

**THIS STAFF REPORT COVERS CALENDAR ITEM NO.: 12
FOR THE MEETING OF: July 31, 2009**

TRANSBAY JOINT POWERS AUTHORITY

BRIEF DESCRIPTION:

Amending Contract No. 07-04-TTC-000, Professional Design Services for the Transbay Transit Center Building and Related Structures, with Pelli Clarke Pelli Architects, Inc., to plan and monitor tests of alternate methods for soil improvements and shoring wall construction and analyze the test results in an amount not to exceed \$850,000, a reduction of \$4,150,000 to a prior authorization; and amending Contract No. 08-04-CMGC-000, Construction Manager/General Contractor Services for the Construction of Transbay Transit Center Building and Related Structures, with Webcor/Obayashi, JV, to expand the scope of preconstruction services to include performing geotechnical field tests of soil improvements and shoring wall construction in an amount not to exceed \$4,150,000.

SUMMARY:

- On March 20, 2008, the TJPA Board approved the award the contract for design and construction administration services of the Transbay Transit Center Building and Bus Ramps to Pelli Clarke Pelli Architects, Inc. (PCPA). Geotechnical engineering services, the design of the soil improvements beneath the Transit Center and design of foundation systems were included in the scope of services under the contract.
- On September 26, 2008, PCPA completed Concept Validation and began Schematic Design of the Transit Center.
- On March 12, 2009, the TJPA Board approved the award of a contract to Webcor/Obayashi, Joint Venture to act as the Construction Manager/General Contractor for the construction of the Transbay Transit Center Building and Bus Ramps. The contract includes pre-construction services to provide constructability, cost, schedule and other input during the design of the Transit Center Building.
- On April 3, 2009, PCPA submitted Schematic Design and commenced Design Development.
- On April 9, 2009, the TJPA Board approved an amendment to the PCPA contract to evaluate drilled piers being considered to support properties adjoining the Transit Center and to evaluate alternate means of constructing the shoring walls which will form the perimeter of the excavation for the train levels of the Transit Center in an amount not to exceed \$5,000,000.
- In developing the scope and refining the plan for performing and monitoring the tests, TJPA and PCPA have coordinated extensively with Webcor/Obayashi and are recommending that the change order with PCPA be modified to provide the plan for the tests, collect data during and following the testing, and report on the findings of the work and that the scope of Webcor/Obayashi's pre-construction services be modified to have Webcor/Obayashi contract for and manage the implementation of the tests in the field.
- Funding for this amendment is through Regional Measure 2 (RM2) funds, as administered by the Metropolitan Transportation Commission.

EXPLANATION:

Proposed Geotechnical Tests

The geotechnical engineer has proposed and the TJPA Board has authorized conducting a series of tests to determine the technical feasibility and effectiveness of alternate construction processes prior to finalizing the design of the soil improvements and foundation systems for the Transit Center. These tests will inform the design and specifications of the soil improvements to support adjacent properties and the shoring wall that will form the perimeter of the Transit Center foundation system.

As originally authorized by the TJPA Board, the tests were to be performed under the design contract with PCPA and coordinated and supervised by the geotechnical sub-consultant ARUP. Under the proposed contract modifications, ARUP would plan, coordinate, and monitor the tests under the contract with PCPA, and Webcor/Obayashi will contract with TJPA for and supervise the performance of the physical tests.

Role of CM/GC

At the time that the tests were first proposed to the TJPA Board, the CM/GC had been under contract with the TJPA for less than a month. In developing the testing plan and coordinating with Webcor/Obayashi, it became apparent that it would be beneficial to have the CM/GC oversee the performance of the tests. The tests are intended to provide data that will inform the design of the shoring wall and other geotechnical improvements and to demonstrate the viability and productivity of means and methods for constructing those improvements. By having the Webcor/Obayashi supervise the performance of the tests, they will gain direct experience with the proposed means of construction and the site conditions. This insight will further inform the construction planning efforts for the Transit Center Building.

Funding

Funding for this amendment is through Regional Measure 2 (RM2) funds, as administered by the Metropolitan Transportation Commission.

RECOMMENDATION:

Staff recommends that the TJPA Board of Directors authorize amending Contract No. 07-04-TTC-000, Professional Design Services for the Transbay Transit Center Building and Related Structures, with Pelli Clarke Pelli Architects, Inc., to plan, monitor, and analyze the results of geotechnical tests of means and methods for soil improvements and shoring wall construction, and amending Contract No. 08-04-CMGC-000, Construction Manager/General Contractor Services for the Construction of Transbay Transit Center Building and Related Structures, with Webcor/Obayashi, JV, to expand the scope of preconstruction services to perform the geotechnical field tests.

