

REPORT

Report: Update on GoPort Program: Freight Intelligent Transportation System and 7th Street Grade Separation Projects. (Maritime)

MEETING DATE: 3/28/2019

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ACTION TYPE: None

EXECUTIVE SUMMARY

Alameda County Transportation Commission and the Port of Oakland have been collaborating over the last several years to develop and implement a suite of freight transportation projects known as the GoPort Program. The GoPort Program comprises the Freight Intelligent Transportation System and the 7th Street Grade Separation Project. This report provides an update on the GoPort Program, including activities, cost, funding, work achieved to date, as well as future activities.

BACKGROUND

The GoPort Program is a partnership between the Port of Oakland (“Port”) and Alameda County Transportation Commission (“Alameda CTC”) to implement strategic roadway infrastructure improvements to address congestion, operation and access concerns in the Port’s Maritime Area (“Seaport”).

The GoPort Program is comprised of three (3) distinct components:

- **Freight Intelligent Transportation Systems (“FITS”) Project:** A suite of 15 demonstration information technology projects along or near main arterial roadways (West Grand Avenue, Maritime Street, 7th Street, Middle Harbor Road, Adeline Street, Embarcadero West and Water Street). These improvements are intended to improve truck traffic flow, increase the efficiency of operations/goods movement, and enhance the safety and incident response capabilities throughout the Seaport. Additional information for FITS is provided in Exhibit A.
- **7th Street Grade Separation East (“7SGSE”) Project:** Re-align roadway and replace the existing 7th Street roadway/railroad underpass structure between I-880 and Maritime Street to provide standard lane and shoulder widths, vertical and horizontal clearances and standard multi-use paths to improve safety, increase truck

and other vehicle throughput, reduce traffic congestion, as well as provide opportunities for safe non-motorized movements within the corridor. Alameda CTC has been working closely with Union Pacific Railroad (“UPRR”) to refine the alignment of this segment due to the critical nature of rail operations in the area that would be impacted. Additional information for 7SGSE is provided in Exhibit B.

- **7th Street Grade Separation West (“7SGSW”) Project:** Replaces 7th Street west of the Maritime/7th Street intersection and a portion of Maritime Street with a grade separated roadway. It will also improve Maritime operations by providing a direct unimpeded rail connection to the Joint Intermodal Terminal railyard and Outer Harbor Intermodal Terminal railyard. The project will improve intermodal access and minimize conflicts between rail, vehicle, pedestrian and bicyclist movements by providing direct and unimpeded rail connections. Preliminary engineering and environmental clearance are underway; however, the Project is not fully funded at this time. Alameda CTC has been pursuing Federal, Regional, State and Local funds to close the funding gap. 7SGSE and 7SGSW are intended to function together, but can be constructed and operated independently. Should funding for 7SGSW be delayed or not available, Alameda CTC still plans on pursuing 7SGSE. Additional information for 7SGSW is provided in Exhibit C.

STATUS

Agreements

- **GoPort Program as a whole:** In May 2016, the Port and Alameda CTC entered into a memorandum of understanding (“MOU”) for the delivery of the GoPort Program, which outlined general roles and responsibilities of the parties.
- **FITS:** Following approval from the Board of Commissioners (“Board”), two cooperative agreements were executed in February and March 2019 by the Port and Alameda CTC that outline more detailed roles and responsibilities for the FITS work, and a temporary license agreement (“TLA”) for construction activities. Over the next 12-18 months, the Port will work to execute agreements with various other agencies, such as the City of Oakland (“City”) and the California Department of Transportation (“CalTrans”) to set forth and/or clarify ownership, operations and maintenance responsibilities.
- **7SGSE:** A TLA was executed in November 2018 with HDR (the engineering firm retained by Alameda CTC for the design of 7SGSE) for pre-construction activities such as traffic counts, land surveying, potholing, and soils testing. Over the next 6 to 12 months, Staff will present additional agreements for the Board’s consideration. These agreements would:
 - o clarify project delivery, operations and maintenance responsibilities;
 - o dedicate Port land necessary for right of way;
 - o grant necessary utility easements; and

- o provide any other approvals or permissions necessary for Alameda CTC to commence construction.

