



## **INFORMATIONAL MEMORANDUM**

TO:Transportation and Infrastructure Services CommitteeFROM:Hari Ponnekanti, Public Works Director/City EngineerBY:Adam Cox, Transportation Program ManagerCC:Mayor Allan EkbergDATE:September 10, 2021SUBJECT:42<sup>nd</sup> Ave South Bridge Replacement Project- 100% Design<br/>Project No. 91810404<br/>Contract No. 20-116, Change Order No. 1

#### **ISSUE**

Approve a supplemental agreement for Contract No. 20-116 with TranTech Engineering, LLC (TranTech) for 100% plans, specifications, and engineering estimate (PS&E) for the design phase of the 42nd Avenue South Bridge Replacement Project.

#### BACKGROUND

On November 02, 2020, Council awarded the design contract to TranTech for the 42<sup>nd</sup> Ave S Bridge Replacement Project. TranTech provided scope of work and estimated design costs for 30% plans and engineering estimate (P&E) and 100% PS&E as part of their contract bid. Council made the decision to move forward with the 30% P&E as part of TranTech's original contract and re-examine options for 100% PS&E once additional funding was secured. The intent of starting the initial design was to make the replacement project more competitive for the federally funded Local Bridge Program grant (formerly known as BRAC) call for projects that was scheduled to be announced in late 2020.

In March of 2021, the Puget Sound Reginal Council (PSRC) announced that contingency funds were available and PSRC Transportation Policy Board members would be selecting projects to receive these funds. In June 2021, because of the continued support and efforts of the Council President, the City received notification that it was selected to receive \$1.5M federal contingency funding from the PSRC to be applied toward the design phase of the 42<sup>nd</sup> Ave S Bridge Replacement Project. These funds will cover the remaining design expenses and move the project to a 'shovel-ready status'.

#### **ANALYSIS**

Staff conducted the initial consultant selection process for the project in accordance with the Washington State Department of Transportation (WSDOT) Local Agency Guideline (LAG) manual to ensure the selected consultant would be approved by WSDOT and expenses would be eligible for grant reimbursement. Given that federal protocol was adhered to during the selection process, WSDOT Local Programs Department has determined that TranTech is an approved consultant to perform the remaining design work without the need to readvertise or reinterview design consultants, a process that would take a minimum of three months. The ability to move forward with 100% design through the existing contract with TranTech will provide the City with costs savings and prevent project delays.

#### FISCAL IMPACT

The contract supplement for 100% design is estimated to be \$1,483,203.00, which will bring the contract total to \$2,561,690. The PSRC grant will fund \$1,500,000 of the design costs, and the remaining will be covered by City funds up to \$1,078,487, which were approved as part of the original contract. TranTech's scope of work and cost estimate are attached.

	Contract Estimate		Funding Sources
Original Contract	\$1,078,487	City Funding	\$1,078,487
Supplement Contract	1,483,203	PSRC Grant	1,500,000
Total	\$2,561,690		\$2,578,487

#### RECOMMENDATION

Council is being asked to approve a supplemental agreement for 100% design services with TranTech Engineering in the amount of \$1,483,203.00 for the 42<sup>nd</sup> Ave S Bridge Replacement Project and consider this item on the Consent Agenda at the September 20, 2021 Regular Meeting.

Attachments: 2021 CIP, Page 9 Revised CIP Page Supplemental Agreement Supplemental Scope of Work and Budget Original Contract

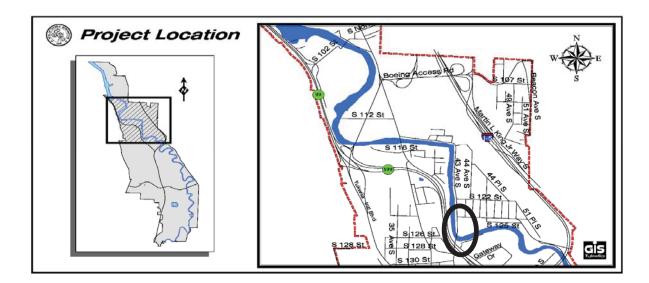
#### CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT:	42nd Ave S Bridge Replacement	Project No. 91810404
DESCRIPTION:	Design and construct a replacement structure for the existing 42nd Ave S B Center. Council approved 30% design with City funding of \$1M in 2020, rem	5
JUSTIFICATION:	The current bridge has a sufficiency rating of 7.6 (out of 100), is load restrict and is structurally deficient. Truck speed was reduced to 15 mph in 2018.	
STATUS:	In 2017 and 2019, Bridge Replacement Advisory Committee (BRAC) funding Staff will apply for future BRAC funding during the next call. Applying for ST design.	5
MAINT. IMPACT:	New bridge.	
COMMENT:	STP funding has 13.5% match requirement. BRAC funding would be at 80% partners may include FMSIB & BNSF Railroad as they have over 1,800 trips	

and it is the only ingress/egress available for their intermodal yard. Also State TIB for \$3M.

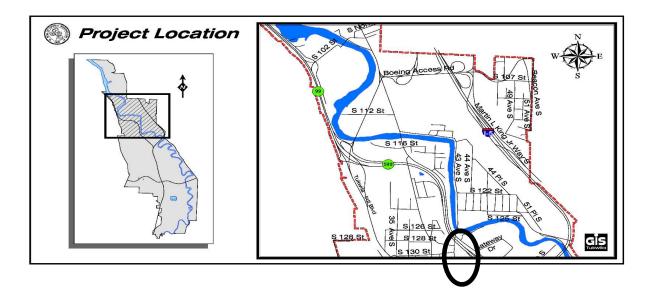
**FINANCIAL** Through Estimated (in \$000's) 2019 2020 2021 2022 2023 2024 2025 2026 BEYOND TOTAL **EXPENSES** 19 200 878 1,252 2,349 Design Land (R/W) 30 30 Const. Mgmt. 250 1,650 1,650 3,550 Construction 7,800 7,800 15,600 **TOTAL EXPENSES** 878 0 9,450 19 200 1,532 9,450 0 0 21,529 FUND SOURCES Awarded Grant 0 Proposed BRAC Grant 6,000 6,000 12,000 Proposed STP Grant 1,000 1,000 2,000 Proposed TIB 1,500 1,500 3,000 Proposed FMSIB 500 500 700 Solid Waste Utility Tax 650 700 710 720 549 4,029 City Oper. Revenue 200 228 (700) 832 (549) 0 19 240 (270)0 **TOTAL SOURCES** 19 200 878 0 1,532 9,450 9,450 0 21,529 0



2021 to 2026

PROJECT:	42nd Ave S Bridge Replacement	Project No. 91810404			
DESCRIPTION:	5 1 5 5	n and construct a replacement structure for the existing 42nd Ave S Bridge near the Tukwila Community r. Council approved 30% design with City funding of \$1M in 2020, remaining scheduled in 2022.			
JUSTIFICATION:	CATION: The current bridge has a sufficiency rating of 7.6 (out of 100), is load restricted for AASHTO Type 3 trucks and is structurally deficient. Truck speed was reduced to 15 mph in 2018.				
STATUS:	In 2021, PSRC awarded \$1.5M in contingency funding for 100% design and Waawarded \$12M.	SDOT Local Bridge Program			
MAINT. IMPACT:	New bridge.				
COMMENT:	PSRC funding has 13.5% match requirement. The Local Bridge Program funds million. Project partners may include FMSIB & BNSF Railroad as they have ove S Bridge and it is the only ingress/egress available for their intermodal yard. Also	er 1,800 trips a day on the 42nd Ave			

FINANCIAL	Through	Estimated								
(in \$000's)	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	TOTAL
EXPENSES										
Design	19	98	400	1,228	833					2,578
Land (R/W)					30					30
Const. Mgmt.					250	1,650	1,650			3,550
Construction						7,800	8,071			15,871
TOTAL EXPENSES	19	98	400	1,228	1,113	9,450	9,721	0	0	22,029
FUND SOURCES										
Awarded PSRC Grant	t		200	975	325					1,500
Awarded WSDOT Gra	ant					6,000	6,000			12,000
Proposed Grant						1,000				1,000
Proposed TIB						1,500	1,500			3,000
Proposed FMSIB							500			500
Solid Waste Utility Ta	x		650	700	700	710	720	549		4,029
City Oper. Revenue	19	98	(450)	(447)	88	240	1,001	(549)	0	0
TOTAL SOURCES	19	98	400	1,228	1,113	9,450	9,721	0	0	22,029





Supplemental Agreement Number	Organization and Address				
Original Agreement Number					
	Phone:				
Project Number	Execution Date	Completion Date			
Project Title	New Maximum Amount Payable				
Description of Work					
The Local Agency of					
desires to supplement the agreement entered in to					
and executed on and identified as Agreement No					
All provisions in the basic agreement remain in effect	ct except as expressly modifi	ed by this supplement.			
The changes to the agreement are described as follows:					
Ι.					
Section 1, SCOPE OF WORK, is hereby changed to read:					
	II				

Section IV, TIME FOR BEGINNING AND COMPLETION, is amended to change the number of calendar days for completion of the work to read:

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Section V, PAYMENT, shall be amended as follows:

as set forth in the attached Exhibit A, and by this reference made a part of this supplement. If you concur with this supplement and agree to the changes as stated above, please sign in the Appropriate spaces below and return to this office for final action.

Ву:	By:	
Consultant Signature	Approving Authority Signature	

## Exhibit "A" Summary of Payments

	Basic Agreement	Supplement #1	Total
Direct Salary Cost			
Overhead (Including Payroll Additives)			
Direct Non-Salary Costs			
Fixed Fee			
Total			

#### EXHIBIT A SUPPLEMENT 01

## CITY OF TUKWILA 42<sup>ND</sup> AVE S BRIDGE REPLACEMENT

## SCOPE OF WORK – SUPPLEMENT 30% TO BID -READY

#### Introduction:

The City of Tukwila (AGENCY) has retained TranTech Engineering, LLC (CONSULTANT) to provide a Type, Size, & Location (TS&L) report and 30% design package for the 42<sup>nd</sup> Ave S Bridge Replacement. The following describes Supplement 01 of this work.

## **Background:**

City of Tukwila (AGENCY) desires to replace the existing bridge structure with a new bridge and has contracted TranTech Engineering, LLC's team (CONSULTANT) to prepare a TS&L and 30% design. This supplement adds 60%, 90%, 100%, and bid-ready Plans, Specifications and Estimate (PS&E) to this project.

Furthermore, the AGENCY reserves the right to retain the services of CONSULTANT's team for the project's construction phase engineering services and construction inspection and management.

All work performed by CONSULTANT's team shall be in accordance with the WSDOT Local Agency Guidelines (LAG) Manual for federally funded projects as this project has now acquired federal funds.

The following work elements present a summary of the services associated with supplementing the project to include design to bid-ready:

## Scope Summary:

- 1. Project Management
- 2. Surveying and Right-of-Way
- 3. Geotechnical Engineering
- 4. Environmental Permitting
- 5. Bridge Aesthetics and Landscape Architecture
- 6. Utility Coordination
- 7. Constructability Review, Construction Schedule & Estimation
- 8. Traffic Control & Traffic Signal
- 9. Illumination & Signage
- 10. Hydraulics and Hydrology (H&H)
- 11. Type, Size & Location Report (TS&L) Completed with original contract
- 12. Plans, Specifications & Estimate (PS&E) 30% completed with original contract, 60%, 90%, 100%, and bid-ready added with this supplement *Future anticipated work as a contract supplement:*

13. Phase 2 Supplement – Construction Phase Services – Future supplement

Reports, plans, and estimates, to the extent feasible, shall be developed in accordance with the latest edition and amendments of the following:

- AGENCY Standards and Specifications.
- AASHTO 2011, "A Policy of Geometric Design of Highways and Streets; 6<sup>th</sup> Edition";
- AASHTO 2004, "A Guide for Achieving Flexibility in Highway Design of Highways; 1st Edition".
- Washington State Department of Transportation, "Standard Specifications for Road and Bridge Construction".
- Washington State Department of Transportation, "Design Manual".
- Washington State Department of Transportation, "Standard Plans".
- Washington State Department of Transportation, "Materials Laboratory Outline".
- Washington State Department of Transportation, "Construction Manual".
- Washington State Department of Transportation, "Local Agency Guidelines".
- Highway Research Board's Manual entitled "Highway Capacity".
- FHWA and USDOT, "Manual on Uniform Traffic Control Devices for Streets and Highways".
- WSDOT Highway Runoff Manual.
- WSDOT Hydraulics Manual.
- King County 2021 Edition of the King County Surface Water Design Manual (KCSWDM)

#### WORK ELEMENT 1 PROJECT MANAGEMENT

This supplement updates the Project Management to include project management to include 60%, 90%, 100%, and bid ready. Project Management for TS&L and 30% design is considered in the original contract.

This work element includes administration of the contract between the CONSULTANT and the AGENCY, preparation of monthly progress reports and quality control, necessary for the Project. The task includes all administrative services needed to coordinate with the Agency and sub-consultant/s and to complete the Project on time and within budget. The following are the categorized activities associated with this work element:

- Project Schedule Updating.
- Meetings and Meeting Minutes approximately 48 additional virtual 1-hour long team meetings are assumed for the duration of the design activities.
- Monthly Progress Reports, and Invoicing. Progress reports will contain a narrative that identifies and describes significant activities performed in the previous month and the significant planned activities for the upcoming month.
- Design Team Management:
  - a. Schedule and coordinate with design team.
  - b. Prepare sub-consultant agreements, coordinate, budget and review the project progress and submittals.
  - c. Prepare, monitor, and update project schedule. Monitor project budget.
  - d. Prepare monthly billings, progress reports, and updated monthly project schedule.
  - e. Maintain regular informal contact telephone discussions, and electronic mail.
  - f. Obtain, with assistance from the AGENCY, rights of entry necessary for geotechnical studies, etc.

#### <u>Deliverables:</u>

- Progress Reports
- Meeting Minutes
- Monthly Invoicing
- Project Schedule

#### WORK ELEMENT 2 SURVEYING AND RIGHT-OF-WAY

This Work Element is supplemented to provide final surveying and mapping services to be performed by 1 Alliance, and ROW acquisition and certification to be performed by DCI Engineers (DCI).

#### Surveying

#### 2.1 Survey PM, Admin, QA/QC

This task includes the survey project management, administrative duties, and quality control required for a project of this complexity and magnitude.

#### 2.2 Survey Control

This task was completed with the original contract.

#### 2.3 Field Surveying and Mapping

This task includes the field surveying and mapping required on an as needed basis to supplement the field survey mapping already finalized. Only the hours included in Exhibit E are available for additional survey to be collected and if more hours are needed a supplement will be required.

#### 2.4 Utility Surveying Services

This task includes the mapping of utilities at additional locations required for task 2.3. The CONSULTANT shall arrange for underground 'conductible' utility locating, by means of a private utility firm.

- 2.4.1 Surface Observable: power poles, vaults, risers, fire hydrants, water valves/meters, gas valves, traffic signal/traffic control boxes, and overhead utility lines.
- 2.4.2 Stormwater and Sanitary sewer structures shall be located. Standard efforts will be made for obtaining pipe invert elevations, size, and materials.

#### 2.5 Office Processing

This task includes the office processing of the collected survey data under this supplement, data extraction, field book reductions, CADD drafting, and other duties required for the generation of the deliverable(s).

For 3D laser scanning efforts, sub-tasks include the registering of point clouds; evaluating the registrations; exporting the point cloud data to Civil3D; creating or picking of appropriate points in Civil3D; Linework and Layering, and standard CADD drafting of the deliverables, as required.

#### 2.6 **Right-of-Way and Boundary Resolution(s)**

- 2.6.1 Completed under original Contract
- 2.6.2 Completed under original Contract
- 2.6.3 Produce a Right-of-Way Plan meeting WSDOT requirements for certification.

#### <u>Assumptions:</u>

- Rights-of-Entry will be provided by the AGENCY.
- Traffic control, if required, will be implemented and billed as an invoiced ODC.
- Tree Tags, driplines/canopies are not a part of the scope services.
- Setting of property corners is not a part of the scope of services.
- A record of Survey is not a part of the scope of services.
- Title reports with underlying documents for parcels to be provided by the AGENCY.
- The AGENCY or CONSULTANT will provide a border for the ROW Plan.
- The is an estimated level of effort for additional survey needs between 30% and bid-ready. If additional survey hours are required a supplement will be needed.

#### <u>Deliverables:</u>

- Topographic Survey with 1-foot contour intervals (electronic copy) new survey data will be combined with survey from the original contract into one file.
- AutoCAD Surfaces (DTM Files) (electronic copy) or any other desired electronic source file.
- ASCII file of control points.
- ROW Plan

# **Right-of-Way (ROW)** – the following activities will be performed by DCI staff who will be in close coordination with 1-Alliance staff

#### 2.7 ROW Appraisal Coordination

- Coordinate appraisal activities
- Coordinate with Agency to set Just Compensation
- Review approved ROW procedures

## 2.8 ROW Acquisition

- Review title reports
- Design team involvement to ensure adequate/necessary property rights
- Coordination with Agency for payment processing
- Acquire necessary property rights as needed for the project
- Prepare conveyance documents
- Attend open house virtually or in person
- Prepare weekly status reports
- Title company coordination for recording/escrow
- Completed parcel files per WSDOT LAG manual

#### 2.9 ROW Certification

- Coordination with WSDOT LAC
- Completed files to WSDOT for certification

#### <u>Assumptions</u>

• All legal descriptions to be provided by agency and/or design team

- Approved ROW procedures
- Escrow and recording fees to be paid by agency
- Assumed no relocation activities
- Tasks are based on assumed 3 parcels. Additional parcels added will be a scope change and additional fees apply.

#### **Deliverables**

- Valuation of 3 parcels
- ROW Acquisition of 3 parcels
- All acquisition files to meet local, state and federal regulations
- Three (3) completed files delivered electronically to the agency
- WSDOT certification

## WORK ELEMENT 3 GEOTECHNICAL ENGINEERING

This Work Element is supplemented to provide final geotechnical engineering recommendations and reporting to support the design team and will be performed by LAI Associates, Inc (LAI). The final geotechnical engineering effort will include the following activities:

## **3.1 Review Existing Information**

LAI will review the subsurface information that was gathered by LAI during the preliminary design phase of this project. LAI will also review the 30 percent plans. The purpose of reviewing this information is to incorporate the geotechnical information into the LAI's final geotechnical design considerations and recommendations.

## **3.2 Final Geotechnical Engineering Analysis**

LAI will evaluate the information collected as part of the above-described data review and the previously completed field investigation program in order to develop geotechnical engineering conclusions and recommendations related to the final design of the proposed replacement bridge.

## 3.3 Draft and Final Geotechnical Reports

Deliverables will include a draft geotechnical report containing design-level geotechnical conclusions and recommendations. A final geotechnical report will be created that contains the results of mutually agreed upon consolidated comments from other team members and the AGENCY.

