

MBTA DESIGN-BUILD PROCESS

Revere Transit Facility and Streetscape Improvements



BACKGROUND INFORMATION

Project Funding: \$20M TIGER Grant obtained by the City of Revere
MBTA Contract under MOA with City for oversight by the MBTA



DESIGN-BUILD

MBTA's design-build guideline process

- Consistent with federal guidelines for competitive procurement
- Consistent with MassDOT process
- Application to OIG for design-build procurement method

Design-build procurement method chosen for cost, schedule and quality

- 30% + Design to ensure specific design requirements adequately described
- Best Value used when price alone not determinative



TEAMS

Design Team

- SEA/Kleinfelder, Arrowstreet, Rosales Partners, Corcoran & Associates, Lighting Artist, Landscape, Civil, Structural, Mechanical

Selection Committee Members

- City of Revere, DCR, MBTA

Technical Advisory Committee Members

- Arrowstreet, SEA/Kleinfelder, Rosales Partners, Gilbane, Corcoran & Associates



SUBMITTING TEAMS

Barletta Heavy Division

- Simpson Gumpertz & Heger, Inc.
- Lozano, Baskin, & Associates, Inc.



J. F. White Contracting

- Finley Engineering Group, Inc.
- Touchstone Architecture



MIG Construction

- International Bridge Technologies, Inc.
- Ammann & Whitney



Suffolk Construction Company, Inc.

- Schlaich Bergemann & Partners
- AECOM



Walsh Construction

- Hardesty & Hanover, LLP
- DHK, Inc.



TWO-STEP PROCUREMENT PROCESS

1. Request For Qualifications (RFQ)

RFQ Scoring Issues:

Quality of Submittals

- Requested information was more and less responsive

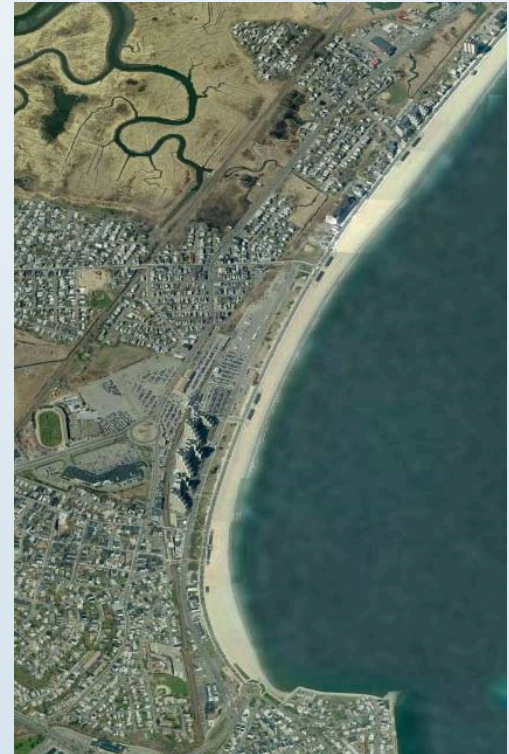
Understanding of □Project

- Experience with pedestrian facilities and urban design
- Completeness of team
- Consideration of entire scope, both plaza and bridge

Competitive Range

Four of the five firms were invited to submit proposals:

- Barletta Heavy Division
- J.F. White Contracting
- Suffolk Construction
- Walsh Construction



RFQ ADVERTISEMENT

LEGAL NOTICE

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
10 PARK PLAZA
BOSTON, MASSACHUSETTS 02116

**Request for Letters of Interest and
Notice of Availability of a Request for Qualifications
for the Design-Build Contract
for the Revere Transit Facility and Streetscape Project**

The Massachusetts Bay Transportation Authority (the "MBTA") hereby solicits Letters of Interest from contractor teams ("Teams") interested in completing the design and constructing the Revere Transit Facility and Streetscape Project (the "Project") at Wonderland Station in Revere on a fixed price/fixed term basis. The Project is being procured in accordance with a two-part, best value Design-Build procurement process authorized under M.G. L. c. 149A, s. 17, et seq.