7SGSW: In the next 12 to 18 months, Staff anticipates agreements like those for 7SGSE will be necessary. Although 7SGSE and 7SGSW are being handled as distinct and functionally independent projects, to the extent possible certain agreements will be drafted to apply to both segments.

Costs and Funding

The GoPort Program is currently funded by \$260 million of local (non-Port), state and federal funds, in addition to some Port funds. Additional funding (yet to be secured) is anticipated to total \$350 million, for a total GoPort Program cost of about \$600 million. Alameda CTC is responsible for administering the preliminary engineering, environmental clearances, plans, specifications and estimates (“PS&E”), as well as for constructing the improvements for the entire GoPort Program. One exception is the construction of two security-related FITS projects that will be administered directly by the Port due to independent grant obligations. Details for each GoPort Program component is provided below.

- **Measure BB:** In March 2016 and February 2018, Alameda CTC approved the allocation of approximately \$53 million for the GoPort Program from the County Freight Corridor Funding Program of the Measure BB Transportation Sales Tax Program (“Measure BB”) to support preliminary engineering/ environmental and final design. A breakdown is as follows:
 - o \$6.6 million for FITS; and
 - o \$19.0 million for 7SGSE; and
 - o \$27.4 million for 7SGSW.
- **Federal Grant and State Funding:** The following details secured and future grant/state funding by GoPort Program component:
 - o FITS: In 2017 and 2018, Alameda CTC and the Port secured external grant funding of approximately \$24 million for FITS construction work. Grant funding is comprised of: \$9.72 million from the Federal Highway Administration (“FHWA”) under the Advanced Transportation and Congestion Management Technologies Deployment Program (“ATCMTD”); \$12.456 million from the California Transportation Commission (“CTC”) under the California Senate Bill 1 (“SB 1”) Trade Corridor Enhancement Program (“TCEP”); and \$1.824 million from the U.S. Department of Homeland Security (“DHS”) under the Fiscal Year 2017 Port Security Grant Program (“PSGP17”).

7SGSE: Alameda CTC has secured approximately \$183 million in funding for the east segment from the CTC. This amount is comprised of approximately \$8 million from the Local Partnership Program (“LPP”) and \$175 million from TCEP. Alameda CTC has committed to seeking other grant funds to close the \$115 million funding gap for this segment.

- o 7SGSW: Funding is uncertain; however, Alameda CTC is seeking additional local state and federal funds to close the \$235 million funding gap for this segment. Alameda CTC hopes to secure all pending funds by Summer 2020 in order to stay on the current schedule.

The table on the following page provides an overview of costs and funding for the GoPort Program from inception through O&M, based on best available information as of the date of this Report.

GOPORT PROGRAM - COST AND FUNDING SUMMARY TABLE								
	Costs (\$ Thousands)			Funding (\$ Thousands)				Funding Shortfall
	Port	Alameda CTC ¹	Total	Measure BB	State/ Federal	Port Cash	Total	
FITS								
PS&E	800	6,600	7,400	6,600	-	800	7,400	
Construction	4,500 ²	21,600	26,100	-	24,000	2,100	26,100	
Total Capital	5,300	28,200	33,500	6,600	24,000	2,900	33,500	0
O&M (5 yrs only)	5,500		5,500			5,500	5,500	0
7SGSE								
PS&E	2,000	27,000	29,000	19,000	8,000	2,000	28,500	0
Construction	1,500	290,000	291,500		175,000	1,500	176,500	115,000
Total Capital	3,500	317,000	320,500	19,000	183,000	3,500	205,500	115,000³
O&M	TBD	0	TBD	0	0	TBD	TBD	TBD
7SGSW								
PS&E	2,000	21,000	23,000	21,000	0	2,000	23,000	0
Construction	3,100	242,000	245,100	6,400	0	3,100	9,500	235,600
Total Capital	5,100	263,000	268,100	27,400	0	5,100	32,500	235,600⁴
O&M	TBD	\$0	TBD	0	0	TBD	TBD	
Total GoPort (capital only)	13,900	608,200	622,100	53,000	207,000	11,500	271,500	350,600

¹ Includes Alameda CTC staff, consultant and contractor costs for PE/PS&E and construction.