The geotechnical report will include the following information:

- Summary logs and a site plan showing the locations of the exploratory borings advanced by the LAI.
- Seismic design criteria in accordance with applicable AASHTO standards.
- An evaluation of the liquefaction and lateral spread hazards at the project site.
- Recommendations for site preparation and fill placement, including: criteria for clearing, stripping and grubbing; an evaluation of the suitability of on-site soil for use as structural fill; gradation criteria for imported fill; guidance for preparation of subgrade soil, which will support the bridge approaches; and criteria for structural fill placement and compaction.
- Geotechnical recommendations for the design of deep foundations for the proposed replacement bridge, as well as temporary foundation support for the existing bridge if it will be used as a temporary bridge during construction of the replacement bridge. The recommendations will include estimates of the following: tip elevation, axial resistance,

downdrag loads and loss of side resistance during seismic loading, uplift resistance, lateral shaft analysis, and construction considerations.

- Lateral earth pressure criteria for design of proposed bridge abutment walls and permanent retaining walls including equivalent fluid densities for the active, at-rest and passive states of stress.
- A discussion related to known or anticipated geotechnical issues that could influence construction of the replacement bridge. The discussion will include methods to mitigate such issues, if identified.

## **3.4 Meeting Participation**

For estimating purposes, it is assumed that the LAI's geotechnical engineer will participate in up to three internal meetings with the design team for consultation during design of the project.

## Assumptions:

- The replacement bridge will consist of a two- or three-span structure with no in water foundation elements.
- The replacement bridge will be located within the existing 42<sup>nd</sup> Avenue corridor alignment.
- Additional exploratory borings may be required if during the design process the locations of the bridge foundations change. For the purpose of estimating costs, it was assumed that no additional exploratory borings will be required.

## <u>Deliverables:</u>

- An electronic (Adobe PDF) copy of the draft Geotechnical Report
- An electronic (Adobe PDF) copy of the final Geotechnical Report

## WORK ELEMENT 4 ENVIRONMENTAL PERMITTING

This Work Element, performed by LAI Associates, Inc., (LAI) is supplemented to provide environmental permitting documentation support for the National Environmental Policy Act (NEPA), the State Environmental Policy Act (SEPA), and local permits/approvals. Federal funding is anticipated to be administered through WSDOT Local Programs. LAI therefore assumes that the WSDOT will be the lead coordinator for NEPA. For the purposes of this Scope of Services, LAI assumes that this project can be authorized under a NEPA Categorical Exclusion (CE). The necessary work elements associated with Environmental Permitting are assumed to be:

## 4.1 SEPA Checklist

LAI will prepare the SEPA Checklist for the project in conformance with WAC 197-11-960 and AGENCY standards. The SEPA Checklist (Checklist) will briefly describe the project and address the project's effects on elements of the environment, as outlined in the Checklist. The Checklist will include a list of permits required for the proposed project. To prepare the Checklist, LAI will use project design information and other available studies prepared for the project, such as the documentation prepared for the additional Work Elements included in this proposal.

As necessary to complete the SEPA Checklist, LAI will review additional AGENCY documents such as the comprehensive and Shoreline Master plans, zoning code, and other development regulations.

## 4.2 WSDOT Local Program National Environmental Policy Act Categorical Exclusion Form

LAI will prepare a final version of the WSDOT Local Programs NEPA Categorical Exclusion (CE) Form (formerly the Local Agency Environmental Classification Summary).

To complete the form, LAI will compile and review environmental information from readily available public domain resources and documents prepared as part of this Work Element to gain a general understanding of relevant environmental resources along the project corridor.

## 4.3 Team and Agency Meetings

LAI will assist in scheduling and participate in meetings, as needed, with the AGENCY, Washington State Department of Transportation (WSDOT), US Army Corps of Engineers (USACE), and Washington Department of Fish & Wildlife (WDFW) to coordinate permit conditions for the project. This task includes participation in at least four onsite meetings, three conference calls and associated correspondence.

## 4.4 Hazardous Materials Linear Corridor Screening

LAI will conduct a screening-level assessment of sites along the project corridor for the potential presence of contamination. The screening-level assessment of the project corridor will include the following components:

- Review available aerial photographs to assess past uses of the project corridor and adjacent properties from the present back to their first developed use, or back to 1940, whichever is earlier.
- Review listings from a subcontracted database service (Environmental Data Resources Inc.) of confirmed and suspected contaminated sites within a 1-mile radius of the project corridor abstracted from US Environmental Protection Agency (EPA), tribal, and Ecology environmental databases.
- Review reports documenting previous environmental investigations completed at sites along the project corridor (if available from the AGENCY and/or WSDOT).
- Conduct a site reconnaissance of the project corridor to visually and physically observe current land-use activities and environmental conditions.
- LAI will request and collect information from Ecology to further evaluate the sites of potential hazardous and problem waste concerns for the project that were identified in the regulatory database search or site reconnaissance, if any. This task will include:
  - Visit Ecology's Northwestern Regional office in Bellevue, Washington to review documents available from the agency files and to request copies of relevant information related to environmental conditions at sites along the project corridor
  - Review/photocopy pertinent documents/information.

The data collected will be summarized in a technical memorandum provided in electronic (Adobe PDF) format.

## 4.5 Section 7 of the Endangered Species Act (ESA) Biological Assessment (BA); Magnuson-Stevens Act Essential Fish Habitat (EFH) Evaluation

LAI will prepare a BA for selected species federally listed as threatened or endangered in the action area under the ESA and an EFH Evaluation for the proposed project. LAI will obtain updated species lists from agency websites, request site-specific species and habitat information from the WDFW Priority Habitats and Species database, and review information from the Washington Natural Heritage Program.

Evaluation of specific project details, such as construction techniques and equipment used, timing of construction, and best management practices (BMPs) will be based on information provided by LAI.

The report will establish the project action area, which incorporates the furthest extent of both aquatic and terrestrial impacts. Appropriate environmental baseline information and species history will be summarized in the BA. A determination of "may effect, not likely to adversely affect" (NLAA) is anticipated. The project is not expected to impact EFH.

LAI will prepare a draft BA and EFH for review and comment by CONSULTANT and the AGENCY, and then a final document.

## 4.6 Cultural Resources

LAI will identify the Area of Potential Effects (APE) in accordance with 36 CFR 800.16(d) and coordinate with the Local Program Engineer and WSDOT archeologist for on the APE request and a Section 106 exemption.

## 4.7 Section 4(f) Documentation

LAI will prepare the WSDOT Section 4(f) De Minimis Impact Determination form. The form will provide:

- A project description
- A description of Section 4(f) resources (i.e., park and/or historic sites) affected by the project and proposed impacts (including figure)
- A summary of public outreach efforts.

LAI will prepare a draft form for review and comment by CONSULTANT and the AGENCY, and then a final document.

## 4.8 Traffic Noise Assessment

LAI will conduct a traffic noise assessment for the project corridor, for potential noise impacts to sensitive receivers within the project study area. The traffic noise assessment will include the following components:

- Site Reconnaissance: An initial site visit will be performed to identify potential noise sensitive receptors along the project corridor.
- Pre-Consultation with WSDOT: Before conducting field work or TNM noise model development, we will consult with WSDOT noise specialists to confirm the appropriate number of modeling receptors and noise validation measurement locations.

- Noise Measurements for TNM Model Validation: Noise measurements for the proposed project will be collected along select existing and proposed roadway/bridge segments that may be affected by the proposed project where frequent human use is likely to occur. Data collection will be used for model validation as part of the Noise Assessment.
- Noise Assessment: Noise levels shall be predicted for the existing road/bridge (the "nobuild" alternative) and one "build" alternative. The AGENCY planning department will be consulted to determine the locations where dwellings have been issued building permits in currently vacant lots adjacent to the roadway/bridge. A land use inventory shall be performed to identify the existing and currently permitted future noise-sensitive land uses and to assist in selection of noise modeling locations. Representative receiver locations shall be modeled for prediction of noise levels and determination of noise impacts. LAI will incorporate provided traffic data into the model. The traffic noise impact criteria against which the Project traffic noise levels are evaluated are taken from WSDOT's Traffic Noise Assessment & Abatement Policy guidance manual.
- Noise Barrier Analysis: If the noise analysis indicates impacts in areas where noise barriers (or building acoustical insulation) is constructible, then we will use the TNM model to design the height and length of noise barrier walls that satisfy WSDOT's acoustical feasibility criteria. For each wall we will estimate the construction cost by using WSDOT's unit cost factor, and we will determine the economic reasonableness based on the number of benefited receptor locations shielded. Based on inspection of preliminary aerial photographs, for budgetary purposes we assume will evaluate up to 3 separate noise walls. We will coordinate with the civil engineering design team to provide the required heights, top elevations, and lengths of each noise wall that satisfies both the feasibility and reasonableness criteria.
- Noise Discipline Report: LAI will compile a technical report summarizing the findings of the noise study. The contents shall include land use in the area, existing noise conditions, methods of analysis, impacts and all evaluated noise mitigation measures. Mitigation cost estimates shall be included. Construction noise impacts shall be discussed. The report shall include maps of the existing and proposed alignments and existing and future land uses on a scale vicinity map. Comparative tables shall be prepared to aid in understanding Project impacts and mitigation. A draft report will be submitted to the AGENCY for review. Based upon the comments, LAI will revise the report and a WSDOT-review draft copy will be delivered to WSDOT. We will respond to WSDOT comments to prepare the final report. The traffic noise analysis will be summarized in a technical report.

## 4.9 Permit Applications

LAI will prepare a Joint Aquatic Resources Permit Application (JARPA) form and documentation as required by the TMC for a shoreline substantial development permit. The JARPA form will be submitted to WDFW for Hydraulic Project Approval, to the USACE for

Section 404/Section 10 permitting, to Ecology for Section 401 Certification, and DNR in support of aquatic lands lease, and to the AGENCY for shoreline permitting. LAI will complete the AGENCY's Shoreline Permit application and associated documentation a figure for property owners within 500 ft of the project area. Mailing list labels and other administrative tasks will be coordinated by the AGENCY. Information required as part of the application also includes five copies of the following:

- Description of project consistency with decision criteria
- Vicinity map
- Shoreline site plans (top of bank, landward catch point toe of levee, riverbank toe, mean high water mark, and 100-year base flood elevation, appropriate setbacks, maintenance easements, limits of construction)
- Sensitive area study documentation and plans
- Cross sections
- Landscape plans
- Civil plans (stamped, signed, and dated by licensed professional engineer).

LAI will prepare the AGENCY Tree Clearing Permit application, which will be included with the Shoreline Permit application package. The "description of project consistency with decision criteria" listed above will include reference to the AGENCY's tree regulations.

## 4.10 Mitigation/Landscape Plan Support

This task consists of the design support services necessary to prepare and complete design drawings that will be required for impacting the shoreline buffer of the Duwamish River. LAI will provide comments to for incorporation of buffer mitigation into the landscape plans relevant to the mitigation plan at the 60 percent, 90 percent, and 100 percent levels.

## 4.11 Agency Coordination

LAI will help CONSULTANT and the AGENCY respond to agency comments on application submittals and provide support with inquiries on agency status of reviews.

The agencies may require additional data about potential environmental impacts and their mitigation. Support will be provided via teleconference and email.

## Assumptions:

• The selected alternative is replacement of the bridge in the existing 42<sup>nd</sup> Avenue corridor alignment.

- The project will not require preparation of a SEPA Environmental Impact Statement. Either a Determination of Non-Significance (DNS) or a mitigated DNS will be issued for the project.
- AGENCY staff will prepare and publish the DNS (or mitigated DNS).
- This proposal does not include time for CONSULTANT to respond to any public or resource agency comments on the Checklist after it has been published for public comment. Should the AGENCY request Consultant involvement in responses or revisions to the Checklist based on public or agency comments, a scope and budget amendment will be required.
- The proposed project will receive funding from the FHWA administered through WSDOT Highways and Local Programs and will satisfy the criteria as a NEPA Categorical Exclusion.
- The AGENCY will provide access permissions if needed.
- A Hazardous Materials Discipline Report to address hazardous and problem waste may be required by WSDOT based on its review of the preliminary NEPA CE form. Preparation of a Hazardous Materials Discipline Report is not included in this scope of services. The level of detail and report format for a Hazardous Materials Discipline Report is dependent on the project activities, and type and number of potential hazardous material impacts identified. A scope and cost estimate to complete a Hazardous Materials Discipline Report, if required by WSDOT, will be provided following receipt of review comments from WSDOT regarding the preliminary NEPA CE form.
- The hazardous materials corridor screen technical memorandum will not meet the requirements of a Phase I environmental site assessment under ASTM E1527-13.
- Building interiors will not be accessed as part of the site reconnaissance.
- LAI assumed that 10 hours of historical environmental document review will be sufficient to come to general conclusions about the recognized environmental conditions that affect the subject properties. If additional review time is required, LAI will bring this to your attention in advance of continuing the review.
- File reviews at the agency level are experiencing extensive delays due to COVID 19 limitations and may require 6 months or more to complete.
- Conditions at immediately adjoining properties may not be observable from public access areas and, as a result, may not be identified during the site reconnaissance.
- The BA will be drafted using the current WSDOT template.
- A 30% to 60% level of design will be sufficient for preparation of the BA and EFH Evaluation report.
- The project will have a NLAA determination on listed species and/or their designated critical habitat and a formal Biological Opinion will not be required. The project will have no adverse impact to EFH.

- WSDOT BA procedures for calculating the extent of in-water impacts will be used; however, this task does not include water quality modeling using CORMIX modeling software or HI-RUN.
- This task does not include meetings with agency staff from the US Fish & Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration (NOAA) Fisheries.
- Design and construction details required for permit applications that are not directly related to a critical areas determination will be provided to the LAI biologist. Such elements include, but are not limited to, a stormwater drainage report; a temporary sediment and erosion control plan; proposed construction timing, sequencing and duration; and primary types and duration of construction equipment to be used.
- This task does not include efforts to conduct a 6-month update review of species listings.
- The scope of work does not include monitoring of any federally listed or state listed species during construction activities. Should any monitoring of these species be required, an addendum to this scope and budget can be prepared.
- This task will be limited to preparation of the APE and coordination with the WSDOT archeologist.
- For this task, LAI will be provided with a detailed project description of the project, project area including areas of ground disturbance and known staging areas, and conceptual plans showing the scope of work and cross-sections.
- Cost for professional archaeological investigation and/or historic property inventory are not included in this scope of services.
- The AGENCY will pay all the applicable permit application fees.
- LAI staff attendance at a Hearing Examiner meeting is included in this scope of services.
- A tree size and location survey (the results of which are required to be shown on the plans) will be completed by others and incorporated into the plans in support of AGENCY shoreline permitting.
- The plan set will include the required Landscape Plan, Site Plan and Sensitive Area Plan, and will be compiled by CONSULTANT.
- Construction will begin within 2 years of permit approval and be completed within 5 years.
- US Coast Guard bridge permit will not be required.
- The 30% design plans will be suitable for the shoreline permit application, and the AGENCY will waive the requirement that civil plans be stamped, signed, and dated by a licensed professional engineer as part of the permit application.
- CONSULTANT will incorporate mitigation in landscape plans and specifications as required by the AGENCY's Shoreline Master Plan (SMP).
- Irrigation design is not included in this task.
- Grading design and grading plans are not included in this task.

- A Temporary Erosion and Sediment Control (TESC) Plan is not included in this scope. Some erosion control design is anticipated, but any erosion control elements are expected to be minor and be coordinated with CONSULTANT for incorporation into the TESC plan(s) prepared by others.
- Impacts to the Green River Trail associated with the project meet the requirements of a Section 4(f) de minimis impact.
- A concurrence letter from the agency with jurisdiction over the Section 4(f) resource will be provided to LAI by the AGENCY.

## Deliverables:

- An electronic (Adobe PDF) copy of the draft and final SEPA Checklist
- An electronic (Adobe PDF) copy of the final NEPA CE form
- An electronic (Adobe PDF) copy of the permit matrix
- An electronic (MS Word) copy of the draft Screening-Level Hazardous Materials Linear Corridor Report
- An electronic (Adobe PDF) copy of the final Screening-Level Hazardous Materials Linear Corridor Report.
- An electronic (Adobe PDF) copy of the draft BA and EFH Evaluation report.
- An electronic (Adobe PDF) of the final BA and EFH Evaluation report.
- An electronic (Adobe PDF) copy of the draft APE.
- An electronic (Adobe PDF) copy of the final APE.
- An electronic (Adobe PDF) copy of the draft JARPA and Shoreline Permit application submittal(s).
- An electronic (Adobe PDF) and required paper copies of the final JARPA and Shoreline Permit application submittal(s).
- E-mail and/or telephone correspondence providing information needed for project landscape plans for the purpose of fulfilling project mitigation requirements related to shorelines
- An electronic (Adobe PDF) copy of the draft Section 4(f) De Minimis Impact Determination form
- An electronic (Adobe PDF) copy of the final Section 4(f) De Minimis Impact Determination form.
- An electronic (MS Word) copy of the AGENCY-review draft noise technical report.
- An electronic (MS Word) copy of the WSDOT-review draft noise technical report.
- An electronic (Adobe PDF) copy of the final Noise technical report.

# WORK ELEMENT 5BRIDGEAESTHETICSANDLANDSCAPEARCHITECTURE

This Work Element is performed by Makers Architecture and Urban Design, LLP (MAKERS), and a landscape architect subconsultant (LAS) and is supplemented to provide Bridge Aesthetics and Landscaping design from 30% to bid-ready. The following outlines the tasks associated with this work:

#### 5.1 Concept Design for Urban Design Elements

- a. Review results of the open house with the Staff/Consultant team.
- b. Work up preferred ideas at 60%, 90%, 100% design level for aesthetic features. Provide drawings in a format compatible with the engineering documents. (Format provided by the engineering team.) Provide narrative description of urban design and/or outline
- c. Prepare 60%, 90% and 100% design level quantity estimate and opinion of cost estimate for the selected aesthetic features.

#### Assumptions:

- MAKERS will not be involved in lighting, electrical or utilities work.
- The budget assumes 2 additional meetings or conferences with the engineering/AGENCY team.
- The engineering team will provide MAKERS with CAD layouts, templates and numbering to meet the requirements of the final bid document formatting.

#### <u>Deliverables:</u>

- 60%, 90%, and 100% documents of urban design (Aesthetic) elements of the project in digital format (CAD) as provided by the engineering team.
- Bid-ready, stamped and signed, plans, specifications, and estimate in digital format (PDF).

#### Landscape Architecture

The following outlines the tasks associated with the landscape architect subconsultant work:

LAS will prepare:

- Preliminary planting concept.
- Landscape planting associated with shoreline enhancement, to support the environmental permitting requirements and site restoration associated with the 42nd Ave Bridge replacement.
- Site sections to illustrate restoration and enhancement intent.

- Mitigation plant schedule in collaboration with LAI, and support with statistics for mitigation area takeoffs to inform the JARPA application.
- Irrigation design for landscape improvements areas.
- Support with constructability review and cost estimating for landscape planting and Irrigation.

## Assumptions:

- LAS will not be involved in lighting, electrical or utilities work.
- LAS will provide input to grading design, but final grading documentation will be by others.
- LAS will provide input to trial and path alignment, but final documentation will be by others.
- LAS will not prepare JARPA sheets, this will be developed by others.
- The budget assumes 2 additional meetings or conferences with the engineering/AGENCY team.
- The engineering team will provide JAB with CAD layouts, templates and numbering to meet the requirements of the final bid document formatting.

