

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2004-115

**Lakewood to Tacoma Track and Facilities, Contract
for Preliminary Engineering Services**

| Meeting: | Date: | Type of Action: | Staff Contact: | Phone: |
|-------------------|--------------|----------------------------|--|--------------------------------------|
| Finance Committee | 11/18/04 | Discussion/Possible Action | Agnes Govern, Director Capital Projects, Sounder & Regional Express Jennifer Ryan, Program Manager, Capital Projects | (206) 398-5037 (206) 398-5472 |

| Contract/Agreement Type: | <input checked="" type="checkbox"/> | Requested Action: | <input checked="" type="checkbox"/> |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Competitive Procurement | <input checked="" type="checkbox"/> | Execute New Contract/Agreement | <input checked="" type="checkbox"/> |
| Sole Source | | Amend Existing Contract/Agreement | |
| Interlocal 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 with HDR Engineering, Inc. to provide preliminary engineering services for the Tacoma to Lakewood Track and Signal project in the amount of \$1,006,356, with a 10% contingency of \$100,636 for a total authorized contract amount not to exceed \$1,106,992.

KEY FEATURES

- Defines a scope of work, including the completion of 30% design for all track and signal improvements necessary for the extension of Sounder commuter rail service from the existing terminus at Tacoma Dome Station to new stations at South Tacoma and Lakewood.
- Includes inventory of the existing railroad facilities on the right-of-way of the Lakeview Subdivision currently being purchased by Sound Transit from Burlington Northern Santa Fe Railroad (BNSF).
- Includes an option to perform final design on the improvements between Tacoma Dome and Lakewood Stations, if Sound Transit elects to follow a traditional design/bid/build process for project completion.
- Includes an option to assist Sound Transit with preparation of a design/build procurement package, if Sound Transit elects to use a design/build approach for a portion of the project completion.

A Limited Notice to Proceed (LNTP) was issued for up to \$86,368 in order to keep the project on schedule for the critical path items. This LNTP is for preparation of the Safety Plan, Quality Assurance Plan, the Design Criteria Manual, the Action Item Log, and to review the existing survey information, verify the survey controls, and combine past survey information into one base map, and geotechnical services. These deliverables authorized under the LNTP will be usable in future work by Sound Transit should the Finance Committee not authorize the full contract amount.

BUDGET IMPACT SUMMARY

Project Description: Lakewood-Tacoma Track and Signal.

Current Status: Preliminary Engineering.

Projected Completion Date: December 2007.

| Action Outside of Adopted Budget: | Y/N | Y Requires Comment |
|--|------------|---|
| This Line of Business | N | |
| This Project | N | |
| This Phase | Y | Final design phase contains sufficient budget to fund shortfall in the Preliminary Engineering phase. |
| Budget amendment required | N | |
| Key Financial Indicators: | Y/N | Y Requires Comment |
| 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 current adopted budget contains \$1,966,000 for preliminary engineering for this project, of which \$1,811,407 has already been obligated. This action for \$1,106,992 will result in a shortfall of \$952,399 in the preliminary engineering phase. The final design phase contains sufficient budget to fund this action without jeopardizing other elements of the project. The budget amounts assigned to the preliminary engineering and final design phases of the project will be restructured in an amendment to the Proposed 2005 Budget to reflect the current project plan with no increase to the total project budget.

REVENUE, SUBAREA, AND FINANCIAL PLAN IMPACTS

The proposed action is within the current Board-adopted project budget and is affordable within Sound Transit’s current long-term financial plan and the subarea financial capacity.

BUDGET TABLE

Action Item: Preliminary Engineering contract with HDR Engineering, Inc. for Sounder Commuter Rail Tacoma To Lakewood Track & Facilities Project (#130), \$s in thousands

| | 2004 Adopted Budget (A) | Committed To Date (B) | This Action (C) | Total Committed & Action (D) | Uncommitted (Shortfall) (E) |
|-----------------------------|-------------------------------|-----------------------------|--------------------|---------------------------------------|-----------------------------------|
| Agency Administration | 10,156 | \$ 4,452 | \$ - | \$ 4,452 | \$ 5,704 |
| Preliminary Engineering | 1,966 | 1,811 | 1,107 | 2,918 | (952) |
| Final Design | 7,496 | 1,039 | - | 1,039 | 6,457 |
| Right of Way | 26,987 | 13,042 | - | 13,042 | 13,945 |
| Construction | 68,874 | 3 | | 3 | 68,872 |
| Vehicles | 19,783 | 17,771 | | 17,771 | 2,012 |
| Contingency | 124 | - | - | - | 124 |
| Total Current Budget | 135,386 | \$ 38,117 | \$ 1,107 | \$ 39,224 | \$ 96,162 |