² For FITS, the \$4.5 million includes the Port's cost to directly administer/construct two of FITS projects that are security related (reimbursable through grant funding), plus Staff labor and consultant support for all 15 projects (costs that are not reimbursable through grant funding).

³ Alameda CTC has committed to seeking other grant funds to close the \$115 million shortfall for this segment.

⁴ Funding is uncertain; Alameda CTC is seeking additional local state and federal funds to close the approx. \$235 million funding gap for this segment.

- **Port Funding:** Measure BB, state funds administered by the CTC, federal grant and other local funds are anticipated to fully cover PS&E and construction costs for the GoPort Program, excluding costs for Port staff (“Staff”) labor and consultant support, which the Port is responsible to fund. As presented in the 5-year Capital Improvement Plans prepared in FY18 and FY19, Staff has been estimating the Port’s cost to complete construction of GoPort Program in the range of \$11.6 to \$13 million. The current estimate of \$13.9 million is about 13% higher than the average of these prior estimates. Also, this estimate does not include operations and maintenance (“O&M”) to be performed by the Port. As outlined above, O&M for FITS is estimated at a minimum of \$5.5 million over 5 years; 7th Street-related O&M remains to be determined.
 - o FITS: In aggregate, the PS&E and construction phases of the FITS will cost the Port about \$5.3 million in Staff labor and consultant support, of which \$2.4 million is expected to be reimbursed (see directly below).
 - o The Board previously approved \$800,000 of this \$5.3 million for Port labor and consultant support during PS&E.
 - o The Board has also approved \$1.6 million for Staff labor and consultant support during the construction phase of 13 of the 15 FITS projects.
 - o Staff plans to seek approval in Summer 2019 for an additional approximate \$2.4 million to construct the remaining two projects (which is grant reimbursable) plus another \$500,000 in Staff labor and consultant support (which is not grant reimbursable)⁵.
 - o Additionally, Staff estimates that O&M for FITS will cost an additional \$1.1 million annually, which will be funded entirely by the Port, with no grant funding offset. Staff will seek approval for O&M costs sometime in 2021. The Port is committed to O&M for a minimum five-year period (totaling \$5.5 million).
 - o 7SGSE: To date, the Board has approved approximately \$1.8 million of capital funds for Staff labor and consultant support during PS&E for both 7SGSE and 7SGSW. Staff anticipates needing approximately \$2.6 million of additional capital funding for Port Staff labor and consultant support through Fiscal Year (“FY”) 2024, to provide project support and oversight through the design, construction, and closeout of 7SGSE project. In aggregate, the 7SGSE project PS&E and construction phases will cost the Port about \$3.5 million in Staff labor and consultant support. During the design phase, Port Staff and its consultants will review and comment on design features, specifically the design plans

⁵ These numbers may change pending actual construction bids.

and specifications, right of way approvals, and environmental compliance. During the construction phase, Port Staff and its consultants will provide oversight of the construction and help address unanticipated field conditions. At a later date, Staff will seek additional Board approval of capital funding necessary to deliver 7SGSE. These estimates do not include O&M costs.

- o **7SGSW:** Staff anticipates needing approximately \$4.2 million of additional capital funding for Port Staff labor and consultant support costs through FY 2025, if the project moves forward as planned. In aggregate, the PS&E and construction phases for 7SGSW are anticipated to cost the Port about \$5.1 million in Staff labor and consultant support. At a later date, Staff will seek additional Board approval of capital funding necessary to deliver 7SGSE. These estimates do not include O&M costs.