## <u>Deliverables:</u>

- PSE 60%, 90%, 100% and bid ready documents of landscape planting and irrigation elements of the project in digital format (CAD) as provided by the engineering team.
- Bid-ready, stamped and signed, plans, specifications, and estimate in digital format (PDF).

#### WORK ELEMENT 6 UTILITY COORDINATION

This Work Element is performed by CONSULTANT and is supplemented to provide utility coordination between 60% and bid-ready design. Any design work will be authorized under a separate supplement.

#### 6.1 Utility Coordination

Utilities owned and operated by agencies/entities, other than the AGENCY, that are within the project corridor of the bridge improvements will be identified. CONSULTANT will acquire and review record drawings of existing utilities within the project limits and define potential utility conflicts. For the purpose of preparing this scope of work, it is anticipated that up to six (6) utilities are located in the project corridor. Known utilities within the project limits include Puget Sound Energy (PSE) Gas and Electric, Comcast, King County Wastewater Treatment Services, Lumen, Allstream, and Seattle City Light (SCL).

CONSULTANT will schedule virtual meetings with utility owners to discuss the project and define utility needs and design criteria if the utility is impacted by the proposed bridge improvements. A total of twelve (12) meetings are anticipated under this subtask. Meeting will be conducted by, and minutes will be prepared by CONSULTANT.

<u>Prepare Memorandum</u> - Prepare a short technical memorandum to outline all agreements between the AGENCY and the utilities including what work may be completed by the Contractor, what will be completed by each utility prior to construction and all commitments made by all parties.

#### Assumptions:

• No utility design is part of this Work Element.

#### Deliverables:

• Utility coordination memorandum

# WORK ELEMENT 7 CONSTRUCTABILITY REVIEW, CONSTRUCTION SCHEDULE AND ESTIMATION:

This work element is performed by Ott-Sakai Construction Consultants (OS), to provide constructability review, construction schedule, and construction estimation services, and is supplemented as follows.

The work element includes the following activities:

### 7.1 Constructability Review and Cost Estimation

This task covered TS&L and 30% only and remains unchanged, the following sections are added with this supplement.

#### 7.2 Constructability Review and Cost Estimation 60%

OS will provide Constructability Review, Construction Schedule and Cost Estimation of the design team's prepared Plans, Specifications & Estimate (PS&E) package at 60%.

#### 7.3 Constructability Review and Cost Estimation 90%

OS will provide Constructability Review, Construction Schedule and Cost Estimation of the design team's prepared Plans, Specifications & Estimate (PS&E) package at 90% design level.

#### 7.4 **Project Management / Meeting Participation**

This sub task includes OS's project management with CONSULTANT, various administrative duties, and quality control. OS will participate in internal meetings with the design team for consultation during design of the project.

#### Deliverables:

• Constructability Review, Construction Schedule and Cost Estimation for 60% and 90% PS&E Levels

#### WORK ELEMENT 8 - TRAFFIC CONTROL AND TRAFFIC SIGNAL:

This work element is performed by Transpo Group, Inc. (TRANSPO) to provide traffic control, detour, and traffic signal plans for the Contractor's use in constructing the proposed bridge and roadway improvements. The original contract is supplemented with the following:

#### 8.1 Traffic Analysis – Completed at 30% Design

#### 8.2 Traffic Control

The Consultant will prepare traffic control plans, special provisions, and engineer's opinion of cost for constructing the proposed bridge and roadway improvements.

The exact limits of the traffic control will be determined jointly between the AGENCY and the Consultant; however, the initial scope and fee are based on the listed assumptions below. The plans will conform with MUTCD and/or WSDOT/AGENCY procedures and standard plans.

#### Assumptions:

- The traffic control design deliverables/fee is based on and assumes the existing bridge is replaced in its current location on 42nd Ave S. If the new bridge is constructed on S 124th St, changes to the projected scope of services/deliverables/fee may be required.
- Construction limits for permanent improvements are confined to 42nd Ave S between S 124th St and Interurban Ave S.
- A temporary bridge structure will be constructed adjacent to the existing bridge on 42nd Ave S to be used as a bypass for traffic during construction of the new permanent bridge on 42nd Ave S.
- The existing lane configurations on Interurban Ave S and 42nd Ave S will not be permanently modified.
- Traffic control plans are anticipated to include:
  - TCP 1: Short term plan full closure of 42nd Ave S (south leg) at S 124th St
  - TCP 2: Short term plan full closure of 42nd Ave S (north leg) at Interurban Ave S
  - TCP 3: Short term plan full closure of Green River Trail plan, including detour plan
  - TCP 4: Short term plan closure of southwest corner of Interurban Ave S/42nd Ave S intersection
  - TCP 5: Short term plan Westbound Interurban Avenue S right turn lane closure at 42nd Avenue S
  - TCP 6: Short term plan Interurban Avenue S left/center lane closure at 42nd Ave S
  - TCP 7: Short term plan Northbound Macadam Rd S right lane/slip-lane closure at Interurban Avenue S
  - TCP 8: Short term plan Northbound Macadam Rd S left lane closure at Interurban Avenue S

- TCP 9: Long term plan temporary staging (channelization and signing) plans for temporary bridge bypass on 42nd Ave S between S 124th St and Interurban Ave S
- It is assumed that others will prepare all civil-related plans for temporary traffic control. This includes, but is not limited to, the design of temporary curbs, sidewalks, paving, grading, utilities, drainage, structures, geotechnical design, and related work.
- Standard traffic control plans will be used to the extent feasible.
- Traffic analysis is not included in this task.

## <u>Deliverables:</u>

- Traffic Control packages for 60%, 90%, and 100%, in an electronic delivery format (PDF)
- Stamped and Signed Ad-ready design plans in electronic format.

## 8.3 Traffic Signal Design

The Consultant will prepare traffic signal plans, special provisions, and engineer's opinion of cost for constructing traffic signal improvements/modifications for the project at the 42<sup>nd</sup> Ave S/Interurban Ave. S. intersection.

## Assumptions:

- The traffic signal design deliverables/fee is based on and assumes the existing bridge is replaced in its current location on 42nd Ave S. If the new bridge is constructed on S 124th St, changes to the projected scope of services/deliverables/fee may be required.
- As-builts for the existing traffic signal at 42nd Ave S/Interurban Ave S intersection will be provided to TRANSPO for use in the design.
- The existing traffic signal at the 42nd Ave S/Interurban Ave S intersection will continue to operate during construction and will require temporary signal modifications to facilitate TCP 9: Long term plan as described in the task above.
- The existing traffic signal pole for westbound Interurban Ave S traffic will not be disturbed during construction and will remain as-is for the final intersection configuration.
- The existing signal phasing at the 42nd Ave S/Interurban Ave S intersection will not be modified.
- Temporary signal modifications at the 42nd Ave S/Interurban Ave S intersection are anticipated to include:
  - Installing a new span wire signal for northbound 42nd Ave S (Macadam Rd S) traffic and removing the existing mast arm signal pole.
  - Installing video detection and re-aiming existing signal heads for southbound 42nd Ave S traffic.
  - Relocating pushbuttons and pedestrian signal heads as needed located on the northeast corner.
- Temporary traffic signals will not be required during construction at the 42nd Ave S/S 124th St and/or Interurban Ave S/Access Roadway intersections.
- Permanent signal improvements at the 42nd Ave S/Interurban Ave S intersection are anticipated to include:

- Installing a new foundation, mast arm signal pole, and signal heads for northbound 42nd Ave S (Macadam Rd S) traffic.
- Installing new APS pedestrian pushbuttons and posts.
- $\circ$  Installing new induction detection loops for southbound 42nd Ave S traffic.
- Existing traffic signal controller and service cabinets will not be impacted by the project and will remain in operation as-is
- Special signal pole foundation design is not anticipated
- Transformer and/or electrical service connection design is not anticipated
- It is assumed that others will prepare all civil-related plans for temporary traffic control. This includes, but is not limited to, the design of curbs, sidewalks, paving, grading, utilities, drainage, structures, geotechnical design, and related work

#### Deliverables:

- Traffic Signal packages for 60%, 90%, and 100%, in an electronic format
- Bid-ready design plans in electronic format.

### WORK ELEMENT 9 ILLUMINATION AND SIGNAGE:

This work element is performed by CONSULTANT, to provide illumination, and permanent signage design services, and is supplemented with the following:

CONSULTANT will provide design services associated with illumination, and permanent signing design. The illumination design is intended for the Bridge and its immediate approaches. CONSULTANT team will prepare PS&E for this work element which includes the following tasks:

#### 9.1 Illumination

This supplement will include completing the illumination design between 30% to bid-ready.

#### 9.2 Permanent Signing

This supplement will include completing the illumination design between 30% to bid ready.

#### Assumptions:

- The bridge will have full illumination for active transportation and vehicles.
- The approaches will have full illumination and transition to existing conditions as required.
- The signing will include wayfinding signs to the community center.

#### <u>Deliverables:</u>

- Electronic illumination and Permanent Signing Plans, Estimate, and list of special provisions list at 60%,
- Electronic PS&E at 90%, and 100%
- Electronic Stamped and signed PS&E at bid-ready.

#### WORK ELEMENT 10 HYDRAULICS & HYDROLOGY

This Work Element replaces work element 10 in the original contract, is performed by Natural Waters (NW) to provide Hydraulics & Hydrology services for the project. The hydraulic and hydrology activities include the following subtasks:

#### **10.01 Existing Data Review**

NW will review existing available data and information that may be needed for the hydraulic and scour evaluation. NW will request available information from the AGENCY, such as: existing topography, aerial photos, bridge inspection records, bridge plans, and anecdotal information on past flood events.

#### **10.02 Site Reconnaissance**

NW will conduct a site reconnaissance to examine the characteristics of the creek, bridge, and surrounding river corridor with respect to hydraulic, erosion, and scour processes. The purpose of this reconnaissance is to understand site hydraulics and channel conditions. It will be beneficial for NW to meet with the project surveyors on site during the site reconnaissance to discuss where additional survey is needed to support the hydraulic and scour analysis.

#### **10.03 Hydrologic Review**

The hydrology for the reach has been studied extensively by the US Corps of Engineers. NW will review available information from the US Corps of Engineers, in addition to available FEMA Flood Insurance Study (FIS) information, to assess appropriate discharges, which will serve as the basis of design for the proposed water crossing. Anticipated flows may consist of the 2-, 10-, 50-, 100-, and 500-year flood events.

#### **10.04 Geomorphic Assessment**

NW will conduct a rapid geomorphic assessment using newly obtained survey information, geotechnical reports, aerial photos, and findings from the field reconnaissance. The purpose of this assessment is to determine if there have been significant geomorphic changes over time which will need to be accounted for in the design of the proposed water crossing.

#### **10.05 Hydraulics**

Based on review of existing data (Task 5.1) and direction from the AGENCY on acceptable level of risk, either an existing hydraulic model developed by the US Corps of Engineers, FEMA or another source may be used as the existing conditions model, with minor modifications to incorporate the proposed bridge to simulate proposed conditions. Based on the proposed crossing being located on a sharp bend, the FHWA recommends a 2D model for assessing hydraulics at a water crossing. For the purposes of this scope and estimate, development of a 2D model was assumed to provide sufficient budget. All survey required for proper development of the existing conditions hydraulic model will be performed by others and provided to NW as a combined surface in a Land XML format in State Plane Coordinates. A proposed combined surface, which includes the proposed bridge and grading, will be provided by CONSULTANT in a Land XML format in State Plane Coordinates.

#### **10.06 Scour Estimates**

A scour evaluation will be conducted using the hydrology and corresponding hydraulic characteristics estimated from the hydraulic model developed in Task 5.5. The proposed bridge is not anticipated to have any elements within the 100-yr water surface elevation. The proposed combined surface, which includes the proposed bridge and grading, will be provided by CONSULTANT in a Land XML format in State Plane Coordinates. The scour estimates will be performed using this information following the guidelines described FHWA HEC-18, 5th Edition.

#### **10.07 Documentation**

The results of the hydrologic, geomorphic, hydraulic and scour assessments will be summarized in a brief report. The report will include a description of the physical characteristics of the site, including photographs taken during the site reconnaissance, along with pertinent information to support the basis of design. A draft version of the report will be provided to CONSULTANT and the AGENCY for review and one set of combined comments. Upon receipt of combined comments, NW will finalize the report and submit a digital (pdf) copy, as requested by CONSULTANT and the AGENCY.

#### **10.08 Intentionally left blank**

#### **10.09** Permitting Assistance

NW will be available to assist with the team's preparation of permit applications and answer questions that arise during agency review.

#### 10.10 60%/90%/100% Plans Review

NW will review river related plans at the 60%, 90%, and 100% project phases.

#### **10.11 Project Management and Meetings**

Throughout the project, NW will maintain a line of communication with the CONSULTANT team and the AGENCY through frequent meetings and e-mails. Various team and resource agency meetings are anticipated throughout the project delivery process. Meetings are assumed to be virtual.

#### Assumptions:

- One site visit is assumed to cover all tasks.
- A no-rise assessment or no-rise certificate (if required by AGENCY) is not assumed to be needed and therefore is not included in the scope or budget.
- No CAD related services will be performed by NW.
- Only hydrologic and hydraulic services to support the riverine aspects of the bridge design are assumed. No other services, such as bridge drainage and stormwater, are assumed to be needed.
- It is assumed no scour countermeasures will be required as bridge elements, walls, roadway prism and other transportation assets will be designed to account for total scour without the need for a scour countermeasure. If scour countermeasures are determined to be needed, an amendment will be required.

- No large woody material or other habitat/restoration features are anticipated for this project. If habitat restoration features are determined to be needed, an amendment will be required.
- No plans, specifications or estimates are assumed to be needed from NW.
- CONSULTANT team will provide required geotechnical and structural information at scheduled time to complete hydraulics and scour related tasks.
- Only one proposed condition is scoped and budgeted to be assessed and documented in report.
- Climate change is not anticipated to be accounted for in the hydrologic and hydraulic analyses.
- It is assumed the project will have no change to the exiting groundline and therefore will meet AGENCY and FEMA no-rise criteria due to being within a floodway. For these reasons, a CLOMR and LOMR is not within this scope or estimate. If a CLOMR or LOMR is needed, an amendment will be required.
- A detailed lateral migration analysis will not be performed. A qualitative assessment of lateral migration potential will be based on site observations and surveyed ground information provided by the AGENCY.
- The US Corps of Engineers and the Effective FEMA hydraulic models will be requested through or in collaboration with the AGENCY.
- AGENCY will pay any fees for acquiring US Corps of Engineers or FEMA hydraulic models and any required permits.
- The number and level of detail of such tasks shall be performed by NW commensurate with the level of effort allocated in the estimate.
- No hydraulic or scour analyses is assumed for any temporary features or work access platforms within the 100-year WSE.

## <u>Deliverables:</u>

• Digital (pdf) copy of final bridge hydraulic and scour report.

## WORK ELEMENT 11

## TYPE, SIZE, LOCATION (TS&L) REPORT

This Work Element was completed in Original Contract

### WORK ELEMENT 12 PS&E

This work element is performed by CONSULTANT whose work is supplemented to provide 60%, 90%, 100% and Bid-ready Plans, Specifications and Estimate (PS&E) documentation in accordance with current AASHTO, and WSDOT guidelines, including Local Agency Guideline (LAG) Manual. The following will be provided with the plans prepared:

#### a. <u>Alignment and cut/fill lines</u>

Consultant will prepare the preliminary alignment and will provide cut/fill lines, proposed preliminary permanent easements layout, and proposed preliminary temporary construction easements (TCEs) layout, and proposed right-of-way acquisition lines to the survey team for preparation of a ROW plan meeting WSDOT certification requirements after the 60% AGENCY review taking into consideration AGENCY comments.

#### b. Site Preparation and Demolition Plans

A Site Preparation and Demolition plan will be prepared for the selected alternative. These plans will show topography, existing utilities, existing surface features and items for demolition, removal, or salvage.

#### c. <u>Roadway Plans & Profiles</u>

A Plan and Profile plan will be prepared in accordance with AGENCY, WSDOT, and/or AASHTO design standards as appropriate. Traffic modeling will be completed by TRANSPO as described in work element 8. Signal plans will be completed by TRANSPO as described in work element 8 and CONSULTANT will coordinate the Roadway Plan and Profiles for any turn lane queue lengths to meet the modeled signal requirements. Feasible connection options to the Green River Trail will be included. The intersection at 42<sup>nd</sup> Ave S and S 124<sup>th</sup> Street will be a stop-controlled intersection similar to other intersections along 124<sup>th</sup> Street, such as 43<sup>rd</sup> to 49<sup>th</sup> Ave S. It is not anticipated that any roadway improvements or widening will occur outside the bridge footprint, rather the roadway will taper down to match the existing roadway width and sidewalk. If additional sidewalk is necessary to connect the bridge to the existing sidewalk at the Community Center a 5' sidewalk is assumed. Any future grants to improve roadway sections will require a supplement to design the improved roadway section and any necessary walls needed due to the increased width of the roadway.

#### d. Coordination with Districts, Utilities, and Stakeholders

Construction of this project will affect multiple parties. Coordination will occur as part of Work Element 6. Coordination with AGENCY utilities will occur with this Work Element. This element will include implementing results of Work Element 11 TS&L.

#### e. <u>Conceptual Stormwater Management Plan</u>

Construction of a new bridge and approaches will require pavement replacement. A stormwater management approach will be developed for the project identify whether stormwater runoff treatment and/or stormwater flow control thresholds will be exceeded.

The Low Impact Development Performance Standard will be evaluated and possible scenarios for meeting this requirement will be explored, coordinated with the AGENCY and the final selections incorporated into the Stormwater Report and PS&E.

### f. City of Tukwila Water Main Design

Construction of a new bridge, in either the existing location or at 124<sup>th</sup> will require the replacement of existing water main or the installation of new water main. CONSULTANT will provide PS&E for the necessary improvements to the water main. For the purpose of this work element it is assumed that the improvements will be for the approaches to and the connection across the bridge.

#### 12.1 30% Plans and Estimate (P&E)

This work element was completed in the original contract.

#### 12.2 60% Plans, Specifications, & Estimate (PS&E)

This work element item encompasses all the activities associated with the preparation of the 60% Plans, Technical Information Report (TIR) for stormwater, Special provisions, and engineer's opinion of construction cost Estimate (PS&E) documents. Full specifications will not be provided only special provisions for review will be provided at the 60% submittal. A contingency will be incorporated into the estimate to account for the level of completeness. Constructability Review and QA/QC activities are an inherent part of this element per work element 7.

#### <u>Deliverables:</u>

- Electronically delivered plan sheets in pdf format.
- Electronic copy of the estimate's quantities opinion of construction cost.
- Electronic copy of preliminary Special provisions anticipated.
- Electronic copy of the preliminary stormwater TIR.