ENCLOSURE:

1. Resolution
2. Amendment to Contract No. 07-04-TTC-000
3. Amendment to Contract No. 08-04-CMGC-000

**TRANSBAY JOINT POWERS AUTHORITY
BOARD OF DIRECTORS**

Resolution No. _____

WHEREAS, The Transbay Transit Center will be a landmark intermodal transit center supporting rail and bus operations; and

WHEREAS, The TJPA requires an Architectural and Engineering team capable of successfully executing such a complex project while maintaining design excellence; and

WHEREAS, On May 15, 2008, the TJPA Board approved the award of the contract for design and construction administration services of the Transbay Transit Center Building and Bus Ramps to Pelli Clarke Pelli Architects, Inc.; and

WHEREAS, Geotechnical engineering services, the design of the soil improvements beneath the Transit Center and design of foundation systems are included in the scope of services under the contract; and

WHEREAS, On September 26, 2008, Pelli Clarke Pelli Architects, Inc. completed Concept Validation and commenced Schematic Design of the Transbay Transit Center; and

WHEREAS, On March 12, 2009, the TJPA Board approved the award of the contract for Construction Manager/General Contractor services for the construction of the Transit Center Building and Bus Ramps to Webcor/Obayashi, JV; and

WHEREAS, On April 3, 2009, Pelli Clarke Pelli Architects, Inc. submitted Schematic Design and is commencing Design Development of the Transit Center; and

WHEREAS, The geotechnical engineer has recommended testing technologies for soil improvements and shoring wall construction; and

WHEREAS, These tests will provide valuable information to the Architectural and Engineering team and potential contractors and will diminish the risk of future delays and cost increases; and

WHEREAS, On April 9, 2009, the TJPA Board authorized a contract amendment with Pelli Clarke Pelli Architects, Inc. to conduct additional geotechnical testing and analysis; and

WHEREAS, PCPA and TJPA desire for Webcor/Obayashi, J.V., to construct the prototype shoring wall and buttress elements; and

WHEREAS, Supervising these tests will provide valuable information to the Construction Manager/General Contractor on the means of construction and project site conditions enhancing their ability to plan the construction work and project construction productivity, cost and schedule; and

WHEREAS, Funds for this contract amendment are available through Regional Measure 2 (RM2) through the Metropolitan Transportation Commission (MTC); now, therefore, be it

RESOLVED, That the TJPA Board of Directors authorizes the Executive Director to execute Amendment No. 1A to the Agreement for professional design and construction administration services for the Transit Center Building and Related Structures with Pelli Clarke Pelli Architects, Inc. in an amount not to exceed \$850,000, a reduction of \$4,150,000 to a prior authorization, to plan geotechnical testing and analyze test results and to execute Amendment No. 2 to the Agreement for Construction Manager/General Contractor Services with Webcor/Obayashi, JV to test means and methods for soil improvements and shoring wall construction in an amount not to exceed \$4,150,000.

I hereby certify that the foregoing resolution was adopted by the Transbay Joint Powers Authority Board of Directors at its meeting of July 31, 2009.

Secretary, Transbay Joint Powers Authority

AGREEMENT
AMENDMENT NO. 01A
BETWEEN
TRANSBAY JOINT POWERS AUTHORITY
AND
PELLI CLARKE PELLI ARCHITECTS, INC.

THIS AMENDMENT for AGREEMENT is entered into as of the _____ day of _____, 20____ by and between the TRANSBAY JOINT POWERS AUTHORITY (“TJPA”) and Pelli Clarke Pelli Architects, Inc. (the “Architect”).

By this Amendment No. 01A the TJPA and the Architect hereby modify the Agreement dated May 15, 2008 (the "Agreement"), only to the extent expressly provided in this Amendment No. 01A. All other terms and conditions of the Agreement shall remain in full force and effect.

Recitals

A. On May 15, 2008, the TJPA Board awarded the Agreement to the Architect to perform architectural and engineering professional design services for the Transbay Transit Center Building and Related Structures Project (the "Project").

