestrian/bicycle volume estimate (between 60 and 120 trail users in a peak hour) on the Link, the Trail LOS is B for the segments with a 17-foot cross section and LOS C for segments with a 14-foot cross section, meaning that pedestrians and bicyclists can generally travel fairly unimpeded along the Link, although some bicyclists may have to wait to pass a slower-moving bicyclist. Trail operations would be better during other times of day and week.

Approximately 500 users per hour could be accommodated on the Path at LOS D condition, which is considered the functional capacity of a trail. When these conditions are experienced, bicyclists are likely to avoid peak periods or adjust expectations of path operations. Segment 3 of the Link constrains the volume of pedestrian and bicycle travel that could be accommodated along the entire Link corridor.

Bicycle/pedestrian conflicts could exist where the Path would connect to the existing Bay Bridge Trail, below the I-880/I-80 connection.

Impact TR-3: Pedestrian/Bicycle Conflicts – Connection of Link to Existing Bay Bridge Trail: The Link project will add a connection to the existing Bay Bridge Trail, resulting in bicycle/pedestrian conflicts at the intersection. As this could create a hazard for pedestrians and bicyclists, this is a potentially ***significant impact*** based on City of Oakland Significance Criteria.

> Mitigation Measure TR-3: Provide additional path width in the vicinity of the Bay Bridge Trail intersection, directional signage and striping, and potentially a bicycle stop sign on the Path at the Bay Trail connection. Implementation of this measure would reduce the Pedestrian Safety impact to a ***less-than-significant*** level.

Pedestrian Safety

The proposed project would add a separated bicycle and pedestrian path connecting West Oakland to the Bay Bridge Trail that would be open at all times. Sidewalks and paths are provided in the project vicinity along Grand Avenue and Mandela Parkway, connecting to the Link, as well as crosswalks and pedestrian signals. Some Link pedestrians could use the Wood Street parking lot. Although sidewalks are provided on some of the streets around the parking lot, they are discontinuous in the area.

Impact TR-4: Pedestrian Safety: The Link project could add pedestrian demand between the Wood Street parking lot and the start of the Path at Mandela Parkway, approximately 0.25 mile. Because sidewalks are discontinuous in this area, this is a potentially ***significant impact*** based on City of Oakland Significance Criteria.

> Mitigation Measure TR-4: Identify the pedestrian path of travel between the Wood Street parking lot and the Path. Install sidewalks, crosswalks (if these are not installed by other projects), lighting elements (if needed), and way-finding elements, as necessary, along the pedestrian path of travel. Implementation of this measure would reduce the Pedestrian Safety impact to a ***less-than-significant*** level.

Bicycle Safety

The proposed project would add a separated bicycle and pedestrian path connecting West Oakland to the Bay Bridge Trail, which would enhance bicycle safety by adding a separated bicycle facility where there currently is none. The Link would have lighting and access provided 24 hours a day. Some bicyclists could use the Wood Street parking lot and access the Link from the Class 2 bicycle facilities proposed on the streets connecting the Wood Street parking lot and the Link. The Class 2 bicycle facilities would be constructed, in addition to crossing treatments, including lighting elements if needed, and wayfinding elements, concurrent with or prior to the construction of the Wood Street parking lot, ensuring that bicycle facilities would be available to meet demand.

Segment 4 of the Path contains a 180-degree curve on a 2 percent grade to transition from the elevated structure to grade level. Based on guidance provided in the Caltrans *Highway Design Manual*, a 5 percent grade is the maximum allowed for short segments, and 2 percent is recommended for sustained grades. The minimum design speed for a bicycle path is 20 miles per hour, with the minimum radius of curvature at that design speed of 90 feet.

Impact TR-5: Bicycle Safety: Based on information contained in Chapter 1000 of the Caltrans *Highway Design Manual*, the minimum design speed for a bicycle path is 20 miles per hour, with the minimum radius of curvature at that design speed of 90 feet, which may not be met with the current design.

> Mitigation Measure TR-5: Warning signs should be installed at the curve approaches for Segment 4 and clear lines of sight maintained between path sections. Deviations from the *Highway Design Manual* will require a design exception to document the engineering constraints, design options considered, and elements of the final plan. Implementation of this measure would reduce this Bicycle Safety impact to a ***less-than-significant*** level.

Bus Rider Safety

The proposed project is not expected to have a significant demand for public transit, nor would it change any existing transit facility. Therefore, the impact to bus rider safety is considered ***less than significant.***

INDUCED AUTOMOBILE TRAVEL

The proposed project would not increase the physical roadway capacity for vehicles., and, therefore, would not induce additional automobile travel. Because the proposed project would construct bicycle facilities, it is expected to induce bicycle travel in the area, which could reduce overall vehicle travel. Therefore, the proposed project is expected to have a positive impact. No impact is identified under this criteria, and no mitigation is required.

CONCLUSION

Based on our review of the West Oakland Link project, in combination with updated CEQA Criteria, we conclude that the proposed project would have a less-than-significant impact on VMT and plan consistency. Potential impacts related to transportation hazards and bicycle and pedestrian safety were identified, and mitigation measures were proposed to reduce those impacts to a less-than-significant level.

Please contact Kathrin Tellez (k.tellez@fehrandpeers.com) or Rob Rees (r.rees@fehrandpeers.com) with questions.