

**SOUND TRANSIT  
STAFF REPORT**

**MOTION NO. M2004-102**

**Contract Amendment with Bechtel Infrastructure for E-3 Busway and  
Operations and Maintenance Facility Construction Management**

| Meeting:          | Date:    | Type of Action:                            | Staff Contact:  | Phone:                               |
|-------------------|----------|--|---|--------------------------------------|
| Finance Committee | 10/21/04 | Discussion/Possible<br>Action to Recommend | Ahmad Fazel, Link Director  | (206) 398-5389                       |
| Board             | 10/28/04 | Board Approval<br>Action                   | <b>Samer Tamimi, Link<br/>Construction Manager</b><br>Gordon Wellwood, Link<br>Deputy Construction<br>Manager | (206) 398-5125<br><br>(206) 370-5512 |

| Contract/Agreement Type: | ✓ | Requested Action:                   | ✓ |
|--------------------------|---|-------------------------------------|---|
| Competitive Procurement  | ✓ | Execute New Contract/Agreement      |   |
| Sole Source              |   | Amend Existing Contract/Agreement   | ✓ |
| Interagency Agreement    |   | Contingency Funds (Budget) Required |   |
| Purchase/Sale Agreement  |   | Budget Amendment Required           |   |

✓ *Applicable to proposed transaction.*

**ACTION**

Authorizes the Chief Executive Officer to execute a contract amendment with Bechtel Infrastructure to provide construction management services for Link Light Rail Initial Segment construction related to the E-3 Busway and Operations and Maintenance Facility in the amount of \$1,816,433, for a new total authorized contract amount not to exceed \$9,998,233.

**KEY FEATURES**

- The contract includes construction management services (e.g., resident engineering, office engineering, cost estimating, field inspection, change order administration, etc.) for the following Initial Segment construction contracts with a combined construction value of approximately \$95 million:
  - procurement of Seattle City Light (SCL) poles along the E-3 Busway (Contract P650);
  - environmental abatement, cleanup, and demolition of 17 buildings on and proximate to the maintenance base facility (Contract C600);
  - construction of 1.4 miles of at-grade and elevated light rail guideway, including and the construction of the Lander Street station (Contract C700);
  - realignment of the E3 Busway and installation of the 230 kV SCL / Bonneville Power Transmission Line (Contract C705); and
  - construction of the Central Link Operations and Maintenance Facility (Contract C810).

- The contract modification proposed under this action addresses the impact of several unforeseen changes, including the delayed execution of the Full Funding Grant Agreement (FFGA) for the Initial Segment, additional staffing, key differing site conditions encountered during construction, revised permitting requirements, and revised assignment of direct expenses. These factors are summarized below.
  - To mitigate the schedule impact due to the delayed execution of the FFGA, Sound Transit modified the original construction packaging plan and created a small construction contract to advance some time-sensitive construction activities, including construction of the power transmission line along the E3 Busway (C705). Delivery of this limited scope as part of a separate contract allowed this work to proceed in advance of the execution of the FFGA. While the overall schedule impact of the delayed FFGA execution was mitigated through the creation of the advance contracts, the delayed execution of the FFGA did cause a delay to the award of the E3 Busway contract (C700) and resulted in an extension of the contract duration for the Bechtel Construction Management Services contract.
  - Due to the complexity of the Operations and Maintenance Facility (C810), an Assistant Resident Engineer (ARE) was anticipated to be provided to Bechtel by the Sound Transit Consultant responsible for the design of C810 (LTK). However, due to professional liability concerns, a decision was made to have Bechtel provide the ARE.
  - Several major differing site conditions have been encountered during the construction of the E3 Busway and Operations and Maintenance Facility, including discovery of subsurface objects during drilling the shafts (e.g., timber piles, driftwood debris, rocks, and buried concrete), encounter of excessive amounts of hazardous and contaminated substances, and encounter of large quantities of unsuitable material. These differing site conditions create additional construction management demands, including the review and processing of additional contract documentation associated with revised construction approaches and the daily verification and administration of construction activities that are being performed in response to changed conditions.
  - The anticipated permitting and inspection requirements for the E-3 Busway and Operations and Maintenance Facility were in accordance with the Seattle Department of Transportation requirements, which are implemented through Central Link contracts. Due to the construction required for the Operations and Maintenance Facility building, a permit from the Department of Planning Development was required. This revision to permitting requirements stipulates that construction management contractors perform additional inspection services, including full-time supervision of pile driving operations by the geotechnical firm and additional welding inspector certification. These requirements were not identified at the time of the original contract award for this construction management services contract and are not provided for under the current contract.
  - A number of unforeseen equipment expenses have been incurred under this construction management contract. At the time of the original contract award, it was anticipated that Sound Transit would supply vehicles and cellular telephones for use by the construction management consultant staff. Since that time, Sound Transit has adopted a policy dictating that provision of such equipment be included within the scope of work of the construction management contracts.

