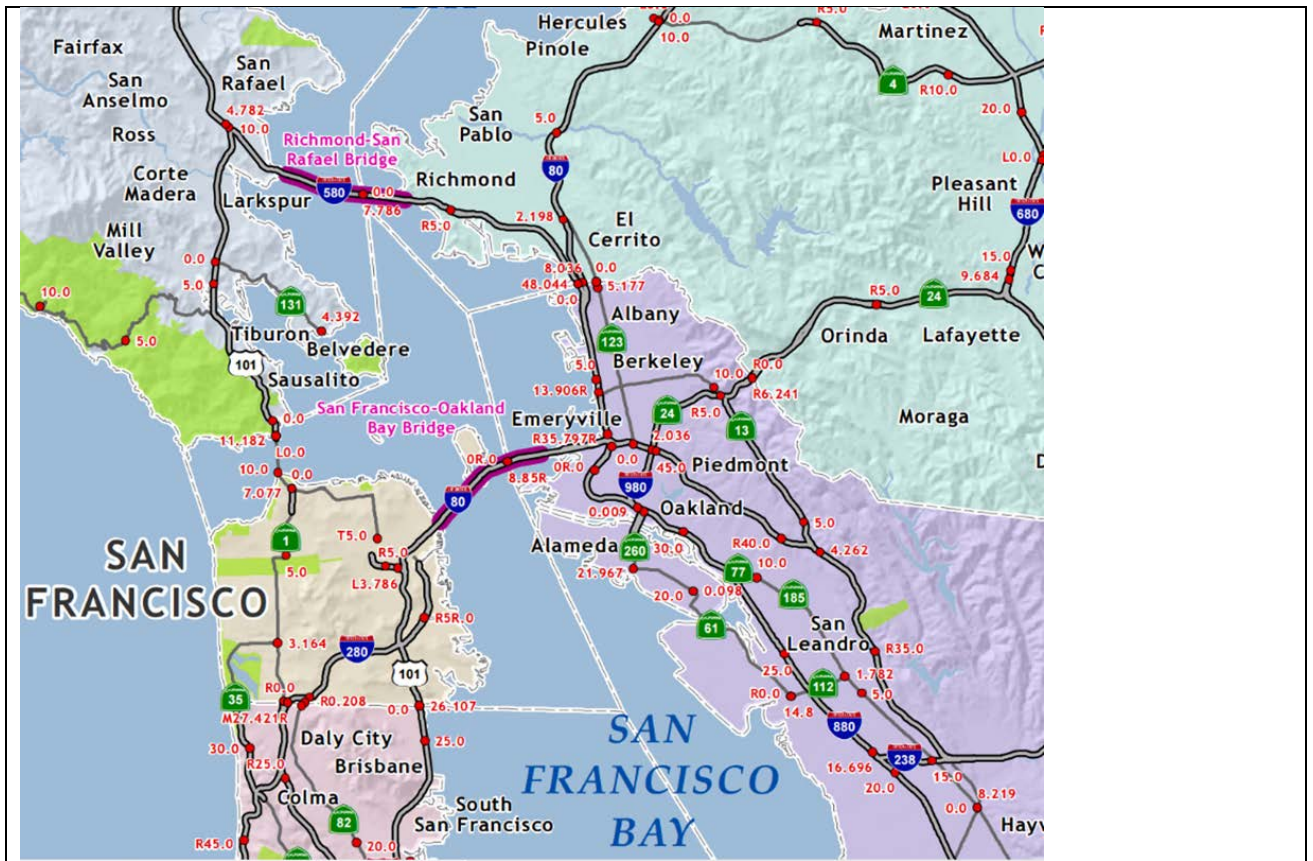


CMGC
NOMINATION FACT SHEET
04-Ala-90-PM 5.82
EA 2K830

Project Description

This project will increase the vertical clearance at the Interstate (I)-80/University Avenue Overcrossing (UAOC) to current standard (16.5') by either raising or replacing the existing structure. This will require raising or replacing the on and off-ramps as well as the adjacent bridge in order to match the new elevation. For either alternative, incidental work will include replacing bridge railings and replacing the existing staircase with an ADA compliant pedestrian ramp structure.



Project Proposal

The purpose of this project is to increase the vertical clearance along I-80 at the UAOC up to standard to allow for a more efficient and uninterrupted travel of oversize vehicles without having to detour. There are 3 alternatives proposed: raise the structure about 2.2 feet, replace the structure to accommodate standard lanes at the new vertical elevation or no build.