The Project includes the design and construction of a cable-stayed pedestrian bridge over Ocean Avenue and an elevated plaza deck connecting the pedestrian bridge with Wonderland Station and with a parking garage that is currently under construction by others, and related improvements. Project completion must be achieved by June 30, 2012.

The Project is being funded with Federal transportation funds authorized under the Transportation Investment Generating Economic Recovery ("TIGER") program and the American Recovery and Reinvestment Act ("ARRA") of 2009. Contractor teams are advised to carefully review all TIGER, ARRA and contract requirements and to keep complete and accurate records of all spending in the event of contract award. The successful Team and any of its subcontractors shall be responsible for complying with the applicable provisions of ARRA which are incorporated herein by reference and all federal and state laws applicable to ARRA funded projects. The Project's cost is estimated at \$16,000,000.00 and will include the obligation to provide a five-year warranty for certain elements of the completed work.

Letters of Interest from teams interested in receiving a Request for Qualifications ("RFQ") for the Project will be received by the MBTA until two o'clock (2:00 p.m.) on February 3, 2011. Letters of Interest should be addressed to Francis A. DePaola, P.E., Assistant General Manager for Design and Construction, Room 6720, 10 Park Plaza, Boston, MA 02116. Upon delivery of the Letter of Interest, one written copy of the RFQ may be obtained from the MBTA between 9:00 a.m. to 4:00 p.m., beginning on January 21, 2011, Monday through Friday. Please note that teams must submit Letters of Interest in order to become part of the procurement process for the Project. Statements of Qualifications ("SOQs") will NOT be accepted from any party not submitting a Letter of Interest by the specified date. Letters of Interest must provide a mailing address, telephone number, email address and fax number for each Team's designated contact in order to ensure that any addenda that may be issued to the RFQ will be received by the interested Team. RFQ Addenda will only be issued electronically. The RFQ will be used to identify qualified Design-Build entities to submit a proposal pursuant to Section 19 of the M.G.L. c. 149A. SOQs will be evaluated by a selection committee established by the MBTA, using the following general criteria:

- Demonstrated experience in complex projects, including experience in design-build and experience in design and construction of cable-stayed bridges, and history of claims and changes and record of safety;
- Understanding of the work, including approach to integration of design and construction, quality assurance and maintenance of schedule;
- Experience and availability of key personnel to be assigned the project ;
- Experience of other personnel; and
- General quality of the SOQ submission.

Teams will be required to demonstrate combined design and construction (Design-Build) qualifications to be considered for this procurement. As a result, each Team shall be required to include members that are prequalified for relevant categories of construction work by both the MBTA and the Department of Conservation and Recreation. In addition, each Team must provide evidence that a key member of the Team is prequalified by DCR in the category of Bridge Construction for projects estimated to cost at least \$7.5 million and that a key member of the team is prequalified by the MBTA in the category of Class 1 – General Transit with a Single Project Rating of \$5 million.

There will be a Disadvantaged Business Enterprise goal of twenty percent (20%) and Minority Manpower Utilization and Female Construction Workforce utilization goals of five percent (5%) and six and nine-tenths percent (6.9%), respectively, for the Project. Teams shall affirmatively ensure that in regard to any contract entered into pursuant this solicitation, minority and female construction contractors will be afforded full opportunity to submit proposals and will not be discriminated against on the grounds of race, color, religion, sex, age or national origin in consideration for award. Teams will also be required to comply with Federal Equal Employment Opportunity Regulations and any amendments or supplements thereto as well as the MBTA's Disadvantaged Business Enterprise Participation Provisions.

Teams will also be required to certify as part of their proposals that they are able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work. The contract will be subject to Buy America provisions and to minimum wage rates in accordance with the Davis-Bacon Act, as well as all other applicable labor laws and Federal Transit Administration (FTA) contract requirements. Each Team that is chosen to submit a proposal will be required to provide a Bid Guarantee in the amount of five (5%) of the value of the bid, in the form of a bid bond. The successful proposer will also be required to furnish a performance bond and a labor and materials payment bond, each for the full amount of the contract price.