#### 12.3 90% PS&E

This task encompasses all the activities associated with the preparation of the 90% Plans, Stormwater TIR, Special Provisions, and engineer's opinion of construction cost Estimate (PS&E). Constructability Review and QA/QC activities are an inherent part of this element.

#### <u>Deliverables:</u>

- Electronically delivered plan sheets in pdf format.
- Electronic copy of the engineers' opinion of construction cost and quantity calculations.
- Electronic copy of Special provisions.
- Electronic copy of the updated TIR.

#### 12.3 100% PS&E

This task encompasses all the activities associated with the preparation of the 100% Plans, Stormwater TIR, Special Provisions and engineer's opinion of construction cost Estimate (PS&E). Constructability Review and QA/QC activities are an inherent part of this element. This task affords the AGENCY to review the draft final construction complete construction documents one last time.

### <u>Deliverables:</u>

- Electronically delivered plan sheets in pdf format.
- Electronic copy of the estimate's quantities opinion of construction cost.
- Electronic copy of Special provisions.
- Electronic copy of the updated TIR.

## 12.4 Bid-ready PS&E

This work element item encompasses all the activities associated with the preparation of the stamped Bid-ready Plans, stormwater TIR, Special Provisions and engineer's opinion of construction cost Estimate (PS&E). Constructability Review and QA/QC activities are an inherent part of this element.

## <u>Deliverables:</u>

- One half size electronic copy of the Bid-ready set of stamped and signed Plans
- Electronic copy of the Project Specification Package meeting FHWA funding requirements, in PDF format
- One electronic copy of the engineer's opinion of construction cost, quantity calculations, and one signed original of the engineer's opinion of construction costs.
- AutoCAD and/ or Civil 3D complete electronic drawing files
- Electronic copy of the Stormwater TIR stamped and signed.

### Assumptions:

- AGENCY to provide:
  - Title block and CAD standards
  - Specification template for AGENCY standard general special provisions

The Following table presents the anticipated bid-ready plan sheets for the S 42<sup>nd</sup> Ave Bridge Replacement Project:

	PS&E Assumed	PS&E Submittal Phase		
Sheet Name	PS&E Assumed Number of Sheets	60%	90%, 100%, & bid- ready	
Cover Sheet	1	Х	Х	
Index Legend and Abbreviations	2	Х	Х	
Civil and Structural Demo Plans	4	Х	Х	
Site Prep and TESC	4	Х	Х	
Roadway Plan & Profile/Stormwater	8	Х	Х	
Trail Plan & Profile	2	Х	Х	

Roadway Typical Sections and Details	3	Х	Х
Trail Typical Sections and Details	1	X	X
ROW	4	X	X
Drainage Details	3	X	X
Utilities	3	X	X
Channelization and Signing	4	Х	Х
Illumination	5	X	X
Construction Detour Plan	6	X	X
Traffic Control	6	X	X
Roadside Restoration	2	X	X
Bridge Plan & Elevation	2	X	X
Bridge Demo	4	X	X
General Notes	1	X	X
Bridge Construction Sequencing	5	X	X
Temporary Shoring	2	X	X
Bridge Foundation Layout	2	X	X
Shaft Details – Pier 1 and 4	2	X	X
Shaft Details – Piers 2 and 3	2	X	X
Pier 1 Layout (Plan & Elevation)	1	X	X
Pier 1 Details	2	X	X
Pier 2 Layout (Plan & Elevation)	1	X	X
Pier 2 Details	2	X	X
Pier 3 Layout (Plan & Elevation)	1	X	X
Pier 3 Details	2	X	X
Pier 4 Layout (Plan & Elevation)	1	X	X
Pier 4 Details	2	X	X
Framing Plan	2	X	X
Bridge Typical Sections	2	X	X
Girder Details	8	X	X
Diaphragms Details	4	X	X
Deck Reinforcing	6	X	X
Bearing Details	3	X	X
Expansion Joint Details	3	X	X
Bridge Drainage Details	3	X	X
Utility Support Details	2	X	X
Bridge Barrier Details	3	X	X
Bridge Railing Details	2	X	X
Throw Fence Details	3	X	X
Bridge Approach Slabs	2	X	X
Retaining Wall Layouts	4	X	X
Retaining Wall Details	2	X	X
Bar Bending Sheets	4	~	X
Guardrail	3	Х	X
Perm. Signage and Attachments	2	X	X
Landscaping and Irrigation	10	X	X
	10	^	^

# WORK ELEMENT 13 - PHASE 2 SUPPLEMENT - CONSTRUCTION PHASE SERVICES:

At the discretion of the AGENCY construction phase services may be added as a supplement to this contract. The following presents the envisioned tasks associated with this work element.

### 14.1 <u>Engineering Support During Construction</u>

In this task CONSULTANT's team will provide on-call engineering support services to the AGENCY during the construction period of the Project. This task encompasses review of and responses to Contractor RFIs; Submittals during the construction phase and preparation of As-built drawings and inventory load rating of the new bridge.

### <u>Deliverables:</u>

- As-built drawings
- Load Rating Analysis and Summary

### 14.2 Optional Construction Management Services

CONSULTANT's team possess a highly experienced and qualified CM team. In case the AGENCY desires, CONSULTANT staff can augment AGENCY's team to provide CM services for this project. The following are the categorized activities associated with this Task:

Pre-con Meeting; Providing Full-time Construction Project Manager for all aspects of construction activity including oversight of contractors and subcontractors, quality control, safety compliance, managing project changes, budget, and schedule. Provide continuous project management throughout the construction duration. This includes management of staff, subconsultants, and preparation for monthly invoices and progress reports; provide full-time senior inspectors (except when AGENCY Inspector is on team) to track quantities, daily inspection reports, etc.; Provide Full-time/part-time assistant inspector, as workload requires.; Review and respond to unanticipated conditions that occur during construction; Review requests to change or modify the work shown in the plans and specifications. Also provide recommendations to resolve the issue; prepare asbuilt drawings; and material testing

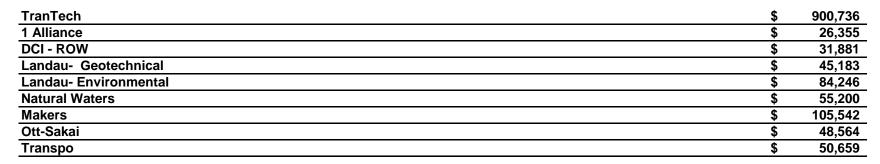
### Deliverables:

• Progress Reports; Inspection Daily Reports; Submittal Reviews; RFI Reviews; Monthly Pay Estimates; Change Management; Record of Materials; Pre-con and Construction Photos; Testing and Lab Reports where necessary; Red-line As-built; Close-out.

# **Exhibit D - Prime Consultant Cost Computations Summary**

City of Tukwila - 42nd Ave S Bridge Replacement 30% to Bid-Ready

### TRANTECH TEAM BUDGET BREAKDOWN



TOTAL PROJECT BUDGET	\$ 1,348,366
MANAGEMENT RESERVE	\$ 134,837
TOTAL CONTRACT BUDGET	\$ 1,483,203





# Encumprance Notice (Contineed and Astheraphy 18/2020) (Contineed to

20-116

Vendor	TranTech Engineering	
Project No.	91810404	
Project Title	42nd Ave S Bridge Replacement	
Contract Title	42nd Ave S Bridge Replacement - 30% Design	
Expires Date	12/31/202	
Contract Original Amount	\$1,078,487.00	
This Encumbrance:	\$1,078,487.00	

BARs This Change/Supplement applies to	Amount
104.98.595.100.65.00	\$1,078,487.00

History of Contract Including Change Orders and Supplements

Date	DateToFinance	Original Amount	Revised Complete Date	Description	Cost
11/17/2020		0	12/31/2022	Original Amt	\$1,078,487.00

**Total:** \$1,078,487.00

Checked by:	and
Approved by:	Public Works Director



Public Works Department - Hari Ponnekanti, Interim Director

City of Tukwila

November 17, 2020

Mr. Khashayar Nikzad TranTech Engineering, LLC 365 118<sup>th</sup> Ave NE Ste 100 Bellevue, WA 98005

### <u>NOTICE TO PROCEED: 42<sup>nd</sup> Ave S Bridge Replacement – 30% Design & TS&L</u> <u>Project No. 91810404, Contract No. 20-116 for \$1,078,487.00</u> <u>Budget 104.98.595.100.65.00 & PA 91810404.1000.100</u>

Dear Kash:

Your executed original 2 of 2 of Contract No. 20-116 is enclosed in the amount of \$1,078,487.00. This Notice to Proceed is effective immediately for providing 30% design and the Type, Size, and Location Report for the 42<sup>nd</sup> Ave South Bridge Replacement Project. All work is to be completed by December 31, 2022, unless modified by supplemental agreement.

Please show the project name and Tukwila project number (91810404), contract number (20-116), project accounting numbers and the City budget number on all billings. Please break out labor by individual name, hourly rate, and overhead/loading rate, and also include a monthly work summary.

We look forward to working with you toward the successful completion of this project. If you have any questions, please contact me at 206-431-2446 or adam.cox@tukwilawa.gov.

Sincerely,

Adam Cox

Adam Cox, P.E. Transportation Project Manager

AC:gl enclosure

cl: City Clerk File: 91810404.2 (w/ encumbrance notice) Notice to Proceed Book

W.VPW EngVPROJECTSVA-RW & RS ProjectsV42nd Ave S Bridge Replacement (91810404)/01 Prefiminary Engineering/NTP TranTech 20-116 30 11172020.docx

6300 Building + 6300 Southcenter Boulevard Suite 100 + Tukwila, WA 98188 + 206-433-0179



City of Tukwila

Public Works Department - Hari Ponnekanti, Interim Director

# INFORMATIONAL MEMORANDUM

- TO: Transportation and Infrastructure Committee
- FROM: Hari Ponnekanti, Interim Public Works Director
- BY: Adam Cox, Transportation Project Manager

CC: Mayor Ekberg

- DATE: September 18, 2020 (revised October 16, 2020)
- SUBJECT: <u>42<sup>nd</sup> Avenue South Bridge Replacement</u> Project No. 91810404 Design Consultant Selection and Agreement

#### **ISSUE**

Execute an agreement with TranTech Engineering, LLC (TranTech) for plans and engineering services for the 42<sup>nd</sup> Avenue South Bridge Replacement Project for either 30% plans and engineering estimate (P&E) or 100% plans, specifications, and engineering estimate (PS&E).

#### BACKGROUND

In February of 2020 both the Transportation and Infrastructure Committee (TIC) and the full Council were presented with three options for moving forward with the 42<sup>nd</sup> Ave South Bridge Replacement. It was decided at the February 24, 2020 Committee of the Whole Meeting that Option 3 was preferred. Option 3 included starting design up to the 30% level, which facilitates the City exploring funding options and being adequately prepared to solicit grant funds from both the State and Federal governments. Option 3 also included an in-depth structural inspection of the bridge to illustrate the internal configuration/deterioration of the steel components of the bridge. The in-depth inspection took place on July 22 through July 24, 2020 and the results will be presented to TIC in a separate agenda item.

Upon selecting Option 3 to prepare the 30% design, staff initiated the Request for Qualifications process that is required under federal and state protocol in order to be considered in compliance and eligible for future federal grant requirements. The City advertised in the Seattle Times and the Daily Journal of Commerce on April 28 and May 5, 2020 and four design firms submitted proposal packages on May 19, 2020. Two firms were invited to interview, and TranTech was the highest-rated firm from the selection process. The City then requested that TranTech submit a scope of work and cost estimate for 30% P&E and 100% PS&E.

A traffic count study was performed to get a better understanding of the current usage of the 42<sup>nd</sup> Ave South Bridge and the surrounding side streets. It also gave an understanding of local impacts and reroutes if the bridge should ever be closed to traffic. The counts illustrated the importance of the structure even at a time of reduced traffic due to COVID-19 restrictions. The traffic counts showcased that before and after the inspection, approximately 7,400 vehicles crossed the bridge daily. The number was reduced to an average of 5,000 vehicles during the inspection (the bridge was closed for an 8-hour period during the inspection) and it was open to traffic during nighttime hours. Please see the attached traffic data for details.

#### DISCUSSION

The City owns and operates the 42<sup>nd</sup> Ave South Bridge and is required to maintain the infrastructure as the sole owner of the bridge. The 42<sup>nd</sup> Ave South Bridge was constructed in 1949 and has continued to carry vehicular traffic and load-restricted truck traffic for approximately 20 years beyond its designed lifespan. Per the inspection report, this critically deficient bridge should be repaired or replaced. Further analysis indicated that a complete bridge rehabilitation would cost approximately the same, if not more, than a full replacement of the structure due to the bridge's configuration and the bridge's inadequacy to carry current truck loadings.

42<sup>nd</sup> Ave South Bridge Replacement September 18, 2020 Page 2

The 30% P&E package, which Council initiated by selecting Option 3 in February 2020, gives the City the opportunity to be "grant ready." Being grant-ready means having early (30%) design plans and engineering estimates and a Type, Size and Location (TS&L) report. The TS&L report will describe various options such as alternative conceptual designs as well as locations for proposed structures. The TS&L will enable the City to give clear direction to TranTech, when the City selects one of the listed options. One conceptual option that will be included in the TS&L report is building a new bridge at South 124<sup>th</sup> Street. This option would require additional exploration and coordination, but this is the time to analyze all possibilities. A new bridge at S 124<sup>th</sup> Street will allow the 42<sup>nd</sup> Ave South Bridge to remain operational during construction of a new bridge. However, this will take more coordination to incorporate the existing East Marginal Way with new traffic control, which is beyond the scope of the bridge replacement. With this concept, the City would have the opportunity to apply for funding that is non-bridge related and more transportation related. By moving the replacement bridge structure, additional transportation infrastructure can be updated to keep traffic flowing through the area.

TranTech Engineering has also presented the scope of work and a cost estimate to perform 100% PS&E. Please note, the 100% scope of work and cost estimate is subject to change once the bridge design and location is selected. The 100% "shovel ready" PS&E package will include all the required permits and advertisement-ready plans needed to begin the bridge replacement project and advertise for construction bids.

#### FINANCIAL IMPACT

Council in February was informed that the approximate costs to perform the in-depth inspection was \$39,000 and there was sufficient budget in the Annual Bridge Inspection CIP Program. The 30% design was estimated at \$1.0 million and would require at least six months to complete from the date the contract was awarded. Budget for the \$1M would be funded from the \$680k Solid Waste Utility tax and \$320k from the General Fund.

TranTech's attached scope of work and cost estimate for a "grant ready" 30% design P&E is \$1,078,487.00 which includes \$98,044.00 in management reserve/contingency. The cost estimate for a complete "shovel ready" 100% design PS&E is \$2,330,488.00, which includes \$211,863.00 in management reserve/contingency. Note, the 100% design cost estimate has the ability to change due to multiple unknowns of the final 42<sup>nd</sup> Ave South Bridge replacement configuration. See attached proposed 2021 CIP sheet for the full funding breakdown.

	<b>Design Estimate</b>	City Funding	Grants/Solid Waste
30% Design Contract Estimate	\$1,078,487.00	\$428,000	\$650,000
100% Design Contract Estimate	\$2,330,488.00	\$980,000	\$1,350,000

The 100% design option is the most time and cost-efficient choice. There will be options for stopping points at 30%, 60% and 100% of the design if needed. The 100% option would allow the City an opportunity to present a shovel ready project sooner to granting agencies and state/federal representatives.

#### **Grant Funding Information**

The City continues to research funding opportunities beyond the Local Bridge Program grant and is exploring other possible funding partners and other funding sources to accelerate the replacement of the 42<sup>nd</sup> Ave South Bridge. Public Works staff has applied for design funding from the Puget Sound Regional Council that would have been available in 2023 for \$1,500,000; however, we found that the project was not recommended to move forward by PSRC. We have also met with representatives from the Washington State Freight Mobility Strategic Investment Board (FMSIB) and have maintained contacts at BNSF, who have expressed eagerness to assist the City with transportation and freight movement grants. In addition, the Mayor and City Administrator, with assistance from David Foster, the City's state government lobbyist, have met with each of the members of the 11<sup>th</sup> District delegation, as well as other members in transportation leadership in both the State's House and Senate (see list).

Staff held discussions with the Port of Seattle and WSDOT Local Programs since the September 21, 2020 TIC. Staff will continue to have discussions with all possible funding partners.

42<sup>nd</sup> Ave South Bridge Replacement September 18, 2020 Page 3

#### List of Legislators

- > Sen Bob Hasegawa, 11<sup>th</sup> District, Rep Steve Bergquist, 11<sup>th</sup> District, Rep Zack Hudgins, 11<sup>th</sup> District
- > Rep Jake Fey, Chair House Transportation Committee
- > Rep Javier Valdez, Vice Chair House Transportation Committee,
- > Rep Sharon Wylie, Vice Chair House Transportation Committee
- > Sen Curtis King, Ranking Member Senate Transportation Committee
- > Sen Joe Nguyen, Senate Transportation Committee

#### Upcoming meetings

- Sen Rebecca Saldana, Vice Chair Senate Transportation Committee
- > Rep Andrew Barkis, Ranking Member House Transportation Committee
- > Rep Vandana Slatter, Vice Chair House Transportation Committee

#### List of Legislative Staff

- Beth Redfield, House Transportation Staff
- > Danny Masterson, Senate Transportation staff
- > David Bremer, House Democratic Caucus
- > Hannah McCarty, Senate Democratic Caucus
- > State Transportation Staff
- > Ashley Probart, Executive Director, Transportation Improvement Board
- Greg Armstrong, Transportation Improvement Board Engineer

#### Upcoming meetings

Kyle McKeon, WSDOT Local Programs

At each of these meetings the City was strongly encouraged to initiate the 30% design immediately in order to be ready for a potential voter-approved transportation package and other grants. It was made very clear that without the initial design completed, the project would not be a strong candidate for grant funding, both on the State and Federal levels.

The City has previously applied for federal grants for the 42<sup>nd</sup> Ave South Bridge without first having the 30% grant ready design in-hand and was not successful. Staff has reached out to receive feedback on those applications from the granting agencies and those conversations have further reinforced that the City must prepare design at this level to compete successfully. Staff have learned that projects that are ahead in design are placed in earlier years of funding package. City staff held a meeting with Ashley Probart, the Executive Director of the Transportation Improvement Board and was told that the City would be in a significantly better position to seek funding from all granting agencies with design completed.

Staff strongly believes that a 30% design, better cost estimates and considering alternating locations for the replacement bridge will make this project grant ready, improving the City's chances to successfully receive grant funding. Some of the grant options are:

Local Bridge Program (formally known as BRAC)

Federal grant programs (BUILD grant)

- State grant programs, including Public Works Board Transportation Improvement Board (TIB) and
- > Washington Freight Mobility Strategic Investment Board (FMSIB).

In addition, as mentioned above, there remains at least some interest in Olympia to explore a voter-approved transportation package in the next few years. This project could be very viable for inclusion, particularly given its impact on regional freight mobility and the fact that the City has a strong partner, with influence in Olympia, in BNSF.