Both 7SGSE and 7SGSW are anticipated to be public streets owned and operated by the City of Oakland, which is consistent with the current ownership and maintenance structure of the existing 7th Street. Currently, pursuant to an MOU with the City of Oakland, the Port pays the City to operate and maintain most of existing 7th Street. However, further discussion between the Port and City will be necessary to memorialize O&M responsibilities for the reconstructed roadway.

Schedule

- **FITS:** PS&E was finalized in March 2019. Request for proposals for construction is scheduled for advertisement in late May following allocation of the TCEP funding. Construction is scheduled to start in September/October 2019 and end in Summer 2021, followed by a 12-month period of systems testing. Operations and maintenance (“O&M”) is scheduled to begin in Fall 2022.
- **7SGSE:** Final environmental review was completed in October 2018 and design is underway. Construction is anticipated to commence in late 2020. Design is currently at 30%; final design is scheduled for Q2 of 2020. Construction commencement is scheduled for late 2020, and last for 30 months, resulting in completion in late 2022.
- **7SGSW:** Preliminary engineering and environmental review are underway. 7SGSW lags 7SGSE by approximately one year, assuming funding is secured as planned.

Community Outreach

The Port and Alameda CTC have also been working together to share information regarding the GoPort Program to community partners and other stakeholders. This includes providing project status updates at local community group meetings, Port Efficiency Task Force (“PETF”) and Trucker Workgroup (“TWG”) meetings, as well as posting project information on both parties’ websites. Such communication and stakeholder outreach will continue throughout the GoPort Program project process. One of the community’s key concerns is the steps that the Port and Alameda CTC plan to take to minimize environmental impacts (noise, air quality, congestion, etc.) during construction. In response, the Port and Alameda CTC have referred to the comprehensive set of mitigation measures required under the Oakland Army Base Redevelopment Project Environmental Impact Report Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (“SCA/MMRP”), which is the CEQA document for the GoPort Program. Such measures include: using Air Resources Board-certified Tier 4 construction equipment; implementing construction-related air pollution control measures; enforcing dust control, soil and groundwater management requirements; controlling noise; and designating truck transportation routes (which is part of an overall Truck Management Plan that is currently being finalized).

Other Considerations

While the GoPort Program is poised to deliver substantial benefit to the Port, Port users, and other stakeholders at a relatively modest cost to the Port, Staff wishes to emphasize that the cost estimates presented in this Report are subject to change; Staff will keep the Board apprised. Further, Staff wishes to emphasize that work efforts are complicated because delivery of the Program involves multi-party coordination and agreements, funding that is tied to multiple and distinct grant obligations, securing access rights for work outside Port property, negotiations between Alameda CTC and a railroad company operating on private land, and land use changes. While no additional staffing is being requested at this time, the GoPort Program continues to have a significant impact on available Staff, which affects the delivery of other projects.

NEXT STEPS

The near-term action items for the GoPort Program are as follows:

- Continue discussions and negotiations on the various multi-agency funding and implementation agreements. These agreements may be addressed on a project-by-project basis as required by the project schedule.
- Return to the Board for additional approvals, along with required CEQA determinations, as well as request authority to execute various agreements (as discussed in this report) to advance implementation of the GoPort Program, particularly for 7SGSE and 7SGSW.

- Continue to track costs and funding availability, with a focus on identifying changes to cost estimates for Port-funding for both implementation and/or O&M, so that pressures on the Port's operating and capital budgets are communicated to the Board promptly.

Staff plans to continue to provide the Board with regular updates on the GoPort Program.