One major risk of raising the existing bridge is the control of synchronized lifting, given that the bridge is of reinforced concrete type. If the tilt exceeds a specific value, the structure could sustain damage. However, with a modern advanced lifting system, this risk is significantly reduced. Other construction risks for this

project have been identified but are considered minor.

The project was allocated for PAED support costs at the June 2017 CTC meeting. The project is currently in the PAED phase and is anticipated to require an Initial Study/Categorical Exclusion.

Consultation with the U.S. Fish and Wildlife Service is a possibility. There is a possibility that the project will require a 4(f).

Schedule

Project Milestones		Milestone Date (Month/Day/Year)
PROGRAM PROJECT	M015	June 1, 2017
BEGIN ENVIRONMENTAL	M020	July 1, 2017
PA & ED	M200	January 1, 2019
PS&E	M380	March 1, 2020
R/W CERTIFICATION	M410	May 1, 2020
READY TO LIST	M460	June 1, 2020
FUND ALLOCATION	M470	August 1, 2020
AWARD	M495	November 1, 2020
APPROVE CONTRACT	M500	December 1, 2020
CONTRACT ACCEPTANCE	M600	June 1, 2022
END PROJECT	M800	June 1, 2024

The project PAED kicked off and the environmental studies began in July 2017. Final design is slated to be kicked off in January 2019, with some preliminary design beginning early-2018. The Construction Manager will be most useful from March 2018-March 2020, in order to provide some input before the final project alternative is selected and during the preliminary design process.

Cost/Funding

It has been determined that this project is eligible for federal-aid funding. This project is funded under SHOPP 201.322, Transportation Permit Requirements for Bridges.

There are two build alternatives being considered for study in this project, in which the preferred alternative will be selected during the PA&ED phase. The escalated capital outlay cost for both alternatives are as follows:

Replace Bridge Alternative - \$27.7 M

Raise Bridge Alternative - \$19.4 M

The programmed PA&ED capital outlay support cost is \$ 3.38 million. The total Support Costs, excluding PAED, is \$8,700,000

Permits/Agreements

It is anticipated that a railroad agreement may be needed with AMTRAK.

Right of Way and Utilities

It is anticipated that the bridge railing work will extend beyond state right of way and would require temporary construction easements. Additionally, there will be an impact on the nearby AMTRAK railroad track, east of Second Street (near Berkeley Station). A debris containment system will need to be installed at the bridge soffit (above the tracks) prior to the bridge railing work.

Political Support of Project

It is anticipated that the project will require outreach due to the potential impact on residents, businesses serving the City of Berkeley, and the University of California, Berkeley.

Why is this project a good CMGC candidate?

The project can benefit from the CMGC delivery process through input from a contractor on this complex structure. Traffic control and staging will also be a primary issue of concern on this is a well-traveled segment of I-80 and entrance to the City of Berkeley. CMGC will provide innovative means to perform the construction while minimizing impacts to the traveling public and maintaining environmental commitments.

Anticipated CMGC Services

DESIGN RELATED

- Validate Department/Consultant design
- Assist/input to Department/Consultant design
- Design reviews
- Design charrettes
- Constructability reviews
- Operability reviews
- Regulatory reviews
- Market surveys for design decisions
- Verify/take-off quantities
- Assistance shaping scope of work
- Feasibility studies
- Encourage innovation

COST RELATED

- Validate agency/consultant estimates
- Prepare project estimates
- Cost engineering reviews
- Early award of critical bid packages
- Life cycle cost analysis
- Value analysis/engineering
- Material cost forecasting
- Cost risk analysis
- Cash flow projections/Cost control
- Shape the project scope to meet the budget

PRECONSTRUCTION WORK RELATED

- Utility Relocation
- Potholing

- Preliminary soil and geotech studies
- Right of Way Demolition
- Preliminary Surveying

SCHEDULE RELATED

- Validate agency/consultant schedules
- Prepare and manage project schedules
- Develop sequence of design work
- Construction phasing
- Schedule risk analysis/control

ADMINISTRATION RELATED

- Prepare Document Control
- Coordinate contract documents
- Coordinate with 3rd party stakeholders
- Subcontractor bid packaging
- Attend public meetings
- Bidability reviews
- Subcontractor bid packaging
- Prequalifying Subcontractors
- Assist in right-of-way acquisition
- Assist in permitting actions
- Study labor availability/conditions
- Prepare sustainability certification application
- Follow environmental commitments
- Follow terms of Federal Grant
- Coordinate site visits for subcontractors
- Teamwork/Partnering meetings/sessions
- Develop Quality and Safety plans

CMGC
NOMINATION FACT SHEET
04-ALA-80/580/880-(2.80/46.50R & 46.50L/34.50R)
EA: 04-4K810 (ID# 0417000363)

Project Description

This project is programmed as part of the Accelerated Freight Corridor Bridge Improvement Program developed for the purpose of strategically identifying aging and obsolete bridges that restrict freight movement due to bridges' truck load and/or vertical clearance restrictions. The four connector structures in the MacArthur Maze were identified with vertical clearance restrictions that limit freight movement.

