



CAC presentation TG18.1 Bus Ramps

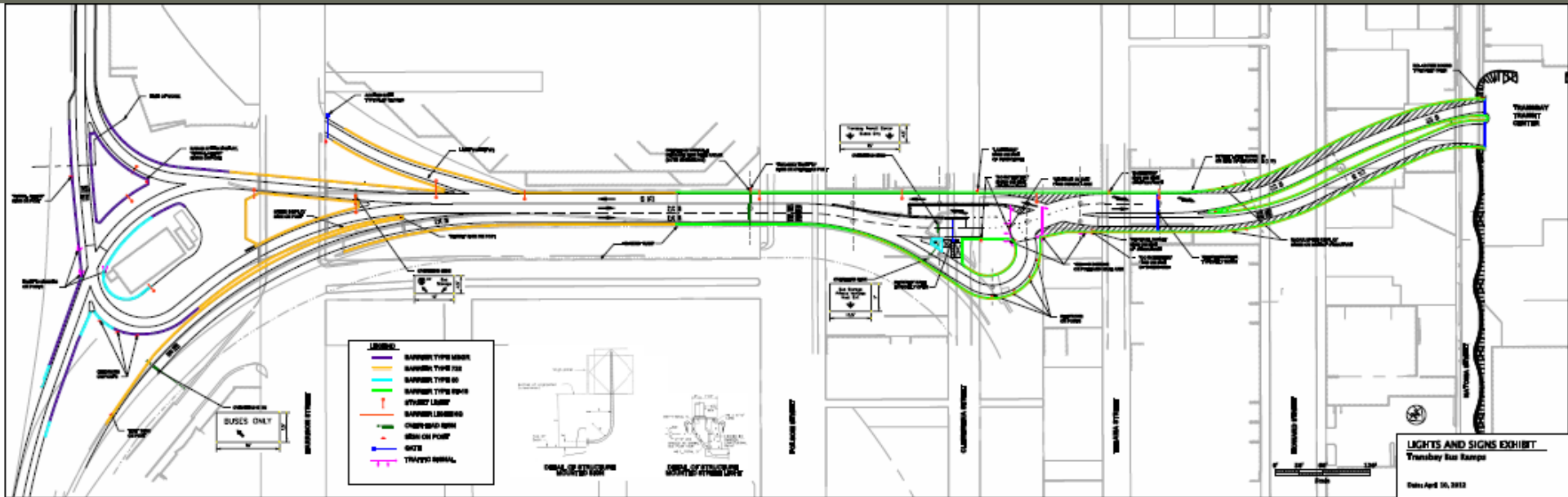
June 10, 2014

Transbay Transit Center

TJPA



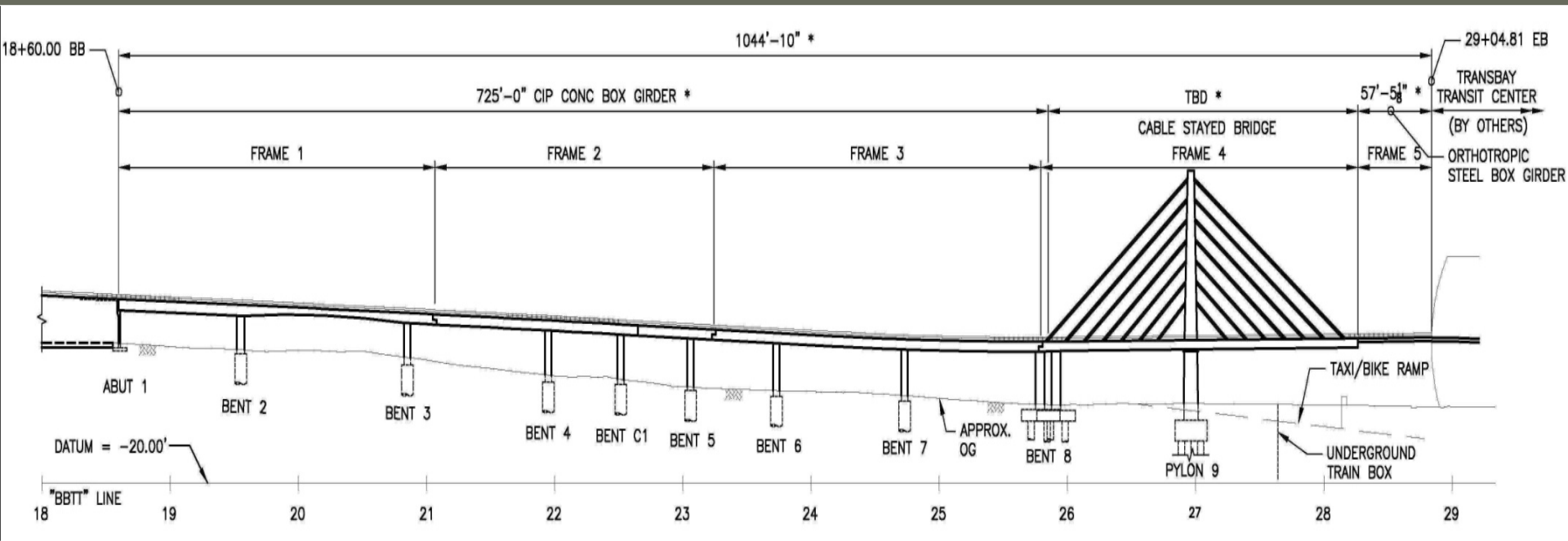
Bus Ramps Scope of Work



Bus Ramps Overall Site Plan



Bus Ramps Scope of Work





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Bus Ramps Scope of Work



Bus Ramps
Cable-Stayed Structure



Bus Ramps Summary

Bid Date: March 6, 2014

Budget: \$40.4M

(7/2013)

Engineer's Estimate: \$41M – \$49M

(12/2013)

SBE Goal: 20%

Prequalified Bidders: 7

Bids Received: 5

Bid Range: \$57.2M – \$84.7M



Value Engineering

- Pre-bid VEs
- A+B
- Deduct Alternates
- Post bid VE



Value Engineering

- Construct an extradosed style bridge in lieu of a cable-stayed structure (\$1.7M)
- Construct a pre-stressed cantilever bridge in lieu of a cable-stayed structure (\$1.8M)
- Use higher grade reinforcing steel bars (\$250K & \$75K)
- Contaminated soil mitigation (\$250K)
- Change Foundation type (\$200K & TBD)



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Bid Results

	Bidder				
	Shimmick Construction Company, Inc.	Skanska Steel Constructors	Walsh Construction Company	Myers and Sons Construction, LP	RGW Construction, Inc.
Part A, Cost Section					
Base Bid	\$ 57,175,056	\$ 64,336,160	\$ 66,987,240	\$ 81,874,280	\$ 84,672,150
Accepted VE Amount	(\$ 500,000)	--	--	--	--
Part B, Time Section*					
Working Days	501	600	550	622	622
(Working Days x \$2,500/day)	\$ 1,252,500	\$ 1,500,000	\$ 1,375,000	\$ 1,555,000	\$ 1,555,000
(10 VE Working Days x \$2,500/day)	(\$ 25,000.00)	--	--	--	--
Total Bid Amount for Bid Selection	\$ 57,902,556	\$ 65,836,160	\$ 68,362,240	\$ 83,429,280	\$ 86,227,150
Alternate No. 1**: Eliminate accent lighting on the cable-stayed structure	(\$ 450,000)	(\$ 376,000)	(\$ 790,000)	(\$ 380,000)	(\$ 320,000)