42<sup>nd</sup> Ave South Bridge Replacement September 18, 2020 Page 4

#### RECOMMENDATION

Local governments play a key role in funding, operating, and maintaining local roads, bridges, airports, transit facilities, drinking water, sewer systems, and other types of infrastructure. The City has an obligation to maintain its current infrastructure. Replacement options for the 42<sup>nd</sup> Ave South Bridge are needed at this time. Safety must be of paramount concern in the design, construction, maintenance, and traffic operations of the City's infrastructure. It is also in the City's economic benefit to create a comprehensive and coordinated maintenance/replacement program to facilitate freight movement between and among local, national and international markets.

A significant bridge replacement project like this will take several years to get designed and constructed. Given the low sufficiency rating of the existing bridge structure, proceeding with the design will make sure that we will have adequate time to replace the bridge before fatigue deterioration due to the truck traffic.

There are two recommended options for making progress on this project. Staff would like Council's consideration of both options listed below:

- 1. Council is being asked to approve, at a minimum, the 30% design P&E contract with TranTech Engineering, LLC, in the amount of \$1,078,487.00 for the 42<sup>nd</sup> Ave South Bridge Replacement Project.
- 2. Council is also being asked to consider 100% design in the amount of \$2,330,488.00, with possible stopping points at 30%, 60% and 100% of the design.

Depending on the decision made by TIC at the September 21 meeting, staff is seeking direction for the next steps for Options 1 or 2 and to consider this item at the September 28, 2020 Committee of the Whole.

#### Update as of October 16, 2020

Council is being asked to approve the consultant agreement with TranTech Engineering, LLC. In the amount of \$1,078,487 for 30% design P&E and Type, Size, and Location Report for the 42<sup>nd</sup> Ave South Bridge Replacement and consider this item at the October 26, 2020 Committee of the Whole and subsequent November 2, 2020 Regular Meeting.

Attachments: <u>1 Proposed 2021 CIP</u> <u>2 Consultant Scoring Sheet</u> <u>3 30% Consultant Agreement</u>

# Local Agency A&E Professional Services Cost Plus Fixed Fee Consultant Agreement

### Agreement Number:

Firm/Organization Legal Name (do not use dba's):	
TranTech Engineering, LLC	
Address 365 118th AVE NE STE 100	Federal Aid Number
Bellevue WA 98005	
UBI Number	Federal TIN
602507862	68-0607809
Execution Date	Completion Date
11/6/2020	12/31/2022
1099 Form Required	Federal Participation
Yes 🚺 No	Yes No
Project Title	
42nd Avenue South Bridge Replacement 30%	
Description of Work	
City of Tukwila desires to replace the existing bridge s preparing a Type, Size, and Location (TS&L) report ar the 42nd Ave S Bridge. One of the intermittent goals o Type, Size and Location (TS&L) Report.	nd 30% Plans and Estimate (P&E) for the replacement of
Yes No DBE Participation	Total Amount Authorized: \$980,443
Yes No MBE Participation	Management Reserve Fund: \$98,044
Yes       No       WBE       Participation         Yes       No       SBE       Participation	Maximum Amount Payable: \$1,078,487.00
Index of Exhibits	
Exhibit A Scope of Work	

- Exhibit B DBE Participation
- Exhibit C Preparation and Delivery of Electronic Engineering and Other Data
- Exhibit D Prime Consultant Cost Computations
- Exhibit E Sub-consultant Cost Computations
- Exhibit F Title VI Assurances
- Exhibit G Certification Documents
- Exhibit H Liability Insurance Increase
- Exhibit I Alleged Consultant Design Error Procedures
- Exhibit J Consultant Claim Procedures

THIS AGREEMENT, made and entered into as shown in the "Execution Date" box on page one (1) of this AGREEMENT, between the City of Tukwila hereinafter called the "AGENCY," and the "Firm / Organization Name" referenced on page one (1) of this AGREEMENT, hereinafter called the "CONSULTANT."

WHEREAS, the AGENCY desires to accomplish the work referenced in "Description of Work" on page one (1) of this AGREEMENT and hereafter called the "SERVICES;" and does not have sufficient staff to meet the required commitment and therefore deems it advisable and desirable to engage the assistance of a CONSULTANT to provide the necessary SERVICES; and

WHEREAS, the CONSULTANT represents that they comply with the Washington State Statutes relating to professional registration, if applicable, and has signified a willingness to furnish consulting services to the AGENCY.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

# I. General Description of Work

The work under this AGREEMENT shall consist of the above-described SERVICES as herein defined, and necessary to accomplish the completed work for this project. The CONSULTANT shall furnish all services, labor, and related equipment and, if applicable, sub-consultants and subcontractors necessary to conduct and complete the SERVICES as designated elsewhere in this AGREEMENT.

# II. General Scope of Work

The Scope of Work and projected level of effort required for these SERVICES is described in Exhibit "A" attached hereto and by this reference made a part of this AGREEMENT. The General Scope of Work was developed utilizing performance based contracting methodologies.

# III. General Requirements

All aspects of coordination of the work of this AGREEMENT with outside agencies, groups, or individuals shall receive advance approval by the AGENCY. Necessary contacts and meetings with agencies, groups, and/or individuals shall be coordinated through the AGENCY. The CONSULTANT shall attend coordination, progress, and presentation meetings with the AGENCY and/or such State, Federal, Community, City, or County officials, groups or individuals as may be requested by the AGENCY. The AGENCY will provide the CONSULTANT sufficient notice prior to meetings requiring CONSULTANT participation. The minimum required hours or days' notice shall be agreed to between the AGENCY and the CONSULTANT and shown in Exhibit "A."

The CONSULTANT shall prepare a monthly progress report, in a form approved by the AGENCY, which will outline in written and graphical form the various phases and the order of performance of the SERVICES in sufficient detail so that the progress of the SERVICES can easily be evaluated.

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations, and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

Agreement Number: 20-116

,

Participation for Disadvantaged Business Enterprises (DBE) or Small Business Enterprises (SBE), if required, per 49 CFR Part 26, shall be shown on the heading of this AGREEMENT. If DBE firms are utilized at the commencement of this AGREEMENT, the amounts authorized to each firm and their certification number will be shown on Exhibit "B" attached hereto and by this reference made part of this AGREEMENT. If the Prime CONSULTANT is a DBE certified firm they must comply with the Commercial Useful Function (CUF) regulation outlined in the AGENCY's "DBE Program Participation Plan" and perform a minimum of 30% of the total amount of this AGREEMENT. It is recommended, but not required, that non-DBE Prime CONSULTANTS perform a minimum of 30% of the total amount of this AGREEMENT.

In the absence of a mandatory UDBE, the Consultant shall continue their outreach efforts to provide SBE firms maximum practicable opportunities.

The CONSULTANT, on a monthly basis, shall enter the amounts paid to all firms (including Prime) involved with this AGREEMENT into the <u>wsdot.diversitycompliance.com program</u>. Payment information shall identify any DBE <u>Participation</u>. Non-minority, woman owned DBEs does not count towards UDBE goal <u>attainment</u>.

All Reports, PS&E materials, and other data furnished to the CONSULTANT by the AGENCY shall be returned. All electronic files, prepared by the CONSULTANT, must meet the requirements as outlined in Exhibit "C – Preparation and Delivery of Electronic Engineering and other Data."

All designs, drawings, specifications, documents, and other work products, including all electronic files, prepared by the CONSULTANT prior to completion or termination of this AGREEMENT are instruments of service for these SERVICES, and are the property of the AGENCY. Reuse by the AGENCY or by others, acting through or on behalf of the AGENCY of any such instruments of service, not occurring as a part of this SERVICE, shall be without liability or legal exposure to the CONSULTANT.

Any and all notices or requests required under this AGREEMENT shall be made in writing and sent to the other party by (i) certified mail, return receipt requested, or (ii) by email or facsimile, to the address set forth below:

If to AGENCY: Name: Adam Cox Agency: City of Tukwila Address: 6300 Southcenter Blvd., Suite 100 City: Tukwila State: WA Zip: 98188 Email: Adam.Cox@TukwilaWA.gov Phone: (206) 431-2446 Facsimile: (206) 431-3665 If to CONSULTANT: Name: Khashayar Nikzad Agency: TranTech Engineering, LLC Address: 365 118th Ave SW, Suite #100 City: Bellevue State: WA Zip: 98005 Email: Knikzad@trantecheng.com Phone: (425) 453-5545 Facsimile: (425) 453-6779

## **IV.** Time for Beginning and Completion

The CONSULTANT shall not begin any work under the terms of this AGREEMENT until authorized in writing by the AGENCY. All work under this AGREEMENT shall be completed by the date shown in the heading of this AGREEMENT titled "Completion Date."

The established completion time shall not be extended because of any delays attributable to the CONSULTANT, but may be extended by the AGENCY in the event of a delay attributable to the AGENCY, or because of unavoidable delays caused by an act of GOD, governmental actions, or other conditions beyond the control of the CONSULTANT. A prior supplemental AGREEMENT issued by the AGENCY is required to extend the established completion time.

# V. Payment Provisions

The CONSULTANT shall be paid by the AGENCY for completed SERVICES rendered under this AGREEMENT as provided hereinafter. Such payment shall be full compensation for SERVICES performed or SERVICES rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete SERVICES, specified in Section II, "Scope of Work". The CONSULTANT shall conform to all applicable portions of 48 CFR Part 31 (www.ecfr.gov). The estimate in support of the Cost Plus Fixed Fee amount is attached hereto as Exhibits "D" and "E" and by this reference made part of this AGREEMENT.

- A. Actual Costs: Payment for all consulting services for this PROJECT shall be on the basis of the CONSULTANT'S actual cost plus a fixed fee. The actual cost shall include direct salary cost, indirect cost rate, and direct non-salary costs.
  - 1. Direct (RAW) Labor Costs: The Direct (RAW) Labor Cost is the direct salary paid to principals, professional, technical, and clerical personnel for the time they are productively engaged in work necessary to fulfill the terms of this AGREEMENT. The CONSULTANT shall maintain support data to verify the direct salary costs billed to the AGENCY.
  - 2. Indirect Cost Rate (ICR) Costs: ICR Costs are those costs, other than direct costs, which are included as such on the books of the CONSULTANT in the normal everyday keeping of its books. Progress payments shall be made at the ICR rates shown in attached Exhibits "D" and "E" of this AGREEMENT. Total ICR payment shall be based on Actual Costs. The AGENCY agrees to reimburse the CONSULTANT the actual ICR costs verified by audit, up to the Maximum Total Amount Payable, authorized under this AGREEMENT, when accumulated with all other Actual Costs.

A summary of the CONSULTANT'S cost estimate and the ICR percentage is shown in Exhibits "D" and "E", attached hereto and by this reference made part of this AGREEMENT. The CONSULTANT (prime and all <u>A&E</u> sub-consultants) will submit to the AGENCY within six (6) months after the end of each firm's fiscal year, an ICR schedule in the format required by the AGENCY (cost category, dollar expenditures, etc.) for the purpose of adjusting the ICR rate for billings received and paid during the fiscal year represented by the ICR schedule. It shall also be used for the computation of progress payments during the following year and for retroactively adjusting the previous year's ICR cost to reflect the actual rate. The ICR schedule will be sent to Email: ConsultantRates@wsdot.wa.gov.

Failure to supply this information by either the prime CONSULTANT or any of their <u>A&E</u> sub-consultants shall cause the AGENCY to withhold payment of the billed ICR costs until such time as the required information is received and an overhead rate for billing purposes is approved.

The AGENCY's Project Manager and/or the Federal Government may perform an audit of the CONSULTANT'S books and records at any time during regular business hours to determine the actual ICR rate, if they so desire.

3. Direct Non-Salary Costs: Direct Non-Salary Costs will be reimbursed at the Actual Cost to the CONSULTANT. (excluding Meals, which are reimbursed at the per diem rates identified in this section) These charges may include, but are not limited to, the following items: travel, printing, long distance telephone, supplies, computer charges and fees of sub-consultants. Air or train travel will be reimbursed only to economy class levels unless otherwise approved by the AGENCY. The CONSULTANT shall comply with the rules and regulations regarding travel costs (excluding air, train, and rental car costs) in accordance with WSDOT's Accounting Manual M 13-82, Chapter 10 – Travel Rules and Procedures, and revisions thereto. Air, train, and rental car costs shall be reimbursed in accordance with 48 Code of Federal Regulations (CFR) Part 31.205-46 "Travel Costs." The billing for Direct Non-Salary Costs shall include an itemized listing of the charges directly identifiable with the PROJECT. The CONSULTANT shall maintain the original supporting documents in their office. Copies of the original supporting documents shall be supplied to the AGENCY upon request. All above charges must be necessary for the services provided under this AGREEMENT.

- 4. Fixed Fee: The Fixed Fee, which represents the CONSULTANT'S profit, is shown in attached Exhibits "D" and "E" of this AGREEMENT. This fee is based on the Scope of Work defined in this AGREEMENT and the estimated person-hours required to perform the stated Scope of Work. In the event the CONSULTANT enters into a supplemental AGREEMENT for additional work, the supplemental AGREEMENT may include provisions for the added costs and an appropriate additional fee. The Fixed Fee will be prorated and paid monthly in proportion to the percentage of work completed by the CONSULTANT and reported in the Monthly Progress Reports accompanying the billings. Any portion of the Fixed Fee earned but not previously paid in the progress payments will be covered in the final payment, subject to the provisions of Section IX entitled "Termination of Agreement."
- 5. Management Reserve Fund (MRF): The AGENCY may desire to establish MRF to provide the Agreement Administrator with the flexibility to authorize additional funds to the AGREEMENT for allowable unforeseen costs, or reimbursing the CONSULTANT for additional work beyond that already defined in this AGREEMENT. Such authorization(s) shall be in writing and shall not exceed the lesser of \$100,000 or 10% of the Total Amount Authorized as shown in the heading of this AGREEMENT. The amount included for the MRF is shown in the heading of this AGREEMENT. This fund may not be replenished. Any changes requiring additional costs in excess of the MRF shall be made in accordance with Section XIII, "Extra Work."
- 6. Maximum Total Amount Payable: The Maximum Total Amount Payable by the AGENCY to the CONSULTANT under this AGREEMENT shall not exceed the amount shown in the heading of this AGREEMENT. The Maximum Total Amount Payable is comprised of the Total Amount Authorized, and the MRF. The Maximum Total Amount Payable does not include payment for Extra Work as stipulated in Section XIII, "Extra Work." No minimum amount payable is guaranteed under this AGREEMENT.
- B. Monthly Progress Payments: The CONSULTANT may submit billings to the AGENCY for reimbursement of Actual Costs plus the ICR and calculated fee on a monthly basis during the progress of the work. Such billings shall be in a format approved by the AGENCY and accompanied by the monthly progress reports required under Section III, "General Requirements" of this AGREEMENT. The billings will be supported by an itemized listing for each item including Direct (RAW) Labor, Direct Non-Salary, and allowable ICR Costs to which will be added the prorated Fixed Fee. To provide a means of verifying the billed Direct (RAW) Labor costs for CONSULTANT employees, the AGENCY may conduct employee interviews. These interviews may consist of recording the names, titles, Direct (RAW) Labor rates, and present duties of those employees performing work on the PROJECT at the time of the interview.
- C. Final Payment: Final Payment of any balance due the CONSULTANT of the gross amount earned will be made promptly upon its verification by the AGENCY after the completion of the work under this AGREEMENT, contingent, if applicable, upon receipt of all PS&E, plans, maps, notes, reports, electronic data and other related documents which are required to be furnished under this AGREEMENT. Acceptance of such Final Payment by the CONSULTANT shall constitute a release of all claims for payment, which the CONSULTANT may have against the AGENCY unless such claims are specifically reserved in writing and transmitted to the AGENCY by the CONSULTANT prior to its acceptance. Said Final Payment shall not, however, be a bar to any claims that the AGENCY may have against the CONSULTANT or to any remedies the AGENCY may pursue with respect to such claims.

The payment of any billing will not constitute agreement as to the appropriateness of any item and at the time of final audit; all required adjustments will be made and reflected in a final payment. In the event that such final audit reveals an overpayment to the CONSULTANT, the CONSULTANT will refund such overpayment to the AGENCY within thirty (30) calendar days of notice of the overpayment. Such refund shall not constitute a waiver by the CONSULTANT for any claims relating to the validity of a finding by the AGENCY of overpayment. The CONSULTANT has twenty (20) working days after receipt of the final POST AUDIT to begin the appeal process to the AGENCY for audit findings.

D. Inspection of Cost Records: The CONSULTANT and their sub-consultants shall keep available for inspection by representatives of the AGENCY and the United States, for a period of six (6) years after receipt of final payment, the cost records and accounts pertaining to this AGREEMENT and all items related to or bearing upon these records with the following exception: if any litigation, claim or audit arising out of, in connection with, or related to this AGREEMENT is initiated before the expiration of the six (6) year period, the cost records and accounts shall be retained until such litigation, claim, or audit involving the records is completed.

An interim or post audit may be performed on this AGREEMENT. The audit, if any, will be performed by the State Auditor, WSDOT's Internal Audit Office and/or at the request of the AGENCY's Project Manager.

# VI. Sub-Contracting

The AGENCY permits subcontracts for those items of SERVICES as shown in Exhibit "A" attached hereto and by this reference made part of this AGREEMENT.

The CONSULTANT shall not subcontract for the performance of any SERVICE under this AGREEMENT without prior written permission of the AGENCY. No permission for subcontracting shall create, between the AGENCY and sub-consultant, any contract or any other relationship.

Compensation for this sub-consultant SERVICES shall be based on the cost factors shown on Exhibit "E" attached hereto and by this reference made part of this AGREEMENT.

The SERVICES of the sub-consultant shall not exceed its maximum amount payable identified in each subconsultant cost estimate unless a prior written approval has been issued by the AGENCY.

All reimbursable direct labor, indirect cost rate, direct non-salary costs and fixed fee costs for the sub-consultant shall be negotiated and substantiated in accordance with section V "Payment Provisions" herein and shall be memorialized in a final written acknowledgement between the parties.

All subcontracts shall contain all applicable provisions of this AGREEMENT, and the CONSULTANT shall require each sub-consultant or subcontractor, of any tier, to abide by the terms and conditions of this AGREEMENT. With respect to sub-consultant payment, the CONSULTANT shall comply with all applicable sections of the STATE's Prompt Payment laws as set forth in RCW 39.04.250 and RCW 39.76.011.

The CONSULTANT, sub-recipient, or sub-consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this AGREEMENT. The CONSULTANT shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the CONSULTANT to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the recipient deems appropriate.

# VII. Employment and Organizational Conflict of Interest

The CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warrant, the AGENCY shall have the right to annul this AGREEMENT without liability or, in its discretion, to deduct from this AGREEMENT price or consideration or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

Any and all employees of the CONSULTANT or other persons while engaged in the performance of any work or services required of the CONSULTANT under this AGREEMENT, shall be considered employees of the CONSULTANT only and not of the AGENCY, and any and all claims that may arise under any Workmen's

Compensation Act on behalf of said employees or other persons while so engaged, and any and all claims made by a third party as a consequence of any act or omission on the part of the CONSULTANT's employees or other persons while so engaged on any of the work or services provided to be rendered herein, shall be the sole obligation and responsibility of the CONSULTANT.