The MacArthur Maze is a large freeway interchange consisting of the three major freeways - the Eastshore (I-80/I-580), MacArthur (I-580) and Nimitz (I-880). It is located within one mile northeast of the Port Oakland. The Port of Oakland serves as the principle ocean gateway for international containerized cargo shipments in Northern California. It is the 5th busiest container port in the United States. Additionally, 99% of the containerized goods moving through Northern California pass through the Port of Oakland, and much of that freight traffic utilizes the MacArthur Maze.

Purpose:

The purpose of this project is to increase the vertical clearances on the Connectors in the MacArthur Maze up to standard to allow for a more efficient and uninterrupted freight movement without prolonged detours.

Need:

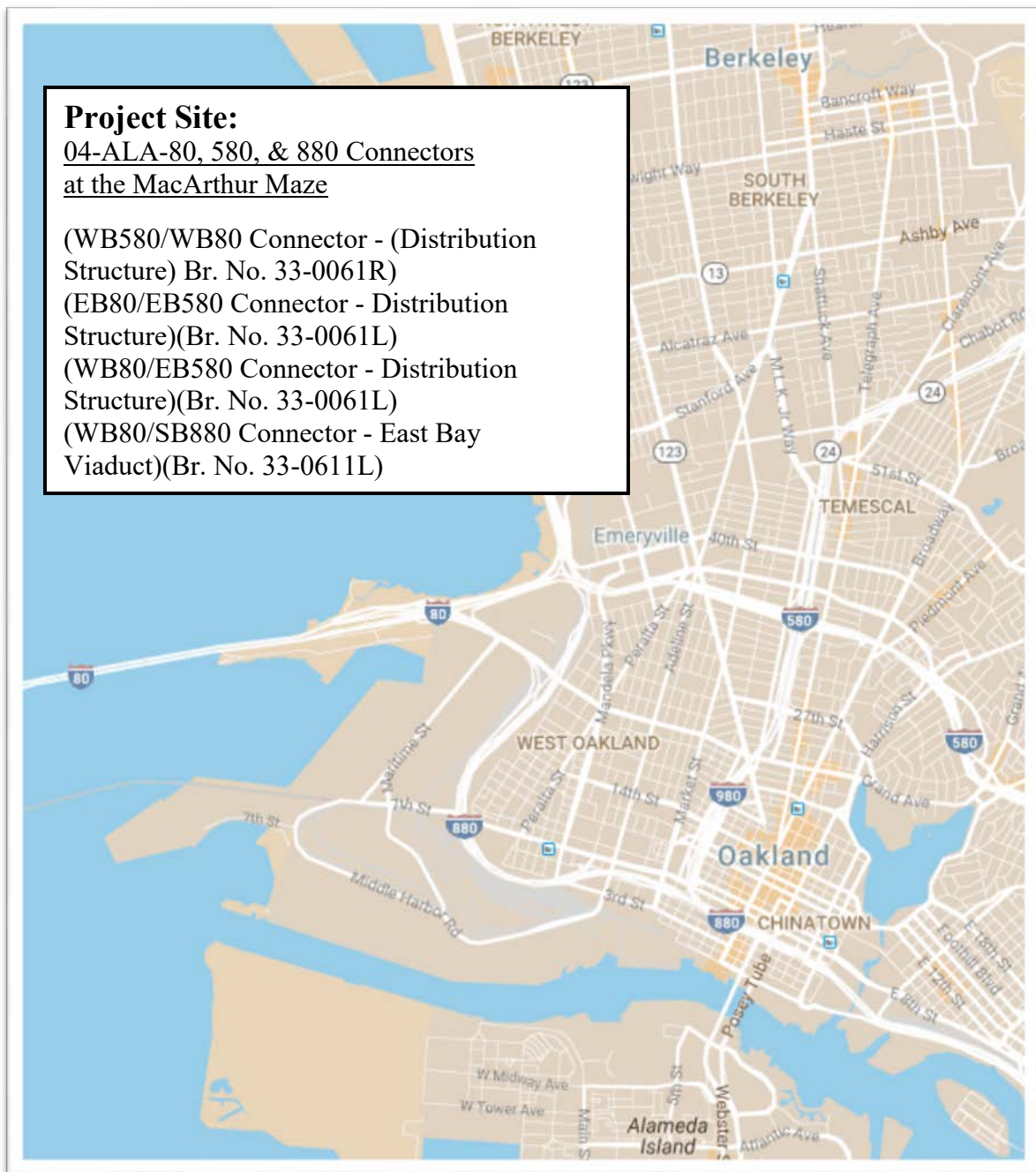
Three existing vertical clearances in the MacArthur Maze do not meet current standards. These deficiencies impede safe and efficient movement of freight vehicles through the critical freight corridor to I-80. In addition, potential truck impacts to low bridges present risk and danger to other vehicles on the road, and can result in lengthy closures and costly repairs.