B. In performance of services under the Agreement, the Architect has retained Arup North America Limited ("Arup") as a subconsultant to provide geotechnical, civil engineering, and other professional engineering services for the Project, with Arup having direct liability to the TJPA only for its geotechnical services. Arup has proposed site-specific tests of drilling and shoring methods and equipment (the "Shoring Wall and Buttress Tests" or "SW/B Tests").

C. On April 9, 2009, the TJPA Board approved Amendment No. 01 to the Agreement. By Amendment No. 01, the TJPA authorized an Additional Services fee in an amount not to exceed \$5 Million for the SW/B Tests.

D. TJPA has entered into a separate contract with its Construction Manager/General Contractor, Webcor/Obayashi ("W/O"). For the convenience of the Architect, TJPA has requested and W/O has agreed to perform the SW/B Tests in accordance with the design criteria and design direction provided by the Architect and/or its subconsultant Arup. The TJPA and the Architect acknowledge and agree that as a result of this arrangement, a portion of the approved Additional Services fee as set forth in Amendment No. 01 must be redirected to W/O for the performance of the SW/B Tests.

E. By this Amendment No. 01A, the TJPA and the Architect desire to clarify the roles and responsibilities among the TJPA, the Architect, Arup, and W/O for the SW/B Tests.

Terms and Conditions

Performance of the SW/B Tests

1. The Architect, with, by, or through Arup, shall provide the design criteria and design direction for the SW/B Tests to be performed by W/O. The scope of the SW/B Tests is set forth in the accompanying Exhibit A to this Amendment No. 01A, which shall replace and supercede the scope document annexed to Amendment No. 01.

Responsibilities and Liabilities

2. The Architect shall remain responsible in accordance with the terms of the Agreement as modified by Amendment No. 01 and this Amendment No. 01A for all services performed under Agreement Amendment No. 01 as modified by this Amendment No. 01A. Nothing in Amendment No. 01 or in this Amendment No. 01A shall modify or abrogate the rights and responsibilities under the Agreement, including all indemnification and insurance coverage requirements.

3. The TJPA shall have no liability or responsibility whatsoever, directly or indirectly, arising out of or relating to the SW/B Tests (other than payment of the appropriate Additional Services fee). The design of the shoring wall and buttress and any design or engineering use, analysis, results, conclusions, and/or design decisions arising out of or relating to the SW/B Tests shall be the responsibility of the Architect and Arup and not the TJPA.

Fee Structure

4. By this Amendment No. 01A and by contemporaneous direction to W/O, the TJPA hereby reduces the Amendment No. 01 Additional Services Fee to an amount not to exceed \$850,000. Such amount shall cover all professional engineering and management services arising out of or relating to the SW/B Tests. The TJPA shall re-allocate the balance of SW/B Test funds (\$4,150,000) to W/O under its separate contract for performance of the SW/B Tests.

5. The TJPA shall pay the Architect its Additional Services Fee for the SW/B Tests as an Additional Service, as provided in Amendment No. 01 and in the Agreement. TJPA shall not be liable or responsible for any direct payment to the Architect's subconsultants, including but not limited to Arup. Under no circumstances shall the TJPA be responsible for an Additional Services Fee under Amendment No. 01 or this Amendment No. 01A in excess of \$850,000.

Additional Provisions for Agreement Paragraph 4.2.5 (not just this Amendment)

6. Effective only upon written confirmation that Arup has agreed to provide TJPA with the protections required under paragraph 4.2.5 of the Agreement, and only to the extent allowed by applicable law, Arup shall be entitled, in any action or proceeding related to Arup's direct liability to the TJPA under the Agreement, to raise the same defenses to a claim by the TJPA as the Architect would have available under the terms and conditions of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this contract Amendment No. 01A on the day first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY

Maria Ayerdi-Kaplan
Executive Director

Transbay Joint Powers Authority

Transbay Joint Powers Authority
Board of Directors
Resolution No. _____
Adopted: _____
Attest:

Secretary, TJPA Board

Approved as to Form:

Dennis J. Herrera, City Attorney

By _____
Deputy City Attorney

Architect

By signing this Agreement, I certify that I comply with the requirements of the Minimum Compensation Ordinance, which entitle Covered Employees to certain minimum hourly wages and compensated and uncompensated time off.

I have read and understood paragraph 55, the TJPA's statement urging companies doing business in Northern Ireland to move towards resolving employment inequities, encouraging compliance with the MacBride Principles, and urging San Francisco companies to do business with corporations that abide by the MacBride Principles.