Exhibit A
FITS Summary Description

1. Adaptive Signal System - Upgrade Port traffic signal system to allow for an adaptive system control to allow for pre-programmed time-of-day signal timings, utilizes the intersection vehicle detection and sensor equipment to adjust the timing of red, yellow and green phases for each approach as well as overall cycle lengths. This aims to accommodate changing traffic patterns and reduce congestion by improving vehicle progression.
2. Advanced Traffic Management System ("ATMS") - Upgrade existing signal system to allow connectivity and control. Signal controllers with networking equipment will be installed. The ATMS software system will be designed to receive, transmit and integrate data from other FITS elements (i.e., traffic information, control messages, and control traffic signal systems) and shall be upgradeable to allow further automation and enhancements.
3. Advanced Train Detection System – Installation of non-intrusive train detection equipment and software to provide warnings of long-trains and delays at at-grade rail crossings via CMS, GoPort Freight ITS Information System/App, voice messaging, and other system technology.
4. Basic Smart Parking System – Installation of software system/application that monitors parking availability that can be shared via GoPort Freight ITS Information System/App, CMS and other system technology, as well as provide parking payment options.
5. Center to Center ("C2C") Communications - Deploy new communication interfaces among the public-sector agencies (Caltrans, City and Port) to enhance interagency communications and collaboration for traffic, emergency, and other operational messaging.
6. Changeable Message Signs ("CMS") - Informs truckers on regional conditions as they leave and enter the Seaport. CMS will be fiber connected and connectivity to the TMC/EOC will allow access and control by the traffic management system. Mounting options include overhead and roadside but need to consider construction activities and geometric considerations (e.g., oversize loads for both height and turn radius).
7. Closed Circuit Television Video ("CCTV") Upgrade to High Definition ("HD") - Upgrade existing CCTVs to HD to fill-in surveillance gaps and deploy vehicle video detection software for speed information. This will allow cameras to address surveillance and traffic needs simultaneously.
8. Communications ("Fiber") – Upgrade the existing fiber network so technology improvements at the Port are served by a fiber communications network

backbone to the greatest extent possible. This will set the foundation for connection and control of all other FITS elements.

9. Communications (“WiFi”) - Install WiFi capabilities in the Port area as a backup communication system and a means for addressing cellular dead spots and enhancing security and emergency response functions. Offers amenities to truckers in queue or within the Port (e.g., Port traffic and gate queue videos and improved access to GoPort freight ITS information System/App).
10. Emergency Operations Center/Traffic Management Center (“EOC/TMC”) - Reconfiguring the existing watch stander location to accommodate a scalable EOC/TMC. Enhancements will include outfitting the space with updated command, control, and communications technology to better support and streamline local and interagency response and prevention operations. The EOC/TMC shall be the physical site where data and information collected from other FITS elements is transmitted, reviewed, managed and distributed.
11. GoPort Freight ITS Information System/Application (“GoPort”) - The GoPort traveler information app will be a multi-platform system (e.g., web, mobile app, email, etc.). It will be a consolidated portal of useful truck information collection from data obtained by other FITS elements and web tools. It will disseminate static and real-time Port messages and information regarding travel times, parking, incidents, wait times, terminal turn times, terminal information, etc.
12. Queue Detection – Add software and hardware technology that captures queue times outside tenant terminal entrances through identification and monitoring of idling vehicles. Information will integrate with other technology (see RFID below) to provide total truck term time data.
13. Radio Frequency Identification Devices (“RFID”) - Installation of RFID readers at all marine terminal entry and exit gates and strategic locations throughout the Seaport that will connect to the Port’s existing fiber optic network. Data collected from the RFID readers will be sent to, and be integrated with, the Port’s Comprehensive Truck Management Plan to obtain real-time entry and exit information for each drayage truck that accesses the regulated maritime facilities.
14. Supplemental Vehicle Detection – Installation of camera systems along main roadways in the Port area that determine vehicle speed and traffic conditions - information that will transmit (in real-time) to the EOC/TMC to monitor traffic patterns for operations and safety purposes.
15. Weigh-in-Motion (“WIM”) Technology – Install WIM technology on PORT property as a courtesy to trucks leaving the PORT with new containers to determine total vehicle weight. Potential WIM information sharing and coordination with CHP. Future goal is to eliminate or reduce the need for trucks to go through additional weigh stations if cleared at WIM at the Port.