Complete instructions for the submission of Statements of Qualifications shall be set forth in the RFQ. The MBTA reserves the right to reject any or all proposals, to waive informalities, to advertise for new proposals or proceed to do the work otherwise, as may be deemed in the best interests of the Authority.

Massachusetts Bay Transportation Authority

Jeffrey B. Mullan
MassDOT Secretary
and Chief Executive Officer

Richard A. Davey
General Manager and Rail
and Transit Administrator

RFQ SCORING CATEGORIES

Qualitative evaluation will count for 100% of total score, focused on:

- Relevant Work Experience (40 points)
- Understanding of the Work (20 points)
- Resumes and Availability of Key Personnel (20 points)
- Personnel by Discipline (10 points)
- General Evaluation (10 points)



GUIDELINES FOR RATING RFQ

Highly Advantageous (90-100): ... significantly exceed stated requirements/objectives and provides a consistently outstanding level of quality....

Advantageous (80-89): ...exceed state requirements/objectives and offer generally better than acceptable level of quality....

Acceptable (70-79): ...meet the stated requirements/objectives and has an acceptable level of quality....

Poor (60-69): ...fails to meet the stated requirements/objectives as there are weaknesses and/or deficiencies, but they are susceptible to correction through oral presentations....

Unacceptable (0-59): ...contains significant weaknesses or deficiencies and/or are of unacceptable quality. The Team fails to meet the stated requirements/objectives and/or lacks essential information and is conflicting and/or unproductive....

RFQ SAMPLE SCORING SHEETS

MIG Construction

Ranked 5th (Total Score: 322.8)

Item	Rating	Comments
Relevant Work Experience – (40 points)	20	
1. Demonstrated ability to complete complex projects on time and on budget.	3	
2. Demonstrated experience in carrying out design-build projects, including organizational experience and the ability of team members to work together to integrate design and construction disciplines.	3	
3. Demonstrated experience constructing new pedestrian bridges over highways and in constructing public plazas.	3	
4. Demonstrated experience in design and construction of cable-stayed bridges, and in context-sensitive design of public plazas.	3	
5. Demonstrated experience in favorable resolution of issues concerning claims, changes and other disputes.	5	
6. Demonstrated history of compliance with DBE requirements	?	
7. Demonstrated safety record.	3	
8. Current workload.	?	
Understanding of the Work – (20 points)	15	
1. Approach to completing design and integration of design and construction of the Project.	2	
2. Approach to assuring and maintaining design quality.	3	
3. Approach to assuring construction quality.	3	
4. Approach to schedule development, schedule maintenance and to schedule recovery.	2	

Walsh Construction

Ranked 1st (Total Score: 409.1)

Item	Rating	Comments
Relevant Work Experience – (40 points)	36	
1. Demonstrated ability to complete complex projects on time and on budget.	38	Chicago Millennium
2. Demonstrated experience in carrying out design-build projects, including organizational experience and the ability of team members to work together to integrate design and construction disciplines.	39	200 PB completed \$1 Billion M PB
3. Demonstrated experience constructing new pedestrian bridges over highways and in constructing public plazas.	39	Hert-
4. Demonstrated experience in design and construction of cable-stayed bridges, and in context-sensitive design of public plazas.	39	PJ 5,9
5. Demonstrated experience in favorable resolution of issues concerning claims, changes and other disputes.	38	
6. Demonstrated history of compliance with DBE requirements	38	PJ 25
7. Demonstrated safety record.	30	
8. Current workload.	30	
Understanding of the Work – (20 points)	19	
1. Approach to completing design and integration of design and construction of the Project.	19	PJ 23
2. Approach to assuring and maintaining design quality.	19	PJ 22
3. Approach to assuring construction quality.	19	PJ 23
4. Approach to schedule development, schedule maintenance and to schedule recovery.	19	PJ 23

SUBMITTING TEAMS AND RANKINGS FOR RFQ

Committee Member	Barletta	JF White	MIG	Suffolk	Walsh
#1	73.6	64.4	67.6	80.1	76.1
#2	71.0	78.0	63.0	82.0	85.0
#3	86.0	72.0	71.0	77.0	89.0
#4	75.0	72.7	67.2	76.5	80.0
#5	71.0	70.0	54.0	74.0	79.0
Score	376.6	357.1	322.8	389.6	409.1
Rankings					
#1	3	5	4	1	2
#2	4	3	5	2	1
#3	2	4	5	3	1
#4	3	4	5	2	1
#5	3	4	5	2	1
Total Rank	15	20	24	10	6
Final Rank	3	4	5	2	1

(MIG was eliminated for not addressing base concept.
Proposal could have been classified as non responsive.)