Phase Budget Detail - Preliminary Engineering

| | | | | | |
|---|-----------------|-----------------|-------------------|-----------------|-----------------|
| Environmental Services | \$ 484 | \$ 484 | 1,107 | \$ 1,591 | \$ (1,107) |
| Tacoma Connection Work | 530 | 530 | - | 530 | - |
| BNSF | 478 | 477 | - | 477 | 0 |
| Other engineering and consulting services | 474 | 320 | - | 320 | 155 |
| Total Phase | \$ 1,966 | \$ 1,811 | \$ 1,107.0 | \$ 2,918 | \$ (952) |

| Contract Budget | Contract Value (F) | Spent to Date (G) | Action (H) | Contract Value (I) |
|-----------------|-----------------------|----------------------|-----------------|-----------------------|
| HDR Contract | \$ - | \$ - | \$ 1,006 | \$ 1,006 |
| ST Contingency | - | - | \$ 101 | 101 |
| Total | \$ - | \$ - | \$ 1,107 | \$ 1,107 |

Budget Shortfall

| Level | Shortfall Amt (J) | Potential Funds (K) | Funding Source (L) |
|------------------------|----------------------|------------------------|-----------------------------------|
| Preliminary Engr phase | \$ (952) | \$ 952 | Final Design phase of the project |

Notes:

- (A) Project budget shown on page 65 in the Adopted 2004 budget book and on page 92 of the proposed 2005 Budget book.
 (B) Committed to-date amount includes actual outlays and commitments through October 27, 2004.

M/W/DBE – SMALL BUSINESS PARTICIPATION

Prime Consultant/Contractor

HDR is the prime consultant and will perform 55.8% of the work. HDR has committed to the participation of M/W/DBE and other small businesses amounting to over 44% of the work.

Utilization Breakdown Table

The following percentages are based on the consultant's response to the Request for Proposals. These amounts and percentages will be revised based on contract negotiations.

| Subconsultant | Business Type | % of Work | Dollar Value |
|---------------------------|----------------------|------------------|---------------------|
| ETG, Inc. | WBE | 1.4% | \$ 14,400 |
| GHL Consultants | MBE/DBE | 7.4% | \$ 74,077 |
| Lin & Associates | MBE/DBE | 11.7% | \$ 117,357 |
| Railway CPS | Small Business | 0.4% | \$ 4,060 |
| Systems Consulting | MWBE | 7.7% | \$ 77,685 |
| Transit Safety Management | DBE | 0.4% | \$ 4,464 |
| Twin City Signal | Small Business | 11.8% | \$ 119,123 |
| Civil Tech | MWBE | 0.4% | \$ 4,000 |
| Cherokee Drilling | MBE | 3.0% | \$ 29,700 |
| Total | | 44.2% | \$ 444,866 |

EEO Commitment

HDR Engineering, Inc.'s workforce demographics are 29% women and 13% minorities.

Apprentice Utilization Commitment

There are no apprentice utilization requirements since this is a professional-services contract.

HISTORY OF PROJECT

Prior Board or Committee Actions and Relevant Board Policies

| Motion or Resolution | Summary of Action | Date of Action |
|-----------------------------|--|-----------------------|
| M2003-135 | Executed the Joint Use Agreement with the BNSF Railway for the Tacoma to Nisqually railroad right-of-way and properties. | 12/13/03 |
| R2002-21 | Selected the rail corridor improvements for the Lakewood to Tacoma Commuter Rail project. | 12/12/02 |
| M2001-44 | Executed a contract with Berger-Abam for services related to Lakewood to Tacoma Commuter Rail Final Environmental Impact Statement. | 5/3/01 |
| M2001-13 | Selected the preferred alternative for the Lakewood to Tacoma Commuter Rail Project. | 2/8/01 |
| M2000-36 | Executed a contract with BNSF for preliminary engineering of track and signal improvements for the Lakewood to Tacoma Commuter Rail project on right-of-way owned by BNSF. | 4/27/00 |
| M2000-13 | Executed a change order to contract RTA CR 98-99 with David Evans and Associates, Inc. for Phase II Preliminary Engineering work for the connection via South Tacoma Way to the BNSF Lakeview Subdivision for the eventual extension of Sounder service to Lakewood. | 2/17/00 |
| M98-14 | Executed a contract with Berger-Abam for services on the environmental review process for the Lakewood to Tacoma Commuter Rail project. | 4/6/98 |

The initial preliminary engineering of the M Street to Lakewood track improvements was completed by BNSF in May 2001 based on the assumption that Sound Transit would be using an operating easement for commuter rail train service in the corridor similar to what is used in the other two corridors to the north, with BNSF responsible for design and construction of track improvements. The initial preliminary engineering of the new track connection to be built by Sound Transit from D Street to M Street was completed by David Evans and Associates in March 2002. Based on this, the Final Environmental Impact Statement (FEIS) for the Lakewood-to-Tacoma Commuter Rail Project was published in May 2002, and the Record of Decision was received in December 2002.