Exhibit B
7th Street Grade Separation East Project (7SGSE)

This project is intended to replace a deficient railroad grade separation/aging railroad bridge structure that connects I-880 to the Seaport which serves Oakland Railport operated by Union Pacific Railroad (UPRR). The scope of the 7SGSE project that is anticipated to generally consists of the following main elements:

- Reconstruction of the 7th Street roadway, generally below existing grade, between the I-880/7th Street Interchange and Maritime Street (South). The reconstructed segment of 7th Street is anticipated to include two 12-foot wide travel lanes in each direction with 4-foot inside and 8-foot outside shoulders.
- Construction of a new underpass structure/railroad bridge over the reconstructed 7th Street to replace the existing railroad bridge.
- Reconstruction of the shared-use path along the entire length of the realigned and widened roadway and shoulders. The existing bicycle and pedestrian path will be reconstructed and is anticipated to be widened to create a 10-foot-wide paved multi-use pathway with 2-foot shoulders on each side (total paved width of 14 feet). The pathway would replace existing segments of the San Francisco Bay Trail on 7th Street.
- Relocation of third-party utilities.
- Construction of a bridge structure to support relocation of the existing Kinder Morgan Fuel lines affected by the project.
- Construction of drainage work including the installation of a pump station and associated Clean Water Program elements.
- Installation of street lighting, signals, various roadway signs and street furniture.
- General site grading work
- Construction of temporary realignment (shoofly) of the railroad tracks to serve existing to serve existing rail traffic during the reconstruction of 7th Street and the underpass structure. It is anticipated that the shoofly may have to be constructed in phases before the railroad tracks are constructed in their final alignment.
- Installation of landscaping and public arts

