REGIONAL TRANSIT AUTHORITY

RESOLUTION NO. 98-3 BACKGROUND AND COMMENTS

Meeting:	Date:	Agenda Item:	Staff Contact:	Phone:
Finance Committee Executive Committee Board	1/15/98 1/16/98 1/22/98	No. 5-A No. 5-C No. 7B-1	Paul Bay Bill Houppermans	206-689-4761 206-689-7431

ACTION:

Approve Board Resolution 98-3, based upon recommendation of the Finance Committee, to award a Civil Facilities Consulting contract for conceptual and preliminary engineering in the amount of \$22,989,057 to a Joint Venture Partnership composed of Parsons Brinkerhoff Quade & Douglas, Inc., ICF Kaiser Engineers Inc., and BRW Inc. d.b.a. Puget Sound Transit Consultants (PSTC). An additional \$4,600,000 is requested to be authorized as a contingency reserve (to cover changes in the work).

Note: The contingency reserve is not part of the consultant contract. The Director of Light Rail Transit will hold the contingency in reserve.

BACKGROUND:

On October 31, 1997, the RTA received qualification proposals from five consultant teams to perform civil facilities design services for the LINK Light Rail Transit System in response to RTA's Request for Qualifications. All five consultant teams that submitted written qualifications were deemed qualified and oral interviews were held on November 5, 1997. The RTA selection committee recommended that the RTA pursue negotiations with PSTC, the firm deemed most qualified based on written qualifications and the oral interview. After responding to some concerns that RTA had regarding the PSTC proposal, PSTC was notified of their selection in mid-November, 1997.

Contract terms were then discussed and PSTC agreed to the basic terms that RTA proposed. PSTC proposed overhead rates for the firms making up the joint venture and for the thirty-one subconsultant firms. RTA then negotiated a composite project office/home office overhead rate for PSTC since most of the PSTC staff will be co-located with RTA at 1100 Second Ave. in Seattle. King County Metro Audit Services then analyzed the subconsultant overhead rates and documented their findings. These findings were presented to PSTC and agreement was reached on home and project office rates for the subcontractors.

The RTA issued a limited notice to proceed in the amount of \$200,000 to PSTC on December 4, 1997. One of the tasks identified in the limited notice to proceed was to develop a work program for the conceptual and preliminary engineering civil facilities design. This has been accomplished. This will be a two-year work program. The work program contains five elements:

- Work Plan (scope of work) on a task by task basis
- Project Schedule on a task by task basis
- Organization Chart with identification of key individuals
- Project Budget on a task by task basis
- Summary Budget by firm

After three iterations of negotiations, agreement was reached on the total work program comprised of all five elements. This work program is more fully described in the attachment to resolution 98-3.

RELEVANT BOARD POLICIES AND PREVIOUS ACTIONS TAKEN:

- ♦ Adoption of Sound Move (May 31, 1996)
- Adoption of Resolution 78 (December 13, 1996)
- Adoption of Implementation Guide (May 22, 1997)
- ♦ Adoption of First Moves (May 22, 1997)
- Adoption of Fiscal Year 1998 Budget (December 11, 1997)

KEY FEATURES:

A savings of over \$2,000,000 in overhead charges due to consultant being co-located in RTA offices. A \$100,000 limitation on costs associated with termination for convenience. Use of a letter of credit in lieu of retainage monies. Negotiated overhead rates versus annually adjusted provisional rates. Consultant's commitment of key personnel. The contract will extend from January 1998 to January 2000. It is anticipated that this contract will be extended beyond January 2000 to provide final design oversight services provided the consultant performs good work.

FUNDING:

Funding is provided in the Fiscal Year 1998 budget. Federal funds are available in FY 1998. Additional federal funds may become available in FY 1999.

ALTERNATIVES:

Pursue negotiations with the second ranked team.

CONSEQUENCES OF DELAY:

The civil consultant contract is the highest priority contract to get underway. This contract is on the critical path of program implementation. Delay in award of this contract would delay all subsequent major milestones on the project.