* The engineer's estimate for the number of working days was 555 days; the range of allowable working days in the bidding documents was between 501 and 622 days. The value of the number of working days is used for bid evaluation purposes only and is not factored into the subcontract amount.. ** Alternate pricing was accepted following bid evaluation.



Cost Saving Measures

Value Engineer Proposal:

- Accepted \$500K VE proposal for saddle detail in lieu of clevis pin design on cable-stayed section
- Accepted \$450K deductive alternate to delete accent lighting on cable-stayed section

Proposed Award Value:

Base Bid	\$57,175,056
VE Proposal	(\$500,000)
Deduct Alternate	(\$450,000)
Proposed Award:	\$56,225,056



Thank You



Bid Analysis

Cable-stayed structure accounted for \$11.3M price increase over engineer's estimate.

- Cable-stayed structure is a unique structure necessitated by the requirement to keep the adjacent train box free of foundations.
- Cable-stayed pylon structure requires specialized barrette pile foundation to accommodate lateral seismic forces without impacting train box.



Recommendation

Recommend Board approval of a Trade Subcontract with Shimmick Construction Company, Inc. for \$56,225,056:

- Bid reflects current market conditions
- Trade Package is on critical path
- Scope of work does not lend itself to more VE



Recommendation

Bid Amount:

• Base Bid	\$57,175,056
• VE Proposal	(\$500,000)
• Deductive Alternate #1	<u>(\$450,000)</u>
• Total	\$56,225,056

Award Amount:

• Budget (construction + design contingency)	\$40.4M
• Program Reserves	<u>\$15.8M</u>
• Total	\$56.2M

Program Reserves:

• Current Balance	\$74.7M
• Balance after Award	\$58.9M

Thank You