Authorized Signature

Printed Name

Title

Pelli Clarke Pelli Architects, Inc.

Company Name

1056 Chapel Street

Address

New Haven, CT 06501

City, State, ZIP

Phone Number

Federal Employer ID Number

Exhibit A
Amended Scope
Prototype Test for Shoring Wall and Buttress (“SW/B”)

1. Additional Services Architect Agrees to Perform

Services under this Agreement shall be performed only by competent personnel under the supervision of and/or in the employment of the Architect and shall include all costs associated with labor, materials, equipment, professional services, permits, markups and fees.

a. Prototype Shoring Wall and Buttress

The Architect shall provide design criteria and design direction for the construction of the following three prototype shoring wall and buttress elements; these elements of work shall be performed by Webcor/Obayashi, Joint Venture (not by the Architect or Arup).

- 1) Construct a series of 5 overlapping drilled shafts, each 7 feet in diameter and 220 feet deep, to evaluate constructability issues and production rates for the construction of the buttress that is intended to protect adjacent buildings.
- 2) Construct a 1-cell cut-off/shoring wall (50 ft x 25 ft) using the Deep Mixing Method (DMM), also referred to as the Cement Deep Soil Mixing (CDSM) method. A system of three overlapping augers shall be used to drill through a column of soil to the depth of interest while injecting and mixing cement-bentonite slurry with the in-situ soils to construct overlapping soil-cement panels that will form the shoring/cut-off walls to shore the excavation for the train box. Construct two walls 50 feet by 105 feet, 1 wall 25 feet by 120 feet and a fourth wall 25 feet by 140 feet.
- 3) If budget allows, construct a 1-cell shoring/cut-off wall (50 ft x 25 ft) using the Cutter Soil Mixing (CSM) method, which uses a system of steel blades to shear the soil as the equipment penetrates the ground, and to mix the soil with injected cement-bentonite slurry. Consecutive overlapping panels shall be constructed to form the shoring/cut-off wall. Construct 2 longitudinal walls each 120 feet deep (100 feet by 120 feet) and two transverse walls each 140 feet deep (50 feet by 140 feet).

b. Testing and Supervision

Perform monitoring and in-situ testing as follows while construction of prototype shoring wall and buttress is in progress: Perform geotechnical testing consisting of dewatering the cells and monitor the performance of the test cells, coring of the soil-cement and concrete shafts, and perform laboratory testing; and Coordinate with Webcor/Obayashi to avoid interference between testing and prototype work.

-End of Exhibit A-

AGREEMENT
AMENDMENT NO. 02
BETWEEN
TRANSBAY JOINT POWERS AUTHORITY
AND
WEBCOR/OBAYASHI, J.V.

THIS AMENDMENT for AGREEMENT is entered into as of the ____ day of _____, 20____ by and between the TRANSBAY JOINT POWERS AUTHORITY ("TJPA") and Webcor/Obayashi, J.V. (the "CM/GC"). By this Amendment No. 02 the TJPA and the CM/GC hereby modify the Agreement dated March 17, 2009 (the "Agreement"), only to the extent expressly provided in this Amendment No. 02. All other terms and conditions of the Agreement shall remain in full force and effect.

Recitals

A. On March 12, 2009, the TJPA Board awarded the Agreement to the CM/GC to perform pre-construction and construction services for the Transbay Transit Center Building and Related Structures Project (the "Project").

B. On May 15, 2008, the TJPA Board awarded to Pelli Clarke Pelli Architects, Inc. (the "Architect"), a contract to perform architectural and engineering professional design services for the Project.

C. In performance of services under its contract, the Architect has retained Arup North America Limited ("Arup") as a subconsultant to provide geotechnical, civil engineering, and other professional engineering services for the Project, with Arup having direct liability to the TJPA only for its geotechnical services. To inform its design, Arup has proposed site-specific tests of drilling and shoring methods and equipment (the "SW/B Tests").

D. On April 9, 2009, the TJPA Board approved an amendment to the Architect's contract for Additional Services fee in an amount not to exceed \$5 Million for the SW/B Tests.

E. After that date, for the convenience of the Architect and for the information and experience of the CM/GC, the CM/GC has agreed to perform the SW/B Tests in accordance with the design criteria and design direction provided by the Architect and/or its subconsultant Arup.

F. By this Amendment No. 02, the TJPA increases the authorization of pre-construction services to be performed by the CM/GC to include the performance of the SW/B Tests and to clarify the roles and responsibilities among the TJPA, the Architect, Arup, and the CM/GC for the SW/B Tests.