WHY DO WE NEED A CONTINGENCY FOR THIS OR OTHER PROFESSIONAL SERVICE CONTRACTS?

We are entering into conceptual and preliminary engineering design and environmental documentation for the LINK Light Rail System. As evidenced in scoping meetings held in

December, there are still uncertainties regarding alignment location, vertical profile, station locations and site specific applications of each alternative. These uncertainties extend even beyond the multitude of alignment options presented in the Environmental Scoping Information Report. It is important that we have the capability to respond to these alignment issues now, during preliminary engineering, not later when designs have been completed.

Besides alignment issues, there are impacts with traffic, visual, noise and vibration, potential for hazardous materials, soil conditions, and endangered species that are currently unknown but will have to be studied nonetheless. Physical constraints and modifications to existing utilities will also have to be dealt with. We are also sure there will be issues that the public will be concerned about which we cannot even anticipate at this point in time.

Yet we need to award a tight contract based on a definitive scope of work that we can manage accordingly. Our approach has been to make assumptions up front as to how much time and effort will be required, based on the best information at hand.

Hence, a contingency fund is proposed to allow us to respond with engineering studies that may be required above and beyond our initial assumptions. In addition, we have taken a lean approach to the consultant's budget focusing in on what we know we have to do. In some cases (like hazardous materials) we are not even attempting to quantify the work at this point to avoid awarding a larger amount of funds than may be needed. The contingency fund will then be used only as needed to allow us to properly scope and manage the consultant effort.

A pre-approved contingency fund will also allow us to expeditiously respond to such issues, if they arise, to avoid impacts to schedule. A contingency fund of 20% is a reasonable amount. This was provided for by the Board in Resolution 78, Sections 9 and 10.

HOW DOES THIS CONTRACT FIT INTO THE OVERALL PROGRAM?

For the total conceptual and preliminary engineering effort there will be five main contracts:

- Civil Facilities (This Resolution)
- System Facilities
- Environmental Documentation
- Project Management/Control
- Ridership Forecasting (Regional Express taking the lead)

The work performed in the conceptual and preliminary engineering stage will be the basis for follow on final design and procurement contracts as follows (for example only; specific packaging has yet to be determined):

Civil Facilities Procurements

- ♦ Rail
- Trackwork and Trackwork materials
- Ties and direct fixation fasteners
- Paved Track Materials
- Wayside Maintenance Equipment

System Facilities Procurements

- ✓ Transit Vehicles
- ✓ Traction Power Substation Equipment
- ✓ Fare Collection Equipment
- ✓ Maintenance Equipment

Civil Construction Contracts

- Tacoma Line Section
- Southern Terminus to Boeing Access Road
- Boeing Access Road to Columbia City
- Columbia City to DSTT (Tacoma)
- DSTT
- DSTT to Northern Terminus
- Maintenance Yard
- Stations/Station finishes (multiple contracts)
- Art in Transit

System Facilities Construction Contracts

- Traction Power Installation
- Signaling and Communications
- Maintenance Facility
- Satellite Maintenance Facility
- Systemwide Start-up and Testing

These final design contracts will require additional professional services for construction management, system activation, and final design oversight. One cannot overstate the importance of conceptual and preliminary engineering and the decisions that must be made as a result of that effort to ensure that follow-on work goes smoothly, without delay and without re-examining past decisions. The cost of change escalates once final design begins.

EXECUTIVE SUMMARY OF THE SCOPE OF WORK

This civil facilities contract for conceptual and preliminary engineering covers the work described below. This authorization covers only conceptual and preliminary civil engineering. Extensions to this contract into final design will require additional authorization, as will the all the other contracts listed above.