7SGSE Location Map



7SGSE Conceptual Alignment

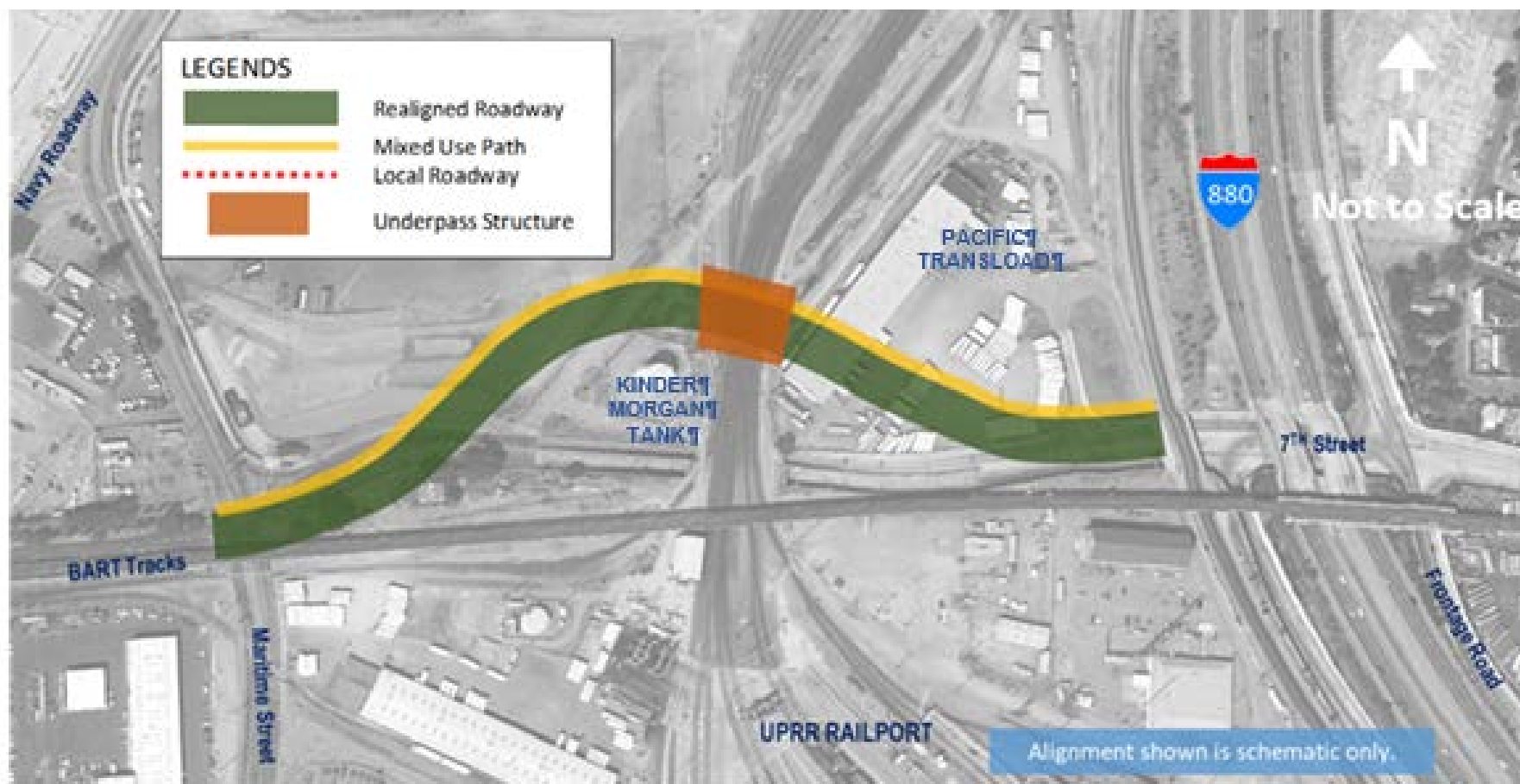


Exhibit C

7th Street Grade Separation West Project (7SGSW)

This project is intended to improve traffic and rail operation efficiency by constructing a grade separation structure at 7th Street and Maritime Street (North) to facilitate construction of spur tracks between the Joint Intermodal Yard (JIT) and the Outer Harbor Intermodal Yard (OHIT). The JIT is currently leased to BNSF Railroad. The scope of the 7SGSW project consists of the following main elements:

- Demolition of the existing Navy Roadway and segments of 7th Street and Maritime Street, sometimes collectively referred to as the “Navy Triangle.”
- Reconstruction and realignment of 7th Street between Maritime Street (South) and Middle Harbor Road that is anticipated to provide two 12-foot wide travel lanes in each direction with 8-foot outside shoulders.
- Realignment of Maritime Street (North) that is anticipated to provide two 12-foot wide travel lanes in each direction with 8-foot outside shoulders.
- Construction of an elevated signalized T- intersection with the realigned segments of 7th Street and Maritime Street.
- Installation of a single set of railroad tracks, switches and rail infrastructure connecting the Outer Harbor Intermodal Terminal (OHIT) with the Joint Intermodal Terminal (JIT)
- Construction of an at-grade bridge over the BART TransBay tunnel approach to support up to three railroad tracks connecting OHIT and JIT.
- Construct a multi-use path along the entire length of the realigned and widened 7th Street and Maritime Street (North) to create an anticipated 10-foot-wide paved multi-use pathway with 2-foot shoulders on each side (total paved width of 14 feet). The pathway would replace existing segments of the San Francisco Bay Trail on 7th Street.
- Construction of drainage work and associated Clean Water program elements associated with the road and rail realignment.
- Installation of street lighting, signals, various roadway signs and street furniture.
- Relocation of major utilities in conflict with the proposed roadway improvements either as project work or by others.
- Installation of landscaping and public arts.

7SGSW Location Map



7SGSW Conceptual Alignment