## **BUDGET IMPACT SUMMARY**

**Project Description:** Central Link Initial Segment

**Current Status:** Final Design / Construction

**Projected Completion Date:** 2009

| <b>Action Outside of Adopted Budget:</b>   | <b>Y/N</b> | <b>Y Requires Comment</b>  |
|--|------------|--|
| This Line of Business  | N          |  |
| This Project   | N          |  |
| This Phase   | N          |  |
| This Task  | Y          | Budget for the work included in this contract is located in multiple work packages |
| Budget amendment required  | N          |  |
| <b>Key Financial Indicators:</b>   | <b>Y/N</b> | <b>Y Requires Comment</b>  |
| Contingency funds required   | N          |  |
| Subarea impacts  | N          |  |
| Funding required from other parties other than what is already assumed in financial plan | N          |  |

N = Action is assumed in current Board-adopted budget. Requires no budget action or adjustment to financial plan

## **BUDGET DISCUSSION**

The total adopted capital budget for the Initial Segment is \$2.07 billion. Within that budget, \$7,438,000 is set aside for construction management services for related to the construction of the E-3 Busway and Operations and Maintenance Facility (C700/C810) in the construction services phase. In early 2004, after completion of the adopted budget, but prior to negotiating the amendment, additional funds were transferred to this budget line item from available surplus budget within the construction management phase to address potential changed conditions. For purposes of managing budget, staff recognized a budget transfer of \$2,562,000 to this line item. When added to the adopted budget for C700/C810, the total budget available for this work is \$10,000,000. The proposed action would result in a surplus budget of \$1,767 to the adjusted amount for this budget line item.

## **REVENUE, SUBAREA, AND FINANCIAL PLAN IMPACTS**

The proposed action is consistent with the current Board-adopted budget and is affordable within the agency's current long-term financial plan, and subarea financial capacity. The action will have no new revenue impact on Sound Transit.

## BUDGET TABLE

**Action Item:** Bechtel Infrastructure, Inc. (Provide construction management services related to the E-3 Busway and the Operations and Maintenance Facility (C700/C810) in the Central Link Initial Segment)

**(Year of Expenditure \$000)**

| <b>Initial Segment</b>        | <b>Amended<br/>FY2004<br/>Budget<br/>(A)</b> | <b>Committed To<br/>Date<br/>(B)</b> | <b>This Action<br/>(C)</b> | <b>Total Committed<br/>&amp; Action<br/>(D)</b> | <b>Uncommitted<br/>(Shortfall)<br/>(E)</b> |
|-------------------------------|--|--------------------------------------|----------------------------|---|--|
| 1 Agency Administration       | 218,780                                      | 110,561                              |                            | 110,561   | 108,219                                    |
| 2 Preliminary Engineering     | 35,000                                       | 33,643                               |                            | 33,643  | 1,357                                      |
| 3 Final Design                | 143,523                                      | 138,049                              |                            | 138,049   | 5,475                                      |
| 4 Right of Way                | 233,016                                      | 155,596                              |                            | 155,596   | 77,420                                     |
| 5 Construction                | 1,159,837                                    | 670,731                              |                            | 670,731   | 489,106                                    |
| 6 Construction Services       | 82,737                                       | 78,769                               | 1,816                      | 80,586  | 2,152                                      |
| 7 Third Party Agreements      | 58,800                                       | 52,474                               |                            | 52,474  | 6,326                                      |
| 8 Vehicles                    | 138,307                                      | 132,244                              |                            | 132,244   | 6,063                                      |
| 9 <b>Total Current Budget</b> | <b>2,070,000</b>                             | <b>1,372,069</b>                     | <b>1,816</b>               | <b>1,373,885</b>                                | <b>696,115</b>                             |