The CONSULTANT shall not engage, on a full- or part-time basis, or other basis, during the period of this AGREEMENT, any professional or technical personnel who are, or have been, at any time during the period of this AGREEMENT, in the employ of the United States Department of Transportation or the AGENCY, except regularly retired employees, without written consent of the public employer of such person if he/she will be working on this AGREEMENT for the CONSULTANT.

# VIII. Nondiscrimination

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, sub-consultants, subcontractors and successors in interest, agrees to comply with the following laws and regulations:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. Chapter 21 Subchapter V § 2000d through 2000d-4a)
- Federal-aid Highway Act of 1973 (23 U.S.C. Chapter 3 § 324)
- Rehabilitation Act of 1973 (29 U.S.C. Chapter 16 Subchapter V § 794)
- Age Discrimination Act of 1975 (42 U.S.C. Chapter 76 § 6101 et. seq.)

- Civil Rights Restoration Act of 1987 (Public Law 100-259)
- American with Disabilities Act of 1990 (42 U.S.C. Chapter 126 § 12101 et. seq.)
- 23 CFR Part 200
- 49 CFR Part 21
- 49 CFR Part 26
- RCW 49.60.180

In relation to Title VI of the Civil Rights Act of 1964, the CONSULTANT is bound by the provisions of Exhibit "F" attached hereto and by this reference made part of this AGREEMENT, and shall include the attached Exhibit "F" in every sub-contract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto.

# IX. Termination of Agreement

The right is reserved by the AGENCY to terminate this AGREEMENT at any time with or without cause upon ten (10) days written notice to the CONSULTANT.

In the event this AGREEMENT is terminated by the AGENCY, other than for default on the part of the CONSULTANT, a final payment shall be made to the CONSULTANT for actual hours charged and any appropriate fixed fee percentage at the time of termination of this AGREEMENT, plus any direct non-salary costs incurred up to the time of termination of this AGREEMENT.

No payment shall be made for any SERVICES completed after ten (10) days following receipt by the CONSULTANT of the notice to terminate. If the accumulated payment made to the CONSULTANT prior to Notice of Termination exceeds the total amount that would be due when computed as set forth in paragraph two (2) of this section, then no final payment shall be due and the CONSULTANT shall immediately reimburse the AGENCY for any excess paid.

If the services of the CONSULTANT are terminated by the AGENCY for default on the part of the CONSULTANT, the above formula for payment shall not apply.

In the event of a termination for default, the amount to be paid to the CONSULTANT shall be determined by the AGENCY with consideration given to the actual costs incurred by the CONSULTANT in performing SERVICES to the date of termination, the amount of SERVICES originally required which was satisfactorily completed to

date of termination, whether that SERVICE is in a form or a type which is usable to the AGENCY at the time of termination, the cost to the AGENCY of employing another firm to complete the SERVICES required and the time which may be required to do so, and other factors which affect the value to the AGENCY of the SERVICES performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount, which would have been made using the formula set forth in paragraph two (2) of this section.

If it is determined for any reason that the CONSULTANT was not in default or that the CONSULTANT's failure to perform is without the CONSULTANT's or its employee's fault or negligence, the termination shall be deemed to be a termination for the convenience of the AGENCY. In such an event, the CONSULTANT would be reimbursed for actual costs and appropriate fixed fee percentage in accordance with the termination for other than default clauses listed previously.

The CONSULTANT shall, within 15 days, notify the AGENCY in writing, in the event of the death of any member, partner, or officer of the CONSULTANT or the death or change of any of the CONSULTANT's supervisory and/or other key personnel assigned to the project or disaffiliation of any principally involved CONSULTANT employee. The CONSULTANT shall also notify the AGENCY, in writing, in the event of the sale or transfer of 50% or more of the beneficial ownership of the CONSULTANT within 15 days of such sale or transfer occurring. The CONSULTANT shall continue to be obligated to complete the SERVICES under the terms of this AGREEMENT unless the AGENCY chooses to terminate this AGREEMENT for convenience or chooses to renegotiate any term(s) of this AGREEMENT. If termination for convenience occurs, final payment will be made to the CONSULTANT as set forth in the second and third paragraphs of this section.

Payment for any part of the SERVICES by the AGENCY shall not constitute a waiver by the AGENCY of any remedies of any type it may have against the CONSULTANT for any breach of this AGREEMENT by the CONSULTANT, or for failure of the CONSULTANT to perform SERVICES required of it by the AGENCY. Forbearance of any rights under the AGREEMENT will not constitute waiver of entitlement to exercise those rights with respect to any future act or omission by the CONSULTANT.

# X. Changes of Work

The CONSULTANT shall make such changes and revisions in the completed work of this AGREEMENT as necessary to correct errors appearing therein, without additional compensation thereof. Should the AGENCY find it desirable for its own purposes to have previously satisfactorily completed SERVICES or parts thereof changed or revised, the CONSULTANT shall make such revisions as directed by the AGENCY. This work shall be considered as Extra Work and will be paid for as herein provided under section XIII "Extra Work."

# XI. Disputes

Any disputed issue not resolved pursuant to the terms of this AGREEMENT shall be submitted in writing within 10 days to the Director of Public Works or AGENCY Engineer, whose decision in the matter shall be final and binding on the parties of this AGREEMENT; provided however, that if an action is brought challenging the Director of Public Works or AGENCY Engineer's decision, that decision shall be subject to judicial review. If the parties to this AGREEMENT mutually agree, disputes concerning alleged design errors will be conducted under the procedures found in Exhibit "J". In the event that either party deem it necessary to institute legal action or proceeding to enforce any right or obligation under this AGREEMENT, this action shall be initiated in the Superior Court of the State of Washington, situated in the county in which the AGENCY is located. The parties have the right of appeal from such decisions of the Superior Court in accordance with the laws of the State of Washington. The CONSULTANT hereby consents to the personal jurisdiction of the Superior Court of the State of Washington, situated in the AGENCY is located in the county in which the AGENCY is located of Washington, situated in the court in accordance with the laws of the State of Washington. The

# XII. Legal Relations

The CONSULTANT, any sub-consultants, and the AGENCY shall comply with all Federal, State, and local laws, rules, codes, regulations and all AGENCY policies and directives, applicable to the work to be performed under this AGREEMENT. This AGREEMENT shall be interpreted and construed in accordance with the laws of the State of Washington.

The CONSULTANT shall defend, indemnify, and hold The State of Washington (STATE) and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the negligence of, or the breach of any obligation under this AGREEMENT by, the CONSULTANT or the CONSULTANT's agents, employees, sub consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable; provided that nothing herein shall require a CONSULTANT to defend or indemnify the STATE and the AGENCY and their officers and employees against and hold harmless the STATE and the AGENCY and their officers and employees from claims, demands or suits based solely upon the negligence of, or breach of any obligation under this AGREEMENT by the STATE and the AGENCY, their agents, officers, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the STATE and/or the AGENCY may be legally liable; and provided further that if the claims or suits are caused by or result from the concurrent negligence of (a) the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT is legally liable, and (b) the STATE and/or AGENCY, their agents, officers, employees, sub-consultants, subcontractors and or vendors, of any tier, or any other persons for whom the STATE and or AGENCY may be legally liable, the defense and indemnity obligation shall be valid and enforceable only to the extent of the CONSULTANT's negligence or the negligence of the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable. This provision shall be included in any AGREEMENT between CONSULTANT and any sub-consultant, subcontractor and vendor, of any tier.

The CONSULTANT shall also defend, indemnify, and hold the STATE and the AGENCY and their officers and employees harmless from all claims, demands, or suits at law or equity arising in whole or in part from the alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions by the CONSULTANT or the CONSULTANT's agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable, in performance of the Work under this AGREEMENT or arising out of any use in connection with the AGREEMENT of methods, processes, designs, information or other items furnished or communicated to STATE and/or the AGENCY, their agents, officers and employees pursuant to the AGREEMENT; provided that this indemnity shall not apply to any alleged patent or copyright infringement or other allegedly improper appropriation or use of trade secrets, patents, proprietary information, know-how, copyright rights or inventions resulting from STATE and/or AGENCY's, their agents', officers' and employees' failure to comply with specific written instructions regarding use provided to STATE and/or AGENCY, their agents, officers and employees by the CONSULTANT, its agents, employees, sub-consultants, subcontractors or vendors, of any tier, or any other persons for whom the CONSULTANT may be legally liable.

The CONSULTANT's relation to the AGENCY shall be at all times as an independent contractor.

Notwithstanding any determination by the Executive Ethics Board or other tribunal, the AGENCY may, in its sole discretion, by written notice to the CONSULTANT terminate this AGREEMENT if it is found after due notice and examination by the AGENCY that there is a violation of the Ethics in Public Service Act, Chapter 42.52 RCW; or any similar statute involving the CONSULTANT in the procurement of, or performance under, this AGREEMENT.

The CONSULTANT specifically assumes potential liability for actions brought by the CONSULTANT's own employees or its agents against the STATE and /or the AGENCY and, solely for the purpose of this indemnification and defense, the CONSULTANT specifically waives any immunity under the state industrial insurance law, Title 51 RCW. This waiver has been mutually negotiated between the Parties.

Unless otherwise specified in this AGREEMENT, the AGENCY shall be responsible for administration of construction contracts, if any, on the project. Subject to the processing of a new sole source, or an acceptable supplemental AGREEMENT, the CONSULTANT shall provide On-Call assistance to the AGENCY during contract administration. By providing such assistance, the CONSULTANT shall assume no responsibility for: proper construction techniques, job site safety, or any construction contractor's failure to perform its work in accordance with the contract documents.

The CONSULTANT shall obtain and keep in force during the terms of this AGREEMENT, or as otherwise required, the following insurance with companies or through sources approved by the State Insurance Commissioner pursuant to Title 48 RCW.

### Insurance Coverage

- A. Worker's compensation and employer's liability insurance as required by the STATE.
- B. Commercial general liability insurance written under ISO Form CG 00 01 12 04 or its equivalent with minimum limits of one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) in the aggregate for each policy period.
- C. Business auto liability insurance written under ISO Form CG 00 01 10 01 or equivalent providing coverage for any "Auto" (Symbol 1) used in an amount not less than a one million dollar (\$1,000,000.00) combined single limit for each occurrence.

Excepting the Worker's Compensation Insurance and any Professional Liability Insurance, the STATE and AGENCY, their officers, employees, and agents will be named on all policies of CONSULTANT and any subconsultant and/or subcontractor as an additional insured (the "AIs"), with no restrictions or limitations concerning products and completed operations coverage. This coverage shall be primary coverage and non-contributory and any coverage maintained by the AIs shall be excess over, and shall not contribute with, the additional insured coverage required hereunder. The CONSULTANT's and the sub-consultant's and/or subcontractor's insurer shall waive any and all rights of subrogation against the AIs. The CONSULTANT shall furnish the AGENCY with verification of insurance and endorsements required by this AGREEMENT. The AGENCY reserves the right to require complete, certified copies of all required insurance policies at any time.

All insurance shall be obtained from an insurance company authorized to do business in the State of Washington. The CONSULTANT shall submit a verification of insurance as outlined above within fourteen (14) days of the execution of this AGREEMENT to:

Name: Adam Cox Agency: City of Tukwila Public Works Department Address: 6300 Southcenter Blvd., Suite 100 City: Tukwila State: WA Zip: 98188 Email: Adam.Cox@TukwilaWA.gov Phone: (206) 431-2446 Facsimile: (206) 431-3665

No cancellation of the foregoing policies shall be effective without thirty (30) days prior notice to the AGENCY.

The CONSULTANT's professional liability to the AGENCY, including that which may arise in reference to section IX "Termination of Agreement" of this AGREEMENT, shall be limited to the accumulative amount of the authorized AGREEMENT amount or one million dollars (\$1,000,000.00), whichever is greater, unless the limit of liability is increased by the AGENCY pursuant to Exhibit H. In no case shall the CONSULTANT's professional liability to third parties be limited in any way.

The parties enter into this AGREEMENT for the sole benefit of the parties, and to the exclusion of any third party, and no third party beneficiary is intended or created by the execution of this AGREEMENT.

The AGENCY will pay no progress payments under section V "Payment Provisions" until the CONSULTANT has fully complied with this section. This remedy is not exclusive; and the AGENCY may take such other action as is available to it under other provisions of this AGREEMENT, or otherwise in law.

# XIII. Extra Work

- A. The AGENCY may at any time, by written order, make changes within the general scope of this AGREEMENT in the SERVICES to be performed.
- B. If any such change causes an increase or decrease in the estimated cost of, or the time required for, performance of any part of the SERVICES under this AGREEMENT, whether or not changed by the order, or otherwise affects any other terms and conditions of this AGREEMENT, the AGENCY shall make an equitable adjustment in the: (1) maximum amount payable; (2) delivery or completion schedule, or both; and (3) other affected terms and shall modify this AGREEMENT accordingly.
- C. The CONSULTANT must submit any "request for equitable adjustment," hereafter referred to as "CLAIM," under this clause within thirty (30) days from the date of receipt of the written order. However, if the AGENCY decides that the facts justify it, the AGENCY may receive and act upon a CLAIM submitted before final payment of this AGREEMENT.
- D. Failure to agree to any adjustment shall be a dispute under the section XI "Disputes" clause. However, nothing in this clause shall excuse the CONSULTANT from proceeding with the AGREEMENT as changed.
- E. Notwithstanding the terms and conditions of paragraphs (A.) and (B.) above, the maximum amount payable for this AGREEMENT, shall not be increased or considered to be increased except by specific written supplement to this AGREEMENT.

# XIV. Endorsement of Plans

If applicable, the CONSULTANT shall place their endorsement on all plans, estimates, or any other engineering data furnished by them.

# XV. Federal Review

The Federal Highway Administration shall have the right to participate in the review or examination of the SERVICES in progress.

# XVI. Certification of the Consultant and the Agency

Attached hereto as Exhibit "G-1(a and b)" are the Certifications of the CONSULTANT and the AGENCY, Exhibit "G-2" Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions, Exhibit "G-3" Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying and Exhibit "G-4" Certificate of Current Cost or Pricing Data. Exhibit "G-3" is required only in AGREEMENT's over one hundred thousand dollars (\$100,000.00) and Exhibit "G-4" is required only in AGREEMENT's over five hundred thousand dollars (\$500,000.00.) These Exhibits must be executed by the CONSULTANT, and submitted with the master AGREEMENT, and returned to the AGENCY at the address listed in section III "General Requirements" prior to its performance of any SERVICES under this AGREEMENT.

# XVII. Complete Agreement

This document and referenced attachments contain all covenants, stipulations, and provisions agreed upon by the parties. No agent, or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as a supplement to this AGREEMENT.

# XVIII. Execution and Acceptance

This AGREEMENT may be simultaneously executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The CONSULTANT does hereby ratify and adopt all statements, representations, warranties, covenants, and AGREEMENT's contained in the proposal, and the supporting material submitted by the CONSULTANT, and does hereby accept this AGREEMENT and agrees to all of the terms and conditions thereof.

# XIX. Protection of Confidential Information

The CONSULTANT acknowledges that some of the material and information that may come into its possession or knowledge in connection with this AGREEMENT or its performance may consist of information that is exempt from disclosure to the public or other unauthorized persons under either chapter 42.56 RCW or other local, state or federal statutes ("State's Confidential Information"). The "State's Confidential Information" includes, but is not limited to, names, addresses, Social Security numbers, e-mail addresses, telephone numbers, financial profiles, credit card information, driver's license numbers, medical data, law enforcement records (or any other information identifiable to an individual), STATE and AGENCY source code or object code, STATE and AGENCY security data, non-public Specifications, STATE and AGENCY non-publicly available data, proprietary software, State security data, or information which may jeopardize any part of the project that relates to any of these types of information. The CONSULTANT agrees to hold the State's Confidential Information in strictest confidence and not to make use of the State's Confidential Information for any purpose other than the performance of this AGREEMENT, to release it only to authorized employees, sub-consultants or subcontractors requiring such information for the purposes of carrying out this AGREEMENT, and not to release, divulge, publish, transfer, sell, disclose, or otherwise make it known to any other party without the AGENCY's express written consent or as provided by law. The CONSULTANT agrees to release such information or material only to employees, sub-consultants or subcontractors who have signed a nondisclosure AGREEMENT, the terms of which have been previously approved by the AGENCY. The CONSULTANT agrees to implement physical, electronic, and managerial safeguards to prevent unauthorized access to the State's Confidential Information.

Immediately upon expiration or termination of this AGREEMENT, the CONSULTANT shall, at the AGENCY's option: (i) certify to the AGENCY that the CONSULTANT has destroyed all of the State's Confidential Information; or (ii) returned all of the State's Confidential Information to the AGENCY; or (iii) take whatever other steps the AGENCY requires of the CONSULTANT to protect the State's Confidential Information.

As required under Executive Order 00-03, the CONSULTANT shall maintain a log documenting the following: the State's Confidential Information received in the performance of this AGREEMENT; the purpose(s) for which the State's Confidential Information was received; who received, maintained and used the State's Confidential Information; and the final disposition of the State's Confidential Information. The CONSULTANT's records shall be subject to inspection, review, or audit upon reasonable notice from the AGENCY.

The AGENCY reserves the right to monitor, audit, or investigate the use of the State's Confidential Information collected, used, or acquired by the CONSULTANT through this AGREEMENT. The monitoring, auditing, or investigating may include, but is not limited to, salting databases.

Violation of this section by the CONSULTANT or its sub-consultants or subcontractors may result in termination of this AGREEMENT and demand for return of all State's Confidential Information, monetary damages, or penalties.

It is understood and acknowledged that the CONSULTANT may provide the AGENCY with information which is proprietary and/or confidential during the term of this AGREEMENT. The parties agree to maintain the confidentiality of such information during the term of this AGREEMENT and afterwards. All materials containing such proprietary and/or confidential information shall be clearly identified and marked as "Confidential" and shall be returned to the disclosing party at the conclusion of the SERVICES under this AGREEMENT.

The CONSULTANT shall provide the AGENCY with a list of all information and materials it considers confidential and/or proprietary in nature: (a) at the commencement of the term of this AGREEMENT; or (b) as soon as such confidential or proprietary material is developed. "Proprietary and/or confidential information" is not meant to include any information which, at the time of its disclosure: (i) is already known to the other party; (ii) is rightfully disclosed to one of the parties by a third party that is not acting as an agent or representative for the other party; (iii) is independently developed by or for the other party; (iv) is publicly known; or (v) is generally utilized by unaffiliated third parties engaged in the same business or businesses as the CONSULTANT.

The parties also acknowledge that the AGENCY is subject to Washington State and federal public disclosure laws. As such, the AGENCY shall maintain the confidentiality of all such information marked proprietary and/ or confidential or otherwise exempt, unless such disclosure is required under applicable state or federal law. If a public disclosure request is made to view materials identified as "Proprietary and/or confidential information" or otherwise exempt information, the AGENCY will notify the CONSULTANT of the request and of the date that such records will be released to the requester unless the CONSULTANT obtains a court order from a court of competent jurisdiction enjoining that disclosure. If the CONSULTANT fails to obtain the court order enjoining disclosure, the AGENCY will release the requested information on the date specified.