- ♦ Field Surveying
- Geotechnical Investigations
- Preparation of Design Criteria
- Support of Environmental Documentation including construction impacts, alternative evaluation, noise and vibration impacts, architectural renderings, graphics and input to visual simulations
- Civil Alignments plan and profile
- Yard layouts and Maintenance shop siting
- Trackwork designs
- Traffic engineering
- Utility relocation designs and protection program
- Station siting and physical arrangements
- Coordination with City Station Area Planners
- Production of Standard Specifications and Drawings for use by follow-on consultants
- Cost estimating and construction scheduling
- Aerial structures design
- Paved track designs
- Tunneling designs and Methods
- Tunnel Ventilation studies and modeling



- Station architectural designs for 26 stations
- Urban designs
- Station Electrical designs
- Station Mechanical designs
- Hydrology
- Property identification and right-of-way drawings and preparation of parcel maps
- Permit requirements
- Technical and Constructibility reviews
- Systems Integration
- Long Range Phasing and Operations Requirements
- Preparation of an Operations Plan
- Investigation of joint rail/bus operations in the downtown tunnel
- System Safety Program Plan
- Safety Certification Methodology Report
- Preparation of Fire/Life Safety Plan
- Preparation of Security Plan
- Preliminary Hazards Analysis
- Quality assurance, configuration management and document control

This scope of work covers a two-year work program.

REGIONAL TRANSIT AUTHORITY

RESOLUTION NO. 98-3

A RESOLUTION of the Board of the Regional Transit Authority for the Pierce, King and Snohomish Counties region authorizing a contract with a Joint Venture Partnership composed of Parsons Brinkerhoff Quade & Douglas, Inc., ICF Kaiser Engineers Inc., and BRW Inc. d/b/a. Puget Sound Transit Consultants to provide preliminary engineering civil facilities design work for LINK Light Rail Transit System.

WHEREAS, a Regional Transit Authority ("RTA") has been created for the Pierce, King, and

Snohomish County region by action of their respective county councils pursuant to RCW

81.112.030; and

WHEREAS, on November 5, 1996, Central Puget Sound area voters approved local funding for *Sound Move*, the ten-year plan for regional high-capacity transit in the Central Puget Sound Region.

WHEREAS, the *Sound Move* ten-year plan includes the design and construction of a new Link Light-Rail Transit System to provide passenger service from downtown Seattle north to the University District and potentially to Northgate; from downtown Seattle south through Southeast Seattle and Tukwila to SeaTac; and from downtown Tacoma to the Tacoma Dome Intermodal Station;

WHEREAS, the construction of the Link Light Rail Transit System will require the design of an integrated transit system that will include approximately 80 light-rail passenger train cars, 25 miles of newly constructed rail line, and 24 newly constructed passenger stations located in Seattle and Tacoma;

WHEREAS, the RTA solicited proposals through a competitive procurement process for the preliminary civil facilities engineering services necessary to design the Link Light Rail Transit System;

WHEREAS, the selection committee charged with the evaluation of the solicited proposals determined that the joint venture partnership composed of Parsons Brinkerhoff Quade & Douglas, Inc., ICF Kaiser Engineers Inc., and BRW Inc. d/b/a. Puget Sound Transit Consultants ("PSTC") was the most-qualified firm to perform the preliminary engineering services; and

WHEREAS, the RTA has determined that the fees, costs, terms and conditions negotiated with PSTC to perform the preliminary civil facilities engineering services are fair and reasonable and in the best interests of the RTA.

NOW, THEREFORE, BE IT RESOLVED by the Board of the Regional Transit Authority as follows:

The Executive Director is hereby authorized to execute a contract with PSTC to provide preliminary civil facilities engineering services to the Authority pursuant to such terms and conditions as are appropriate, usual and customary for governmental agencies and substantially in the form attached hereto, provided that the base fees and expenses paid for such services shall be not exceed twenty-two million nine-hundred eighty-nine thousand fifty-seven dollars (\$22,989,057.00) in base fees and costs and four million six-hundred thousand (\$4,600,000.00) in contingent funds to pay for additional services, if any, required to be performed due to unforeseen changed conditions.

ADOPTED by the Board of the Central Puget Sound Regional Transit

Authority at a regular meeting thereof held on the 22th day of ______ 199

Bob Drewel

Bob Drewel Board Chair

ATTEST:

Walker

Marcia Walker Board Administrator