Terms and Conditions

Performance of the SW/B Tests

1. The Architect, with, by, or through Arup, shall provide the design criteria and design direction for the SW/B Tests to be performed by the CM/GC. The scope of the SW/B Tests is set forth in the accompanying Exhibit A to this Amendment No. 02.

2. The CM/GC shall solicit bids for and manage and direct the construction of the improvements set forth in the accompanying Exhibit A to this Agreement No. 02.

Responsibilities and Liabilities

3. Nothing in this Amendment shall modify or abrogate the rights and responsibilities under the Agreement, including all indemnification and insurance coverage requirements.

4. CM/GC is not responsible for the design or effectiveness of the SW/B Tests or for the evaluation of the test data.

Fee Structure

5. By this Amendment No. 02, the TJPA hereby authorizes Additional Pre-Construction Services in an amount not to exceed \$4,150,000. Such amount shall cover costs for the construction of SW/B Tests and the CM/GC's supervision and all supervision and management services arising out of or relating to the SW/B Tests with the exception of the design, health and safety plan, monitoring equipment & instrumentation monitoring and analytical work to be performed by ARUP. Demolition of structures installed as part of this testing program are excluded and will be included as part of the Phase I Transit Center Building. CM/GC will not proceed with incurring additional costs related to this work above the \$4,150,000 not to exceed amount without the express written consent of the TJPA.

IN WITNESS WHEREOF, the parties hereto have executed this contract Amendment No. 02 on the day first mentioned above.

TRANSBAY JOINT POWERS AUTHORITY

Maria Ayerdi-Kaplan
Executive Director

Transbay Joint Powers Authority

Transbay Joint Powers Authority
Board of Directors
Resolution No. _____
Adopted: _____
Attest:

Secretary, TJPA Board

Approved as to Form:

Dennis J. Herrera, City Attorney

By _____
Deputy City Attorney

CM/GC

By signing this Agreement, I certify that I comply with the requirements of the Minimum Compensation Ordinance, which entitle Covered Employees to certain minimum hourly wages and compensated and uncompensated time off.

I have read and understood paragraph 55, the TJPA's statement urging companies doing business in Northern Ireland to move towards resolving employment inequities, encouraging compliance with the MacBride Principles, and urging San Francisco companies to do business with corporations that abide by the MacBride Principles.

Authorized Signature

Printed Name

Title

Webcor/Obayashi, Joint Venture

Company Name

Address

City, State, ZIP

Phone Number

Federal Employer ID Number

Exhibit A

Prototype Test for Shoring Wall and Buttress Scope

1. Additional Services CM/GC Agrees to Perform

Work under this Agreement shall be performed only by competent personnel under the supervision of and/or in the employment of the CM/GC and shall include all costs associated with labor, materials, equipment, subcontracted services, professional services, trade permits, markups and fees. Cost of building permit if required is not included.

Prototype Shoring Wall and Buttress

In accordance with design criteria and design direction of the Architect the CM/GC shall:

- 1) Construct a series of 5 overlapping drilled shafts, each 7 feet in diameter and 220 feet deep, to evaluate constructability issues and production rates for the construction of the buttress that is intended to protect adjacent buildings.
- 2) Construct a 1-cell cut-off/shoring wall (50 ft x 25 ft) using the Deep Mixing Method (DMM), also referred to as the Cement Deep Soil Mixing (CDSM) method. A system of three overlapping augers shall be used to drill through a column of soil to the depth of interest while injecting and mixing cement-bentonite slurry with the in-situ soils to construct overlapping soil-cement panels that will form the shoring/cut-off walls to shore the excavation for the train box. Construct two walls 50 feet by 105 feet, 1 wall 25 feet by 120 feet and a fourth wall 25 feet by 140 feet.
- 3) Although currently outside the scope, if budget allows, construct a 1-cell shoring/cut-off wall (50 ft x 25 ft) using the Cutter Soil Mixing (CSM) method, which uses a system of steel blades to shear the soil as the equipment penetrates the ground, and to mix the soil with injected cement-bentonite slurry. Consecutive overlapping panels shall be constructed to form the shoring/cut-off wall. Construct 2 longitudinal walls each 120 feet deep (100 feet by 120 feet) and two transverse walls each 140 feet deep (50 feet by 140 feet).

-End of Exhibit A-