The CONSULTANT agrees to notify the sub-consultant of any AGENCY communication regarding disclosure that may include a sub-consultant's proprietary and/or confidential information. The CONSULTANT notification to the sub-consultant will include the date that such records will be released by the AGENCY to the requester and state that unless the sub-consultant obtains a court order from a court of competent jurisdiction enjoining that disclosure the AGENCY will release the requested information. If the CONSULTANT and/or sub-consultant fail to obtain a court order or other judicial relief enjoining the AGENCY by the release date, the CONSULTANT shall waive and release and shall hold harmless and indemnify the AGENCY from all claims of actual or alleged damages, liabilities, or costs associated with the AGENCY's said disclosure of sub-consultants' information.

# XX. Records Maintenance

During the progress of the Work and SERVICES provided hereunder and for a period of not less than six (6) years from the date of final payment to the CONSULTANT, the CONSULTANT shall keep, retain and maintain all "documents" pertaining to the SERVICES provided pursuant to this AGREEMENT. Copies of all "documents" pertaining to the SERVICES provided hereunder shall be made available for review at the CONSULTANT's place of business during normal working hours. If any litigation, claim or audit is commenced, the CONSULTANT shall cooperate with AGENCY and assist in the production of all such documents. "Documents" shall be retained until all litigation, claims or audit findings have been resolved even though such litigation, claim or audit continues past the six (6) year retention period.

For purposes of this AGREEMENT, "documents" means every writing or record of every type and description, including electronically stored information ("ESI"), that is in the possession, control, or custody of the CONSULTANT, including, without limitation, any and all correspondences, contracts, AGREEMENT 's, appraisals, plans, designs, data, surveys, maps, spreadsheets, memoranda, stenographic or handwritten notes, reports, records, telegrams, schedules, diaries, notebooks, logbooks, invoices, accounting records, work sheets, charts, notes, drafts, scribblings, recordings, visual displays, photographs, minutes of meetings,

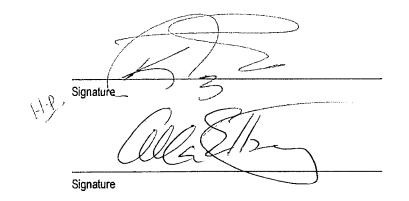
tabulations, computations, summaries, inventories, and writings regarding conferences, conversations or telephone conversations, and any and all other taped, recorded, written, printed or typed matters of any kind or description; every copy of the foregoing whether or not the original is in the possession, custody, or control of the CONSULTANT, and every copy of any of the foregoing, whether or not such copy is a copy identical to an original, or whether or not such copy contains any commentary or notation whatsoever that does not appear on the original.

For purposes of this AGREEMENT, "ESI" means any and all computer data or electronic recorded media of any kind, including "Native Files", that are stored in any medium from which it can be retrieved and examined, either directly or after translation into a reasonably useable form. ESI may include information and/or documentation stored in various software programs such as: Email, Outlook, Word, Excel, Access, Publisher, PowerPoint, Adobe Acrobat, SQL databases, or any other software or electronic communication programs or databases that the CONSULTANT may use in the performance of its operations. ESI may be located on network servers, backup tapes, smart phones, thumb drives, CDs, DVDs, floppy disks, work computers, cell phones, laptops or any other electronic device that CONSULTANT uses in the performance of its Work or SERVICES hereunder, including any personal devices used by the CONSULTANT or any sub-consultant at home.

"Native files" are a subset of ESI and refer to the electronic format of the application in which such ESI is normally created, viewed, and /or modified,

The CONSULTANT shall include this section XX "Records Maintenance" in every subcontract it enters into in relation to this AGREEMENT and bind the sub-consultant to its terms, unless expressly agreed to otherwise in writing by the AGENCY prior to the execution of such subcontract.

In witness whereof, the parties hereto have executed this AGREEMENT as of the day and year shown in the "Execution Date" box on page one (1) of this AGREEMENT.



	11/	4/20	$\mathbf{D}$	
Date	1	7		

11/6/2020

Date

Any modification, change, or reformation of this AGREEMENT shall require approval as to form by the Office of the Attorney General.

Federal Aid No.

See attached Exhibits

### EXHIBIT A

### CITY OF TUKWILA 42<sup>ND</sup> AVE S BRIDGE REPLACEMENT

### PHASE 1 SCOPE OF WORK

#### Background:

This project will replace the existing City of Tukwila's (City) 42<sup>nd</sup> Ave South Bridge with a new multi-span bridge.

The existing 42<sup>nd</sup> Ave South was built in 1949. It is a 3-span bridge that is 280-foot-long (30':220':30') and 28-feet wide (24' curb-to-curb) with the main span consisting a through-truss that spans over the Duwamish River. The existing bridge has a sufficiency rating of 7.56 SD and is considered Structurally Deficient and Functionally Obsolete. The 2018 Average Daily Traffic volume (ADT) was 10,300 vehicles per day with 30% of those vehicles being heavy trucks. The 42<sup>nd</sup> Ave South Bridge is a primary crossing of the Duwamish River for the Allentown neighborhood, the Burlington Northern Santa Fe (BNSF) Intermodal Facility, and the Baker Commodities Facility which are considered as major stakeholders of this project.

Improving the level of service is extremely important on the 42<sup>nd</sup> Ave South Ave. as it serves in excess of 10,000 vehicle per day with 30% of those vehicles being trucks and it is the only viable route for container trucks entering and leaving the Tukwila BNSF Intermodal Facility. The Bridge on this important roadway facility is not only narrow, only 24 feet curb to curb, but also has many structural deficiencies and is currently load posted, restricting the free movement of that freight.

City of Tukwila desires to replace the existing bridge structure with a new bridge and has tasked TranTech Engineering, LLC's team (TranTech) to preparing a Type, Size, & Location Report (TS&L) and 30% Plans and Estimate (P&E) as part of the Phase 1 of this project.

It is TranTech's understanding that Phase 2 services consisting of 60%, 90%, and 100% Plans, Specifications, & Estimate (PS&E) submittals, bid ready documents and environmental permitting documentation for the bridge will be supplemented to the TranTech's contract following completion of the Phase 1 services at a future date. Furthermore, the City of Tukwila reserves the right to retain the services of TranTech's team for Phase 3 of the project consisting of construction phase engineering services and construction inspection and management.

All work performed by TranTech's team shall be in accordance with the WSDOT Local Agency Guidelines (LAG) Manual for federally funded projects, in anticipation of receiving future federal funding.

The following work elements present a summary of the services associated with Phase 1 of the project:

### Phase 1 Scope Summary:

- 1. Project Management
- 2. Surveying
- 3. Preliminary Geotechnical Engineering
- 4. Environmental Permitting (preapplication)
- 5. Bridge Aesthetics & Landscape
- 6. Utility Engineering and Coordination
- 7. Constructability Review, Construction Schedule & Estimation
- 8. Traffic Control & Traffic Signal
- 9. Illumination
- 10. Community Outreach
- 11. Type, Size & Location Report
- 12. 30% Plans, & Estimate (P&E)

### Future anticipated work as a contract supplement:

- 60%, 90%, 100% and Bid-ready PS&E
- Completion of permitting documentation
- Ad-ready Construction Documents
- Construction Phase Services

Reports and plans, to the extent feasible, shall be developed in accordance with the latest edition and amendments of the following guidelines and documents:

- AASHTO 2001, "A Policy of Geometric Design of Highways and Streets"
- Washington State Department of Transportation, "Standard Specifications for Road and Bridge Construction"
- Washington State Department of Transportation, "Design Manual"
- Washington State Department of Transportation, "Bridge Design Manual"
- AASHTO LRFD Bridge design Specifications Seventh Edition
- Washington State Department of Transportation, "Materials Laboratory Outline"
- Washington State Department of Transportation, "Construction Manual"
- Washington State Department of Transportation, "Local Agency Guidelines"
- Highway Research Board's Manual entitled "Highway Capacity"
- United State Department of Transportation and Federal Highway Administration (FHWA) "Manual on Uniform Traffic Control Devices for Streets and Highways"
- Standard drawings prepared by City shall be used as a guide in all cases where they fit design conditions.
- AASHTO "Guide for the Development of Bicycle Facilities"
- WSDOT Highway Runoff Manual
- WSDOT Hydraulics Manual
- King County 2016 Edition of the King County Surface Water Design Manual (KCSWDM)

#### WORK ELEMENT 1 PROJECT MANAGEMENT:

This work element includes administration of the contract between the Consultant and the City, preparation of monthly progress reports and quality control, necessary for the Project. The task includes all administrative services needed to coordinate with the sub-consultant/s and to complete the Project on time and within budget. The following are the categorized activities associated with this work element:

- Project Schedule Updating.
- Meetings and Meeting Minutes approximately 12 team meetings are assumed for the duration of the design activities.
- Monthly Progress Reports, and Invoicing. Progress reports will contain a narrative that identifies and describes significant activities performed in the previous month and the significant planned activities for the upcoming month.
- Design Team Management:
  - a. Schedule and coordinate with design team.
  - b. Prepare sub-consultant agreements, coordinate, budget and review the project progress and submittals.
  - c. Prepare, monitor, and update project schedule. Monitor project budget.
  - d. Prepare monthly billings, progress reports, and updated monthly project schedule.
  - e. Maintain regular informal contact telephone discussions, and electronic mail.
  - f. Obtain, with assistance from the City, rights of entry necessary for geotechnical studies, etc.

#### **Deliverables:**

- Progress Reports
- Meeting Minutes
- Monthly Invoicing
- Project Schedule

### WORK ELEMENT 2 SURVEYING:

This Work Element is performed by 1-Alliance to provide topographic survey and engineering basemaps of the existing 42<sup>nd</sup> Ave South Bridge and its surroundings, including pick-ups of flagging for Ordinary High-Water Mark (OHWM) of the river and topo mapping of the river bank 100 feet east and west of the existing bridge and 500 feet north and south approaches. Survey shall extend laterally to the apparent right-of-way.

Below please find Exhibit A, Surveying Limits.

### 2.1 Survey PM, Admin, QA/QC

This task includes the survey project management, administrative duties, and quality control required for a project of this complexity and magnitude.

### 2.2 Survey Control

This task includes the establishment of survey control, or the recovery of existing survey control, as required for the project. Survey control will be set, found, or referenced utilizing Real Time Kinematic (RTK) GPS (GNSS) and the Washington State Reference Network (WSRN) in conformance with industry standards. This survey control is then propagated, as required, utilizing standard terrestrial total station measurements.

### 2.2.1 Geodetic Survey Control

- 2.2.1.1 Survey work shall reference the Washington State Plane Coordinate System of 1983 as established in accordance with Chapter 58.20 Revised Code of Washington.
- 2.2.1.2 Vertical Datum shall reference the North American Vertical Datum of 1988 (NAVD88).

#### 2.2.2 Cadastral Survey Control

2.2.2.1 Public Land Survey System monumentation required for right-of-way resolution.

### 2.3 Field Surveying and Mapping

This task includes the field surveying and mapping required for this specific effort.

Topographic– approx. 1500 linear feet along 42<sup>nd</sup> Ave South and intersections of adjoining streets. The consultant shall locate and map visible features necessary for the creation of an engineering design base map. Typical features include:

- 2.3.1 Topographic and Planimetric, including channelization.
- 2.3.2 Edge of Pavement, gravel, grass, concrete, etc.
- 2.3.3 Curb and sidewalk, including curb cuts and ADA ramps.
- 2.3.4 Signs and signals, poles and appurtences.
- 2.3.5 Trees, 4" in diameter or greater, and edges of significant vegetation.
- 2.3.6 Walls, rockeries, and fences (or faces of).
- 2.3.7 Ground measurements to generate a digital terrain model at one-foot contours.
- 2.3.8 Visible improvements situated within the described mapping limits.
- 2.3.9 Bridge abutment as-builts and soffit elevations.

### 2.4 Utility Surveying Services

This task includes the mapping of utilities throughout the survey limits. The Consultant shall arrange for underground 'conductible' utility locating, by means of a private utility firm.

- 2.4.1 Surface Observable: power poles, vaults, risers, fire hydrants, water valves/meters, gas valves, traffic signal/traffic control boxes, and overhead utility lines.
- 2.4.2 Stormwater and Sanitary sewer structures shall be located. Standard efforts will be made for obtaining pipe invert elevations, size, and materials.

### 2.5 Office Processing

This task includes the office processing of the collected survey data, data extraction, field book reductions, CADD drafting, and other duties required for the generation of the deliverable(s).

For 3D laser scanning efforts, sub-tasks include the registering of point clouds; evaluating the registrations; exporting the point cloud data to Civil3D; creating or picking of appropriate points in Civil3D; Linework and Layering, and standard CADD drafting of the deliverables, as required.

### 2.6 Right-of-Way and Boundary Resolution(s)

2.6.1 Right-of-Way – Resolve right-of-way within the project limits.

2.6.2 Parcel Resolution – Resolve boundaries for parcels

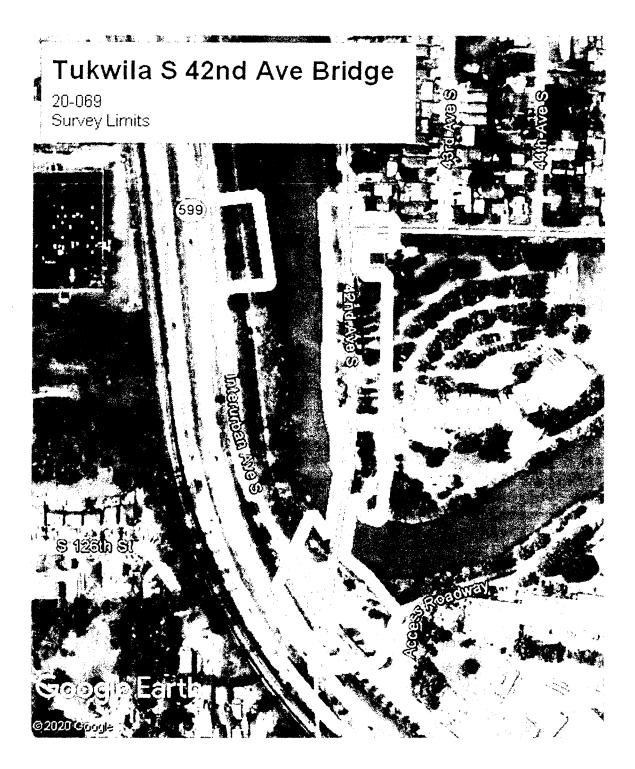
#### Assumptions:

- Rights-of-Entry will be provided by the City.
- Traffic control, if required, will be implemented and billed as an invoiced ODC.
- Tree Tags, driplines/canopies are not a part of the scope services.
- Setting of property corners is not a part of the scope of services.
- A record of Survey is not a part of the scope of services.
- Up to 60 Ordinary High-Water Mark flags, set by others, to be located.
- Title reports with underlying documents for parcels to be provided by the CITY.

#### Deliverables:

- Topographic Survey with 1-foot contour intervals (electronic copy).
- AutoCAD Surfaces (DTM Files) (electronic copy) or any other desired electronic source file.
- ASCII file of control points.

**Exhibit A, Surveying Limits** 



### WORK ELEMENT 3 GEOTECHNICAL ENGINEERING:

This Work Element, the purpose of which is to provide preliminary geotechnical engineering recommendations and reporting to support the design team, will be performed by Landau Associates, Inc. The preliminary geotechnical engineering effort will include the following activities:

### 3.1 Review Existing Geotechnical Information

Consultant will review readily available existing subsurface exploration data for the project area. This will include a review of subsurface information previously gathered by others as part of the nearby King County Allentown Trunk and Sound Transit Central Link Light Rail projects. The purpose of reviewing this data is to facilitate the planning of the Consultant's subsurface exploration program and incorporate geotechnical information from previous explorations into the Consultant's preliminary geotechnical design considerations and recommendations. The data review will also include a review of published geologic and topographic information for the project area.

### 3.2 Geotechnical Support Related to Preparation of the TS&L Report

Consultant will evaluate the above described information collected by others from the project area in order to develop preliminary geotechnical engineering conclusions and recommendations related to preparation of the TS&L Report. Preliminary geotechnical engineering conclusions and recommendation will be prepared for a replacement bridge that is located within the corridor that the existing bridge is currently located, as well as within the South 124<sup>th</sup> Street corridor.

#### **3.3 Geotechnical Investigation Program**

To characterize subsurface soil and groundwater conditions along the selected bridge alignment, Consultant will subcontract a drilling contractor to advance up to four exploratory borings at or near the proposed bridge foundation locations using a track-mounted drill rig. The Consultant's cost estimate includes budget to advance two borings each to a depth of about 90 ft below ground surface (bgs) and two borings each to a depth of about 60 ft bgs. The Consultant's cost estimate also includes budget to subcontract a small tracked excavator to clear brush and/or create relatively level working surfaces for the drill rig. The Consultant's cost estimate also includes budget to stabilize areas of disturbed ground with mulch or straw at the completion of the subsurface investigation. Finally, the Consultant's cost estimate includes budget to obtain access permission from King County for the two borings that will be advanced along or adjacent to the Green River Trail.

A geotechnical representative of the Consultant will observe the advancement of the exploratory borings, obtain soil samples from the borings, and prepare field logs of conditions observed. Soil samples will be obtained from the exploratory borings on about a 2½- or 5-ft depth interval using the Standard Penetration Test (SPT) procedure. The soil samples will be delivered to the Consultant's laboratory for further examination and classification. Soil samples obtained from the exploratory for 30 days after submittal of the final report. After that date, the soil samples will be disposed of unless arrangements are made to retain them. While monitoring wells are not planned for the proposed borings, groundwater occurrence will be noted on the summary boring logs. Upon completion of sampling and logging, the borings will be decommissioned in accordance with the requirements of Chapter 173-160 of the Washington

Administrative Code (WAC). Excess cuttings from the exploratory borings will be properly disposed of offsite. If present, the pavement section at borehole locations will be patched using fast setting concrete.

Prior to performing the above described field activities, Consultant will arrange for underground utility location ("call before you dig"). Consultant will also hire a private utility locating service to check for the presence of buried utilities at planned boring locations.

Consultant will complete a geotechnical laboratory testing program consisting of natural moisture content and grain size and/or Atterberg Limits determinations on selected soil samples to aid in classifying site soils. Laboratory testing will include up to 30 moisture content determinations and 16 grain size distributions or Atterberg limits determinations.

### 3.4 Preliminary Geotechnical Engineering Analysis

Consultant will evaluate the information collected as part of the above described data review and field investigation program in order to develop preliminary geotechnical engineering conclusions and recommendations related to the preliminary design (i.e. 30 percent) of the proposed replacement bridge.

### 3.5 Draft and Final Preliminary Geotechnical Reports

Deliverables will include a draft geotechnical report containing preliminary geotechnical conclusions and recommendations. A final preliminary geotechnical report will be created that contains the results of mutually agreed upon consolidated comments from other team members and the City.