### **Phase Budget Detail**

(L)

|                                    |               |               |              |               |              |
|------------------------------------|---------------|---------------|--------------|---------------|--------------|
| 10 Construction Services C700/C810 | 10,000        | 8,182         | 1,816        | 9,998         | 2            |
| 11 Construction Services C755      | 12,250        | 12,250        |              | 12,250        | -            |
| 12 Other Segments                  | 60,487        | 58,337        |              | 58,337        | 2,150        |
| 13 <b>Total Phase</b>              | <b>82,737</b> | <b>78,769</b> | <b>1,816</b> | <b>80,586</b> | <b>2,152</b> |

(A) AMENDED 2004 BUDGET reflects Board Resolution R2004-05 for Initial Segment phase budget transfer, adopted by the ST Board on 4/22/04.

(B) Committed to Date amounts reflect Link Program Cost Summary Report (HQ Reports) for July 2004

| <b>Contract Budget</b>        | <b>Board<br/>Approvals to<br/>Date<br/>(F)</b> | <b>Current<br/>Approved<br/>Contract Value<br/>(G)</b> | <b>Proposed Action<br/>(H)</b> | <b>Proposed Total<br/>for Board<br/>Approval<br/>(I)</b> | <b>Proposed<br/>Contract Value<br/>(J)</b> |
|-------------------------------|--|--|--------------------------------|--|--|
| 14 Contract Amount            | 7,438  | 7,398  | 1,816                          | 9,254  | 9,214                                      |
| 15 Contingency                | 744  | 784  | -                              | 744  | 784  |
| 16 <b>Total Sound Transit</b> | <b>8,182</b>                                   | <b>8,182</b>   | <b>1,816</b>                   | <b>9,998</b>   | <b>9,998</b>                               |
| 17 Percent Contingency        | 10%  | 11%  | 0%                             | 8%   | 9%   |

| <b>Task Level Budget</b>           | <b>Amended<br/>FY2004<br/>(A)</b> | <b>Budget Transfer<br/>(K)</b> | <b>Revised Budget<br/>(L)</b> |
|------------------------------------|-----------------------------------|--------------------------------|-------------------------------|
| 18 Construction Services C700/C810 | 7,438                             | 2,562                          | 10,000                        |
| 19 Construction Services C755      | 17,000                            | (4,750)                        | 12,250                        |
| 20 Other Construction Services     | 58,299                            | 2,188                          | 60,487                        |
| 21 <b>Total Budget transfer</b>    | <b>82,737</b>                     | <b>-</b>                       | <b>82,737</b>                 |

(L) REVISED BUDGET = AMENDED 2004 BUDGET + formal budget transfers to the Construction Services for CM Package 2 budget line item within the construction phase, which have been approved by the Link Director.

## M/W/DBE – SMALL BUSINESS PARTICIPATION

### Prime Consultant/Contractor

Bechtel Infrastructure is the prime consultant for this contract. Bechtel Infrastructure committed to a 20.5% M/W/DBE and Small Business goal. Due to the staged commencement of the contracts and the noninvolvement of subcontractors until the issuance of the FFGA, utilization of M/W/DBE and Small Business firms was delayed. M/W/DBE and Small Business Participation exceeding the overall goal commitment will be realized in this portion of work.