TWO-STEP PROCUREMENT PROCESS

2. Request For Proposals (RFP)

RFP Scoring Issues:

Understanding of Project

- Appropriateness of team for project
- Integration of meaningful DBE participation (20%)
- Experience with pedestrian facilities
- Completeness of team

Interviews

Clarified teams' approach



RFP SCORING ISSUES CONTINUED



Bid Base Technical Concept

- Mandatory alternate technical concept
- Voluntary alternate technical concepts
- Value versus scope reduction
- VTC's not credited in baseline price proposals
- Six value engineering sessions to meet budget (required for all)

Smartest Approach

- Point spread supports quality-based selection process
- Quality piece supports schedule
- Scoring sheet sample

RFP SCORING CATEGORIES

Technical Evaluation:

- Management Proposal (30%)
 - a. Organizational Structure; Management Personnel Experience (10%)
 - b. Design Services (10%)
 - c. Construction and Construction Management (10%)
- Technical Proposal (70%)
 - a. Project Controls (10%)
 - b. Design Completion: Structural Considerations (10%)
 - c. Construction Staging (10%)
 - d. Geotechnical (5%)
 - e. Schedule (10%)
 - f. Environmental (5%)
 - g. Utilities (5%)
 - h. Aesthetics (10%)
 - i. Communications (5%)

RFP SAMPLE SCORING SHEETS

Walsh Construction

Ranked 4th (Total Score: 62.69)

Item	Rating	Comments
DB Management Proposal – (30%)	19.4	
a. Organizational Structure; Management Personnel Experience – (10%)	6.2	
1. The Proposer's overall organizational structure, both functionally and from a staffing perspective.	5.8	
2. Plans to facilitate communications between organizations and personnel, including among Participants and between the Proposer and the MBTA.	7.3	
3. Experience and ability of management personnel and key personnel and confirmation of key personnel to the Project.	5.8	
4. Quality of plan to achieve the DBE goal of 20% for the Project.	5.9	
b. Design Services – (10%)	6.2	
1. Approach to coordination of civil/structural engineering, utilities, constructability and maintainability.	6.8	
2. Approach to implementation of design submittal reviews and compliance with QC/QA Program.	6.9	
3. Approach to addressing unique challenges and/or design concerns.	5.7	
4. Plan to assure consistency and quality of the Design.	5.8	
5. Quality and approach to development of ATCs and/or RTCs.	5.8	
c. Construction and Construction Management – (10%)	2.8	

Suffolk Construction

Ranked 1st (Total Score: 91.92)

Item	Rating	Comments
DB Management Proposal – (30%)	29.4	
a. Organizational Structure; Management Personnel Experience – (10%)	10	
1. The Proposer's overall organizational structure, both functionally and from a staffing perspective.	10	COMPLETE, COMPLETE TEAM MATCHED TO DR. CRONTS ALL DISCIPLINES INCLUDED
2. Plans to facilitate communications between organizations and personnel, including among Participants and between the Proposer and the MBTA.	10	STATE OF THE ART COMMUNICA UNDERSTAND PROJECT PERMITS & DID DESIGN
3. Experience and ability of management personnel and key personnel and confirmation of key personnel to the Project.	10	UNDERSTAND PROJECT COMPLETE
4. Quality of plan to achieve the DBE goal of 20% for the Project.	10	UPNEY + 5 FW BELL D & C previous
b. Design Services – (10%)	10	
1. Approach to coordination of civil/structural engineering, utilities, constructability and maintainability.	10	BEST TEAM FW WITH D & C
2. Approach to implementation of design submittal reviews and compliance with QC/QA Program.	10	ONLY TEAM W/ DESIGN QUALITY UNDERSTOOD ISSUES/ CONSTRAINTS
3. Approach to addressing unique challenges and/or design concerns.	10	TRACK DESIGN AGAINST BASE CLEAR
4. Plan to assure consistency and quality of the Design.	10	ACCEPT & EMBRACE & IMPROVE
5. Quality and approach to development of ATCs and/or RTCs.	10	CLEAR PAGE # ATCS
c. Construction and Construction Management – (10%)	9.4	