Project Proposal

This project proposes to eliminate vertical clearance restrictions less than 16.5 feet that are located on or leading directly into I-80 near the freight-traffic heavy Port of Oakland. Three viable alternatives have been identified and warrant further investigation in the next phase of the project. Alternatives range from raising/lowering structures to replacement. The project is currently in the PA&ED phase.

An Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) and an Environmental Impact Report (EIR) pursuant to California Environmental Quality Act (CEQA) are anticipated and will be issued in the PA&ED phase of the project. Current project environmental evaluation anticipate impacts from San Francisco Bay waters and wetlands, hazardous waste and materials, environmentally sensitive areas (ESA), and regulated species and their habitats, and cultural.

The proposed scope of work in all of the alternatives should not anticipate any new right-of-way takes. However, there are identified right-of-way concerns that will require further investigations on impacts to project cost and schedule.



Schedule

The Project Development Team (PDT) met with the HQ Accelerated Freight Corridor Improvement, Division of Design team on June 14, 2017 for a project kick-off and overview of the Construction Manager/General Contractor (CMGC) Pilot Program.

District design has provided project information/cross-sections and as-builts to the PDT for preliminary review. The project began environmental studies August 27, 2017. The design schedule and Construction Manager Procurement dates are pending at this time.

The current project schedule major milestones are:

BEGIN ENVIRONMENTAL	M015	7/27/17
PA&ED	M200	01/01/2019
RTL	M460	06/01/2020
CCA	M600	02/01/2024

Cost/Funding

It has been determined that this project is eligible for federal-aid funding. The project is currently funded through the State Highway Operation and Protection Program (SHOPP) in accordance with SHOPP Amendment 16H-013. Project Initiation Report-Project Development Support (PIR-PDS) dated May, 1 2017 estimated programming for construction capital (\$105,489), R/W capital (\$500,000) and total Capital Outlay Support (COS) of (\$22,460,000).

Funding:

The project was amended into the 2016 SHOPP under Program 20.XX.201.322 at the May 2017 CTC meeting and funds for the Project Approval and Environmental Document (PA&ED) phase were voted at the June 2017 CTC meeting.

Programming & Estimate:

The PIR-PDS estimated capital outlay support PA&ED \$6,600,000 or 25.35 PY equivalents. There are three viable alternatives from current investigation. The preferred alternative will be selected during the PA&ED phase.

Capital Outlay Construction Cost Estimate Range

	Construction Cost
Alternative A	\$22,300,000
Alternative B	\$27,300,000
Alternative C	\$96,800,000

Permits/Agreements

Potential permits and agreements (Railroad Agreements, Cooperative Agreements, etc.) are not determined at this time. The location of a railroad may impact structural work and schedule and is a noted risk.

Right of Way and Utilities

Right of way and utility involvement for the project are not determined at this time, but the PDT anticipates major utility involvement. The need for up-to-date/new survey data and possible utility conflicts are noted risks.

Public/Political Support of Project

The Department is pursuing this project under the Accelerated Bridge Delivery – Freight Corridor Improvement Program. The extent of public support will be assessed during PA&ED and a public outreach plan will be developed.

Why is this project a good CMGC candidate?

Utilities involvement, traffic control and staging will be a primary issue of concern as this is a well-traveled segment. The project can benefit from the CMGC delivery process through innovative approaches provided by the contractor to minimize impact to the traveling public, technical solutions to raising/lowering structures and risk management while maintaining environmental commitments.

The Construction Manager's tasks shown below are pending project team and functional unit evaluation. The indicated tasks are considered preliminary and will be used to begin discussion on how the district intends to use the construction manager.

Anticipated CMGC Services

DESIGN RELATED

- Validate Department/Consultant design
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- Assist in permitting actions
- Study labor availability/conditions
- Prepare sustainability certification application
- Follow environmental commitments
- Follow terms of Federal Grant
- Coordinate site visits for subcontractors
- Teamwork/Partnering meetings/sessions
- Develop Quality and Safety plans