### Utilization Breakdown Table

| <b>Subconsultant</b>       | <b>Business Type</b> | <b>% of Work</b> | <b>Dollar Value</b> |
|----------------------------|----------------------|------------------|---------------------|
| TEC Management Consultants | Small Business       | 14.45%           | \$1,211,726         |
| KBA Inc.                   | WBE/DBE              | 6.47%            | \$542,331           |
| <b>Total</b>               |                      | <b>20.91%</b>    | <b>\$1,754,057</b>  |

### EEO Commitment

The present Bechtel Infrastructure workforce demographics are 25% women and 8% people of color.

### Apprentice Utilization Commitment

Utilization of apprentices is not required or applicable to this contract.

### HISTORY OF PROJECT

#### **Prior Board or Committee Actions and Relevant Board Policies**

| <b>Motion or Resolution Number</b> | <b>Summary of Action</b>   | <b>Date of Action</b> |
|------------------------------------|--|-----------------------|
| M2002-84                           | Executed a three-year contract with Bechtel Infrastructure to provide construction management services for Central Link contracts P650, C600, C700 and C810 in the amount of \$7,438,000 plus a 10% contingency of \$743,800 for a total amount not to exceed \$8,181,800. | 7/11/02               |

Sound Transit executed a contract with Bechtel Infrastructure to provide construction management services for the E3 Busway and the Operations and Maintenance Facility, the first major construction contracts for the Initial Segment of Central Link Light Rail. Notice to Proceed (NTP) was originally anticipated to be issued in July 2003; however, the delay in the execution of the Full Funding Grant Agreement postponed the issuance of the NTP to November 10, 2003.

Sound Transit restructured the scope of the construction contracts in order to mitigate the project schedule impact of the delayed execution of the FFGA. Sound Transit created an additional construction contract to advance the delivery of selected time-sensitive construction, including the construction of the power transmission line along the E3 Busway (C705). Isolation of the limited scope items in a separate contract allowed this work to proceed in advance of the execution of the FFGA. Under the authority of a Letter of No Prejudice (LONP), the scope of work included in these early contracts remained eligible for federal funding.

During the construction of the E3 Busway and Operations and Maintenance Facility (C700 and C810, respectively), several major differing site conditions were encountered. These changed conditions resulted in increased construction management demands, as described in the Key Features section of this Staff Report.

### **CONSEQUENCES OF DELAY**

A short delay in approval of the proposed contract amendment would not adversely affect the work of this contract.

### **PUBLIC INVOLVEMENT**

Not applicable to this action.

### **LEGAL REVIEW**

JW 8/19/04

## SOUND TRANSIT

### MOTION NO. M2004-102

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to execute a contract amendment with Bechtel Infrastructure to provide construction management services for Link light rail Initial Segment construction related to the E-3 Busway and Operations and Maintenance Facility in the amount of \$1,816,433, for a new total authorized contract amount not to exceed \$9,998,233.

#### **Background:**

This contract includes construction management services (e.g., resident engineering, office engineering, cost estimating, field inspection, change order administration, etc.) for the following Initial Segment construction contracts with a combined construction value of approximately \$95 million:

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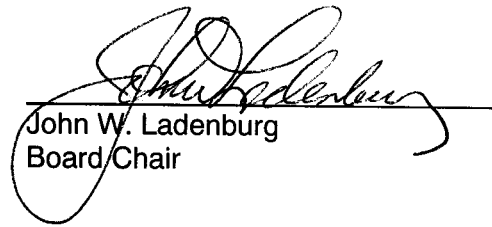
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**Motion:**

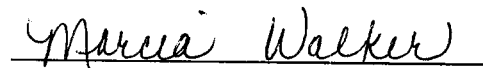
It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the Chief Executive Officer is authorized to execute a contract amendment with Bechtel Infrastructure to provide construction management services for Link light rail Initial Segment construction related to the E-3 Busway and Operations and Maintenance Facility in the amount of \$1,816,433, for a new total authorized contract amount not to exceed \$9,998,233.



APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on October 28, 2004.

  
John W. Ladenburg  
Board Chair

ATTEST:

  
Marcia Walker  
Board Administrator