SUBMITTING TEAMS AND RANKINGS FOR RFP

Committee Member	Barletta	JF White	Suffolk	Walsh
#1	53.11	53.20	94.58	46.50
#2	82.10	75.35	89.45	55.23
#3	82.90	71.02	96.74	80.23
#4	80.85	79.65	90.75	67.98
#5	81.30	68.40	88.10	63.50
Ave. Score	76.05	69.52	91.92	62.69
Rankings				
#1	3	2	1	4
#2	2	3	1	4
#3	2	4	1	3
#4	2	3	1	4
#5	2	3	1	4
Total Rank	11	15	5	19
Final Rank	2	3	1	4

(Walsh could have been eliminated for not addressing base concept. Proposal could have been classified as non responsive.)

SUMMARY EVALUATION SHEET

Summary of Rankings

Best Value Method

Proposer	Total Proposal Price	Total Technical Score	Cost/ Rating Point
Barletta Heavy Division	\$18,187,000.00	76.05	\$239,145.30
JF White Contracting	\$19,425,000.00	69.52	\$279,416.00
Suffolk Construction	\$18,014,215.00	91.92	\$195,977.10
Walsh Construction	\$17,350,000.00	62.69	\$276,758.65

Proposer Offering Lowest Cost/Rating Point: Suffolk Construction, Inc.

To arrive at the Cost/Rating Point ("C/PR") divide the Total Price by the Total Technical Score for each Proposal

ATC LIST BY TEAM

PROJECT: Revere Transit Facility and Streetscape Project
 ARCHITECT: Arrowstreet Architects
 REVIEW TYPE: Review of potential ATC and cost impacts

ITEM NO.	ATC NUMBER*	ATC	PROPOSED COST/SAVINGS	PROPOSED SAVING
		Base Contract	\$18,014,215	\$18,014,215
1	M.1	Delete west elevator and stair	(\$811,000)	(\$811,000)
2	S.1	Elimination of fish sculpture	(\$760,000)	(\$760,000)
3	S.2	Use up to four reglets ILO form liner at east monumental stair	(\$35,000)	\$0
4	S.3	Use exposed concrete planter walls in lieu of cladding them in granite	(\$54,300)	\$0
5	S.4	Cable Stayed Bridge - Elimination of transverse beam	(\$2,500)	(\$2,500)
6	S.5	Cable Stayed Bridge - Pin supports at pylon base connection	(\$8,640)	(\$8,640)
7	S.6	Cable Stayed Bridge - Open channel shapes for longitudinal members	(\$112,500)	(\$112,500)
8	S.7	Cable Stayed Bridge - Open Channel Shape - Traverse Members	(\$2,500)	(\$2,500)
9	S.8	Cable Stayed Bridge - Composite Deck with Steel Framing	(\$32,500)	(\$32,500)
10	S.9	Cable Stayed Bridge - Uniform Stay Cable Diameter	(\$6,000)	\$0
11	S.10	Geotechnical - Small Diameter Drilled Piles	(\$12,000)	\$0
12	S.11	Geotechnical - Driven H piles	(\$100,000)	(\$100,000)
13	S.12	Re-use of excavate for on-site backfill at park	(\$90,000)	(\$90,000)
14	S.13	Use steel angles for interior diaphragm beams for precast bulb tees in lieu of cast-in-place concrete beams	(\$20,000)	\$0
15	B.1.1	Reduced Program - Reduction of Plaza Area	(\$330,000)	\$0
16	B.1.2	Reduced Program - Pavers/Granite Stair Treads	(\$135,000)	\$0
17	B.1.3	Reduced Program - Revise Elevator No. 3 and Delete Sloped Walkways	(\$300,000)	\$0
18	B.1.4	Reduced Program - Defer the Granite Fish Sculpture Installation	(\$790,000)	\$0
19	B.2	Five-Year Warranty - Bond	(\$80,000)	\$0
20	J.1.1	Substitution of Granite Fish Sculpture - Replace with Different Sculpture	(\$585,265)	\$0
21	J.1.2	Substitution of Granite Fish Sculpture - Replace with Playground	(\$325,265)	\$0
22	J.2	Protective Coating - Metallizing for Structural Steel (Bridge)	(\$44,000)	(\$44,000)
23	J.3	Cable Stayed Pedestrian Bridge - Use H beams instead of Box Beams	(\$134,000)	\$0
24	W.2	Stamped Concrete Surface in lieu of Pavers at Upper and Lower Plaza	(\$250,000)	\$0
25	W.3	Delete granite veneer at stair treads	(\$90,000)	\$0
26	W.4	Delete granite fish sculpture	(\$800,000)	\$0
27	W.5	Modified Fish Sculpture Material in lieu of Granite (Gunite)	(\$375,000)	\$0
		TOTAL COST OF ALL ATCs	(\$5,474,470)	(\$1,963,640)
				\$16,050,575.00