Subsequent to this work being completed, major changes to the project have occurred that have had a significant impact on the scope of the work and the method by which it will be accomplished:

1. Sound Transit decided to purchase the Lakeview Subdivision property from BNSF between Tacoma and Nisqually. With Sound Transit as the owner and BNSF's transfer of the freight operations to Tacoma Rail, the level of detail required to adequately define the preliminary engineering increases over that needed by BNSF to upgrade track on its own property.
2. The closure of the north end of the Lakeview subdivision track to accommodate Tacoma Link Light Rail offers opportunity for savings on the D to M segment.
3. The decision by Camp Murray to not allow the layover facility on the base due to Homeland Security concerns have warranted major revisions to the layover facility needed to operate Sounder service.

To respond to these changes and to support the National Environmental Policy Act reevaluations needed to update the FEIS prior to entering final design; Sound Transit identified a need for a track and signals design consultant to revise the initial preliminary engineering. A Request for Proposal was issued July 30, 2004, and Sound Transit received proposals from seven firms and three were selected for interview by a selection panel. The selection panel selected HDR Engineering, Inc. Following cost/price analyses and negotiations, Sound Transit staff recommends executing a contract with HDR Engineering, Inc., subject to Board approval.

About \$1.8 million has been expended on the initial preliminary engineering and environmental review. The proposed action is for additional engineering needed to complete preliminary engineering, at a cost of an additional \$1.1 million. Key work elements in this supplement include:

- Signal design for train control and grade crossings;
- Roadway crossing designs necessary for new crossings;
- Crossing upgrades and closures;
- Geotechnical investigations and analyses;
- Railroad track and structure inventory on the recently purchased sections;
- Design of railroad track revisions required to accommodate commuter and freight rail joint operation;
- 30% design for the South 100th Street layover yard site in Lakewood; and
- Design of utility relocations.

In total the preliminary engineering efforts of about \$3 million represents about 4% of construction costs which is within the typical range of 3% to 5% for a project of this size.

Sound Transit proposes to complete construction in the Lakewood to Tacoma corridor in December 2007. In order to accomplish this, the preliminary engineering needs to be completed by April 2005 with final design beginning in June 2005 and construction beginning in 2006. This contract contains options for final design services either to support a design/bid/build construction procurement or a design/build construction procurement. Dependent on the procurement process selected and satisfactory performance of the consultant, and subject to the Board's approval, the intent is to amend this contract in June 2005 to include final design services.

CONSEQUENCES OF DELAY

The schedule for the Tacoma to Lakewood Corridor has been identified as a high risk for completion of needed construction improvements by December of 2007. Completing third party agreements, preliminary engineering, and final design are critical to meeting the 2007 completion date. The consultant is being asked to have the preliminary engineering complete by April 2005. A Limited Notice to Proceed has been issued to allow the consultant to start November 5, 2004, working on the Safety Plan, Quality Assurance Plan, the Design Criteria Manual, the Action Item Log, and review the existing survey information, verification of the survey controls; and preparation of base map. These items are expected to take two weeks.

In order for the project to stay on schedule, Finance Committee authorization is needed by November 18, 2004, so the consultant can receive full Notice to Proceed on November 19, 2004.

PUBLIC INVOLVEMENT

Not applicable to this action.

LEGAL REVIEW

JW 11/4/05

SOUND TRANSIT

MOTION NO. M2004-115

A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to execute a contract with HDR Engineering, Inc. to provide preliminary engineering services for the Tacoma to Lakewood Track and Signal Project in the amount of \$1,006,356, with a 10% contingency in the amount of \$100,636, for a total authorized contract amount not to exceed \$1,106,992.

Background:

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Motion:

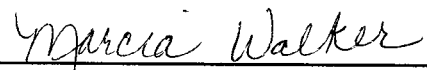
It is hereby moved by the Finance Committee of the Central Puget Sound Regional Transit Authority that the Chief Executive Officer is authorized to execute a contract with HDR Engineering, Inc. to provide preliminary engineering services for the Tacoma to Lakewood Track and Signal Project in the amount of \$1,006,356, with a 10% contingency in the amount of \$100,636, for a total authorized contract amount not to exceed \$1,106,992.

APPROVED by the Finance Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on November 18, 2004.



Keyin R. Phelps
Finance Committee Chair

ATTEST:



Marcia Walker
Board Administrator