***ATC Number**

- **M:** Mandatory
- **S:** Suffolk Construction
- **B:** Barletta Heavy Division
- **J:** J.F. White Contracting
- **W:** Walsh Construction

FINAL SYNOPSIS



Original Date: 6/9/11
Updated: Rev4 - 07/08/11

VALUE ENGINEERING LIST Revere Transit Facility and Streetscape Project

TRADE	APPROXIMATE VALUE	COMMENTS	Accepted	Rejected	Pending
1 Eliminate the west monumental stairway & elevator	(811,000)		(811,000)		
2 Eliminate the fish sculpture	(760,000)	Review the small retaining wall & steps	(760,000)		
3 Use upto four reglets ILO the form liner at the east monumental stair	(35,000)			(35,000)	
4 Use exposed concrete planter walls ILO cladding them in granite	(54,300)	To be adjusted for the mandatory ATC acceptance, if reconsidered		(54,300)	
5 Eliminate the transverse beam at the cable stay bridge	(2,500)		(2,500)		
6 Use a pin support pylon base connection at the cable stay bridge	(8,640)	Minimize the pile scope of work	(8,640)		
7 Use open channel shapes for the longitudinal members at the cable stay bridge	(112,500)	Review bird control	(112,500)		
8 Use open channel shapes at the traverse members at the cable stay bridge	(2,500)		(2,500)		
9 Use composite metal deck ILO formed concrete at the cable stay bridge	(32,500)		(32,500)		
10 Use a uniform stay cable diameter at the cable stay bridge	(6,000)			(6,000)	
11 Use small diameter drilled piles	(12,000)			(12,000)	
12 Use driven H-piles ILO the mini-piles	(100,000)		(100,000)		
13 Re-use of excavated soil for on-site backfilling at the beach park	(90,000)		(90,000)		
14 Use steel angles for the interior diaphragm beams ILO cast-in-place concrete beams	(20,000)	Corrosion issues		(20,000)	
15 Use a tnemec paint system ILO galvanizing of the cable stay bridge	(5,000)				(5,000)
16 Eliminate the fireproofing of the existing east side station	(55,000)			(55,000)	
17 Simplify the temporary ramp & stairway to elevator #3 to target a savings	(5,000)	No wheelchair lift	(5,000)		
18 Simplify the temporary bus loop to target a savings of:	(10,000)		(10,000)		

FINAL SYNOPSIS



Original Date: 6/9/11
Updated: Rev4 - 07/08/11

VALUE ENGINEERING LIST Revere Transit Facility and Streetscape Project

TRADE	APPROXIMATE VALUE	COMMENTS	Accepted	Rejected	Pending
19 Simplify the type 3 railing system to target a savings of:	(5,000)		(5,000)		
20 Use an alternative manufacturer to HDI for the stainless steel railing systems 1 & 2	(10,000)		(10,000)		
21 Eliminate the LED fixtures within the railing systems	(20,000)	Maintains the footcandles with more cost effective light fixtures - added pole fixtures		(20,000)	
22 Reduce the width of the east monumental stairs by eliminating the larger seating areas	(50,000)	Eliminates approx. 14' of the stair is eliminated			(50,000)
23 Review the landscaping to target a savings of:	(20,000)	Set the landscaping as an allowance of \$35,000	(20,000)		
24 Simplify the crosswalk at Revere Beach Blvd.	(1,000)	Assuming the speed bump goes away	(1,000)		
25 Review the weekend vs off-hour work		4 weekends			
26 Review the diaphragm beams for a potential savings	(6,500)	(40) cross braces - 3x3x1/4 x 10' long stainless steel angles			(6,500)
27 Raise the PC line pile caps as high as possible and minimize the impact to the station's existing foundations	(12,500)	The pile caps are thicker than 4" regarding frost protection	(12,500)		
28 Raise all the pile caps to within 4' for frost protection	(5,000)	Special emphasis on the front east stair caps that will encroach on the street as is currently designed	(5,000)		
29 Review the elevator canopies	(15,000)	The canopies are high enough that you'll get wet anyway		(15,000)	
30 Eliminate the column 9 to 10 bay from the upper plaza in its entirety	(58,750)	We lose approx. 1,462 sf of the upper plaza		(58,750)	
31 Use an alternate metal panel system to the specified rainscreen system	(8,000)	Standard rout and return, wet seal system. Used extensively throughout the city		(8,000)	
32 Use an Oldcastle glass with ceramic frits ILO the Vircon glass specified	(12,500)		(12,500)		
33 Use a McGill Louver system ILO the specified louvers	(4,500)		(4,500)		
34 Review the light fixture package based on alternate manufacturers and/or new design	(10,000)	Submittal review		(10,000)	
35 Use aluminum feeders for conductors #4 and larger ILO copper	(12,000)			(12,000)	

FINAL SYNOPSIS



Original Date: 6/9/11
Updated: Rev4 - 07/08/11

VALUE ENGINEERING LIST Revere Transit Facility and Streetscape Project

TRADE	APPROXIMATE VALUE	COMMENTS	Accepted	Rejected	Pending
36 Eliminate the CCTV system	(22,400)	<i>Tie into garage system, including (2) cameras</i>	(16,400)	(6,000)	
37 Eliminate the sound/paging system	(11,000)	<i>Tie into garage system, including (2) speakers</i>	(9,000)	(2,000)	
38 Use a lightning preventer system ILO the lightning protection system	(3,000)	Will not have a UL Master Label		(3,000)	
39 Use PVC coated MC cable at exterior locations (not subject to physical damage) and in-slab branch circuits ILO surface mounted sch80 PVC and/or IMC/GRG conduit	(7,200)			(7,200)	
40 Eliminate the galvanized rebar requirements	(15,000)	Use black reinforcing but need epoxy at the face of the west abutment wall and the pylon cap closest to the street.	(8,500)	(6,500)	
41 Eliminate the (2) bus shelters	(25,000)	By others	(25,000)		
42 Eliminate the lower plaza waterproofing	(38,500)	Have the private development complete it when they tie into it.		(38,500)	
43 Use a standard twin jack elevator by Otis or equal	TBD	Hydraulic can not be used		TBD	
44 Eliminate the spray fireproofing on the lower plaza steel	(12,500)	Have the private development complete it when they tie into it.	(12,500)		
45 Eliminate the excavation and backfilling of the electrical & telecom ductbank if the utility company is completing the work	(20,000)			(20,000)	
46 Use a flat roof structure at the elevator 2 & 3 core buildings ILO the pitched standing seam roofs	(45,000)	Simplifies the louver detail to a 2'-3' high size and the additional glass at elev. 2, which would be one roof plane without the bump up.		(45,000)	
47 Eliminate the metal ceilings	(14,000)	Exposed struture above			(14,000)
48 <i>Use structural steel w/Z106 fire proofing ILO the precast structure for the upper plaza</i>	(114,000)	Keeping the precast decking - includes the elimination of the Pb/P8.5 column and header beam	(114,000)		
48.1 Revise column line Pa foundations to the original design	(558,072)	<i>Elimination of all Pa pile caps, except the design</i>	See garage		
48.2 Revise column line Pc foundations based on a steel structure.	(235,000)	<i>Assuming (32) piles can be eliminated</i>	(235,000)		

FINAL SYNOPSIS



Original Date: 6/9/11
Updated: Rev4 - 07/08/11

VALUE ENGINEERING LIST Revere Transit Facility and Streetscape Project

TRADE	APPROXIMATE VALUE	COMMENTS	Accepted	Rejected	Pending
49 Use railing type 1 ILO the upper plaza canopy	(8,500)			(8,500)	
50 Use an 18 x 18 unit paver, single color ILO the patterned larger pavers	(32,000)	Have the private development complete it when they tie into it.		(32,000)	
51 Use a scored pattern concrete slab finish ILO the pavers on the upper Plaza	(155,000)	Use a traffic coating membrane over the concrete			(155,000)
52 Use a scored pattern concrete slab finish ILO the pavers on the lower Plaza	(150,000)	Use a traffic coating membrane over the concrete			(150,000)
53 Eliminate the planters on the lower plaza	(24,000)			(24,000)	
54 Eliminate all the diaphragm beams & keeper blocks for the precast	(55,000)	There is speculation that they are not required		(55,000)	
55 Use a tile veneer ILO the granite at the planters	(5,000)			(5,000)	
56 Use a concrete seat wall with a granite cap at the beach plaza retaining wall ILO the solid granite wall	(10,000)			(10,000)	
56.1 Use a concrete seat wall at the curved wall section and a 6" x 18" granite curb at the straight wall section at the beach plaza retaining wall ILO the solid granite wall	(220,000)		(220,000)		
57 Reuse as much of the east side of Ocean Ave sidewalk as possible ILO completely replacing the sidewalk	(5,000)	Re-use approx 1,000 sf of sidewalk	(5,000)		
58 Eliminate the CMU partition along the existing station Pc line from column line 6 to 10 and install a 4' high chain link fence	(18,500)			(18,500)	
58.1 Use regular CMU block ILO the ground face block along the Pc line	(9,000)		(9,000)		
59 Eliminate the traffic coating on the existing station floor (MMA)	(74,500)		(74,500)		
60 Eliminate the curbing along Chester & Ocean Aves.	(12,000)		(12,000)		
TOTAL	(4,271,862)		Totals: (2,746,040)	(587,250)	(380,500)
			Current Budget:	18,014,215	
			Total Incorporating Accepted V.E.:	15,268,175	

TOTAL PROJECT BUDGET ESTIMATE

Construction

740085	D39CN01 - Design-Build Contract	\$15,393,175
740090	D38CN01 - CO#3 (Suffolk Garage CO)	\$32,000
9PLZSK	Construction Contingency	\$609,051
		\$16,034,226

Force Account

9RVSKS	Future Force Account	\$674,000
		\$674,000

Field Inspection

xxxxxx	Field Inspection	\$0
		\$0

Project Administration

099685	Indirect Administration	\$325,000
		\$325,000

Design/Professional Services

740081	SEA - Z92PS45 #1	\$1,236,446
740082	Printing and Advertising	\$10,000
740083	Arcadis - Z92PS11 Task 6 (VE Services)	\$47,495
740084	Gilbane - Z90PS02, Am. #2 and #3	\$1,206,583
740088	City of Revere - Legal & Professional	\$275,000
740089	Robinson & Cole - Bid Escrow	\$4,250
xxxxxx	D/B Stipends	\$30,000
xxxxxx	Misc reimbursables	\$10,000
xxxxxx	Future Design/Engineering	\$147,000
		\$2,966,774

Total Project Cost		\$20,000,000
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LESSONS LEARNED

- Continue to hold pre-bid conferences, encourage questions, etc.
 - Implement annual contractor evaluations
 - Design-build to be used more often in the future
- Consider training for:
- Committee members
 - Contractors
- Continue to develop scoring criteria
 - Allow teams adequate time to develop submittals