The preliminary geotechnical reports will include the following information:

- Summary logs and a site plan showing the locations of the exploratory borings advanced by the Consultant.
- Seismic design criteria in accordance with applicable AASHTO standards.
- A preliminary qualitative evaluation of the liquefaction and lateral spread hazards at the project site, if warranted. If such hazards exist at the project site, a detailed evaluation of the liquefaction and lateral spread hazards would need to be performed during a subsequent design phase of the project.
- Recommendations for site preparation and fill placement, including: criteria for clearing, stripping and grubbing; an evaluation of the suitability of on-site soil for use as structural fill; gradation criteria for imported fill; guidance for preparation of subgrade soil, which will support the bridge approaches; and criteria for structural fill placement and compaction.
- Geotechnical recommendations for the preliminary design of deep foundations for the proposed replacement bridge, as well as temporary foundation support for the existing bridge if it will be used as a temporary bridge during construction of the replacement bridge. The recommendations will include preliminary estimates of the following: tip elevation, axial resistance, downdrag loads and loss of side resistance during seismic loading, uplift resistance, lateral shaft analysis, and construction considerations.
- Lateral earth pressure criteria for design of proposed bridge abutment walls and permanent retaining walls including equivalent fluid densities for the active, at-rest and passive states of stress.

- A discussion related to known or anticipated geotechnical issues that should be considered during final design of the project or that could influence construction of the replacement bridge. The discussion will include methods to mitigate such issues, if identified.
- Recommendations for supplemental geotechnical services to support final design of the proposed replacement bridge.

### **3.6 Meeting Participation**

For estimating purposes, it is assumed that the Consultant's geotechnical engineer will participate in up to three internal meetings with the design team for consultation during preliminary design of the project.

### Assumptions:

- The replacement bridge will consist of a two or three-span structure with no in water foundation elements.
- The replacement bridge will be located either within the corridor that the existing bridge is currently located or within the South 124<sup>th</sup> Street corridor.
- Permits will not be required to clear brush and/or create relatively level working surfaces for the drill rig.
- Consultant will not need to provide preliminary foundation design recommendations for more than 3 different foundation options.
- Additional exploratory borings may be required if during the design process the locations of the bridge foundations change.

### Deliverables:

- An electronic (Adobe PDF) copy of the draft Preliminary Geotechnical Report
- An electronic (Adobe PDF) copy of the final Preliminary Geotechnical Report

### WORK ELEMENT 4 ENVIRONMENTAL PERMITTING (PREAPPLICATION):

This Work Element will be performed by Landau Associates, Inc. to provide environmental permitting documentation for preapplication support for the National Environmental Policy Act (NEPA), the State Environmental Policy Act (SEPA), and local permits/approvals. Federal funding is anticipated to be administered through WSDOT Local Programs. Consultant therefore assumes that the WSDOT will be the lead coordinator for NEPA. For the purposes of this Scope of Services, Consultant assumes that this project can be authorized under a NEPA Categorical Exclusion (CE). The necessary work elements associated with preapplication documentation are assumed to be:

### 4.1 Wetland/Waterway Delineation

Consultant will conduct wetland delineations in accordance with the US Army Corps of Engineers (USACE) 1987 Wetlands Delineation Manual and the 2010 USACE Regional Supplement to the Wetland Delineation Manual. The ordinary high-water mark (OHWM) of waterways will be delineated using guidance provided in Ecology's Determining the Ordinary High-Water Mark on Streams in Washington State. The high tide line for the Duwamish River, which is tidally influenced in the project area, will be obtained from available tide gauge data and field observation.

Consultant will compile and review environmental information from readily available public domain resources to gain a general understanding of potential wetland issues at the site. Public domain resources include, but are not limited to:

- Natural Resources Conservation Service Soil Survey data
- National Wetlands Inventory mapping
- Local Critical Areas mapping
- US Geological Survey topographic mapping
- Recent aerial photography.

The field investigation will include an examination of vegetation, soils, and hydrology within the project area for two alternative alignments. Flagging will be placed along the wetland/waterway boundaries and will be confined to the project area. Any wetland/waterway habitat that extends beyond the project area, and within 200 ft (referred to as the study area), will be estimated both visually and using public domain resources to assess extent. Included in this task is time to provide the project surveyors with a hand-sketch of wetland/waterway boundaries to assist the surveyors to locate project flagging. Consultant also included time to review the survey map and request any necessary changes to accurately represent existing wetland/waterway conditions.

Wetlands within the study area will be rated in accordance with Ecology's Washington State Wetland Rating System for Western Washington, and buffer widths will be determined in compliance with applicable Critical Areas regulations. Stream typing and buffer widths will be based on Chapter 18.45 of the TMC, and the water typing system promulgated in WAC 222-15-131.

Consultant will prepare a draft Wetland and Waterway Delineation Technical Memorandum for the selected alternative with the information obtained from field delineation and ratings. The memorandum will be acceptable to the City for shoreline permitting and other regulatory agencies that will include:

• A summary of the methodology used

- The size and rating of each wetland and waterway; a characterization of wetland vegetation, soils, and hydrology; and field data sheets
- A scaled site map showing the locations of wetland/waterway boundaries and buffers, locations of wetland data plots, and site topography
- Supporting photographs.

The draft memorandum will be provided to the City for review. Comments will be reviewed and incorporated, as appropriate, into a final Wetland and Waterway Delineation Technical Memorandum. The delineation report memorandum will be used in pre application meetings for the purposes of discussing potential project impacts and determining agency jurisdiction.

This task includes efforts to summarize wetland/waterway delineation results, including figure, for two project alternatives for use in the Type, Size, and Location report.

### 4.2 WSDOT Local Program National Environmental Policy Act Categorical Exclusion Form

Consultant will prepare a preliminary version of the WSDOT Local Programs NEPA Categorical Exclusion (CE) Form (formerly the Local Agency Environmental Classification Summary). The purpose of the preliminary NEPA CE form is to facilitate discussion with WSDOT Local Programs to determine subsequent NEPA compliance needs.

To complete the preliminary version of the CE form, Consultant will compile and review environmental information from readily available public domain resources to gain a general understanding of relevant environmental resources along the project corridor.

### 4.3 Agency Preapplication Meetings

Consultant will assist in scheduling and participate in pre-application meetings, as needed, with the City, Washington State Department of Transportation (WSDOT), Washington Department of Fish & Wildlife (WDFW), Washington Department of Natural Resources (DNR), US Army Corps of Engineers, and US Coast Guard to coordinate jurisdictional limits and permit conditions for the project.

This task includes participation in at least two onsite meetings, three conference calls and associated correspondence to support preapplication inquiries.

### 4.4 Permit Matrix

Consultant will prepare a permit matrix identifying all anticipated environmental permits and a rough schedule including required reviews, duration of reviews by agencies, public notice or comment periods, public outreach requirements, hearings, and other permit related timing constraints. The permit matrix will evaluate permit needs for no more than two alternatives.

### Assumptions:

• The proposed project will receive funding from the FHWA administered through WSDOT Highways and Local Programs.

- The preliminary NEPA CE form will only be prepared for the selected bridge alignment.
- The preliminary NEPA CE form will identify individual discipline reports anticipated to be prepared for the project. Development of discipline reports is not included in this scope of services.
- The City will provide access permissions if needed.
- Wetland/waterway boundary flagging will be placed only in accessible parts of the project area.
- Permit matrix will be limited to environmental permits related to SEPA, NEPA and Shoreline compliance, and will not include construction permits, building permits, or stormwater permits.

# <u>Deliverables:</u>

- An electronic (Adobe PDF) copy of the preliminary NEPA CE form
- An electronic (Adobe PDF) copy of the draft and final Wetland and Waterway Delineation Technical Memorandum.
- An electronic (Adobe PDF) copy of the permit matrix

## WORK ELEMENT 5 BRIDGE AESTHETICS & LANDSCAPE

This Work Element is performed by Makers to provide Bridge Aesthetics and Landscaping design. The following outlines the tasks associated with this work:

#### 5.1 Concept Design for Urban Design Elements

- a. Review engineering work, site constraints, existing City policies and activities relevant to the project. Assist as requested regarding street configuration and relationship to adjacent properties. Meet with City Staff and Consultant Team to discuss opportunities, constraints and ideas. (Follow-up with selected Staff and team members may be necessary
- b. Sketch preliminary concepts
- c. Review with staff (one meeting) and engineering team and refine the concepts.
- d. Assist Enviro-issues with public open house. (Event time only)
- e. Review results of the open house with the Staff/Consultant team.
- f. Work up preferred ideas to a 30% design level for aesthetic and landscaping features. Provide drawings in a format compatible with the engineering documents. (Format provided by the engineering team.) Provide narrative description of urban design and/or outline
- g. Prepare 30% design level quantity estimate and opinion of cost estimate for the selected aesthetic and landscaping features.

#### Assumptions:

- City and Enviro-issues will organize the open house and publicize and arrange for the meetings and presentations. Makers will assist in conducting the sessions.
- Makers will not be involved in lighting, electrical or utilities work.
- The budget assumes 6 meetings or conferences with the engineering/City team and one public event (open house).
- The engineering team will provide Makers with CAD layouts, templates and numbering to meet the requirements of the final bid document formatting.

#### Deliverables:

- Concept sketches for the open house
- 30% Documents of urban design (Aesthetic) and landscaping elements in digital format (CAD) as provided by the engineering team.

# WORK ELEMENT 6 UTILITY COORDINATION

This Work Element is performed by TranTech to provide utility coordination and potentially design for the project.

# 6.1 Utility Coordination

Utilities owned and operated by other agencies/entities, other than the City, that are within the project corridor of the bridge improvements will be identified. TranTech will acquire and review record drawings of existing utilities within the project limits and define potential utility conflicts. For the purpose of preparing this scope of work, it is anticipated that up to four (4) utilities are located in the project corridor. Known utilities within the project limits include Puget Sound Energy (PSE) Gas and Electric, Comcast, King County Wastewater Treatment Services and Seattle City Light (SCL).

TranTech will schedule meetings with utility owners to discuss the project and define utility needs and design criteria if the utility is impacted by the proposed bridge improvements. A total of four (4) meetings are anticipated under this subtask. Meeting will be conducted by, and minutes will be prepared by TranTech.

<u>Prepare Memorandum</u> - Prepare a short technical memorandum to outline all the findings on the utilities at and around the project site.

# Assumptions:

• No utility design is part of this Work Element

# <u>Deliverables:</u>

• Utility coordination memorandum

# WORK ELEMENT 7 CONSTRUCTABILITY REVIEW, AND ESTIMATION:

This work element is performed by Ott-Sakai Construction Consultants (OS), to provide constructability review, construction schedule, and construction estimation services.

The work element includes the following activities:

## 7.1 Constructability review and Cost Estimation

OS will provide constructability review and cost Estimation of the design team's prepared TS&L Report and Plans, & Estimate (P&E) package at 30% design level.

#### Deliverables:

- Constructability Review and Estimation for TS&L Report.
- Constructability Review and Estimation for 30% P&E design level.

# WORK ELEMENT 8 - TRAFFIC CONTROL AND TRAFFIC SIGNAL:

This work element is performed by Transpo Group, Inc. (Transpo) to provide traffic analysis, traffic control, detour, and traffic signal plans for the Contractor's use in constructing the proposed bridge and roadway improvements.

# 8.1 Traffic Analysis

Transpo will evaluate existing and future traffic conditions as described within this subsection at the following intersections:

- 42nd Ave S/Interurban Ave S
- 42nd Ave S/S 124th St
- Interurban Ave S/S 124th St
- Interurban Ave S/Access Roadway

Transpo will coordinate with the City to identify appropriate evaluation criteria for comparing and analyzing potential improvement options.

# **Future Demand**

It is assumed that the Puget Sound Regional Council (PSRC) travel demand model will be used to develop future year traffic projections at the study intersections identified above. The Consultant will coordinate with the Client to identify an appropriate existing year and design year for analysis.

# Traffic Operations and Level-of-Service

Synchro (Traffic Signals) and aaSidra (Roundabouts) software will be utilized to analyze existing and future traffic operations, queue lengths, and levels-of-service at the study intersections. The purpose of this analysis will be to establish baseline and future no-build conditions for vehicle delay, level-of-service, and travel times through the intersection for vehicles, transit vehicles, and non-motorized users.

## **Evaluate Options**

It is assumed that the following improvement options will be evaluated:

- Option 1 S 124th St Bridge Traffic Signal
  - S 124th St is connected to Interurban Ave S with a new bridge across the Duwamish River.
  - A new traffic signal is installed at the S 124th St/Interurban Ave S intersection.
  - The north leg at the 42nd Ave S/Interurban Ave S intersection is removed.
  - The existing signal at 42nd Ave S/Interurban Ave S is modified as needed and the Interurban Ave S/Access Roadway intersection is signalized, if warrants are met.
- Option 2 S 124th St Bridge Roundabout

- S 124th St is connected to Interurban Ave S with a new bridge across the Duwamish River.
- A new roundabout is installed at the S 124th St/Interurban Ave S intersection.
- The north leg at the 42nd Ave S/Interurban Ave S intersection is removed.
- The existing signal at 42nd Ave S/Interurban Ave S is modified as needed and the Interurban Ave S/Access Roadway intersection is signalized, if warrants are met.
- Option 3 42nd Ave S Bridge Existing Condition

The options will be evaluated against previously established evaluation criteria to help refine and prioritize the potential improvement options for each intersection. In cooperation with the Client and project team, a scoring matrix will be developed with appropriately weighted evaluation criteria for the purpose of rating and prioritizing improvement options.

## **Conceptual Drawings of Improvements**

The Consultant will develop conceptual drawings of Options 1, 2, and 3 utilizing survey data (if available) and/or readily available aerial imagery. The conceptual drawings will represent an approximately 10 percent design level.

## Summary Report

The Consultant will prepare a final report that summarizes the results of the traffic analysis, evaluation of alternatives, and the Project Team's recommendations. Following one round of comments from the Client, the report will be finalized.

## Deliverables:

- Concept drawings
- Summary traffic analysis report

## 8.2 Traffic Control

The Consultant will prepare traffic control plans, special provisions, and engineer's opinion of cost for constructing the proposed bridge and roadway improvements.

Attend a total of 3 team meetings to discuss what type and duration of closures are needed for which phase of the bridge reconstruction.

Attend up to 2 neighborhood meetings to present and discuss closure plans.

The exact limits of the traffic control will be determined jointly between the City and the Consultant; however, the initial scope and fee are based on the listed assumptions below. The plans will conform with MUTCD and/or WSDOT/City procedures and standard plans.

# Assumptions:

- The limits, details, and types of traffic control plans are unknown at the time of contracting. The Consultant has budgeted to provide up to three generic short-term traffic control plans, and one specific traffic control plan to include:
  - TCP 1: Short term plan, including pedestrian and vehicle detour plan as needed
  - TCP 2: Short term plan, including pedestrian and vehicle detour plan as needed
  - TCP 3: Short term plan, including pedestrian and vehicle detour plan as needed
  - TCP 4: Short term full closure of Green River Trail plan, including detour plan
- It is assumed that others will prepare all civil-related plans for temporary traffic control. This includes, but is not limited to, the design of temporary curbs, sidewalks, paving, grading, utilities, drainage, structures, geotechnical design, and related work.
- Traffic analysis is not included in task 8.2.
- Special provisions are not included in the Phase 1 deliverables/fee

# <u>Deliverables:</u>

• Traffic Control packages for TS&L design level.

# 8.3 Traffic Signal Design

Transpo will prepare traffic signal plans, and engineer's opinion of cost for constructing traffic signal improvements/modifications for the project.

# Assumptions:

- The traffic signal design deliverables/fee is based on Option 1 from sub-task 8.1.
- The existing traffic signal at the 42nd Ave S/Interurban Ave S intersection will continue to operate during construction and temporary signal modifications will not be required.
- Temporary traffic signals will not be required during construction at the S 124th St/Interurban Ave S, 42nd Ave S/S 124th St, and/or Interurban Ave S/Access Roadway intersections.
- Permanent signal improvements at the 42nd Ave S/Interurban Ave S intersection are anticipated to primarily include:
  - Removing the existing mast arm and traffic signals for southbound 42nd Ave S traffic
  - Modifying the existing phasing and traffic signals for northbound 42nd Ave S traffic to be left turn signal heads only
  - Removing pedestrian signal heads and pushbuttons for crossing the north leg of the intersection
- Permanent signal improvements at the Interurban Ave S/Access Roadway intersection are anticipated to primarily include:
  - Fully signalizing the intersection to be tied into the existing traffic signal system at the 42nd Ave S/Interurban Ave S intersection

- Permanent signal improvements at the S 124th St/Interurban Ave S intersection are anticipated to primarily include:
  - Fully signalizing the intersection
- Existing traffic signal controller and service cabinets will not be impacted by the project and will remain in operation as-is
- Special signal pole foundation design is not anticipated
- Transformer and/or electrical service connection design is not anticipated
- It is assumed that others will prepare all civil-related plans for temporary traffic control. This includes, but is not limited to, the design of curbs, sidewalks, paving, grading, utilities, drainage, structures, geotechnical design, and related work
- Special provisions are not included in the Phase 1 deliverables/fee
- Wire termination details and pole chart details are not included in the Phase 1 deliverables/fee

#### Deliverables:

• Traffic Signal packages for TS&L and 30% design levels.

# WORK ELEMENT 9 ILLUMINATION:

This work element is performed by TranTech, to provide preliminary illumination design services.

TranTech team will prepare for illumination and signing preliminary design for 30% P&E design level.

Based on the City's selected Alternative, TranTech will provide design services associated with illumination, and permanent signing design. The illumination design is intended for the Bridge and its immediate approaches. TranTech team will prepare 30% plans, and engineering cost estimates. This work element includes the following tasks:

# 9.1 Illumination

The design team will discuss guidelines and criteria with the City. The team will develop a design basis report outlining the lighting design approach, AGi32 software, design criteria, target luminance and luminance levels, power densities, wiring schematics, sources (discuss with the PUD service types and locations), color temperature and control intent.

Following the input from the City, the lighting engineer will develop illumination P&E, lighting schedules and provide required fixture catalog cuts.

# Assumptions:

- The bridge will have full illumination for bicycles, pedestrians and vehicles.
- The approaches will have full illumination and transition to existing conditions as required.

# Deliverables:

• Illumination P&E at 30% design levels.

# WORK ELEMENT 10 COMMUNITY OUTREACH:

This work element is performed by EnviroIssues and TranTech to provide Community Outreach services in the TS&L Phase. Community outreach will be broken into two phases:

#### Phase 1: Early engagement and coordination (at project initiation)

During Phase 1, EnviroIssues will focus on building relationships with key stakeholders, establish local avenues for project communications and develop a plan for outreach. EnviroIssues will also develop initial project messaging and materials. Outreach will include interviews and briefings with key stakeholders and community organizations to gather initial feedback about the project, potential solutions, decision criteria and tradeoffs and outreach approach.

#### Phase 2: Technical options and tradeoffs (with draft TS&L/pre 30% design)

During Phase 2, EnviroIssues will focus outreach efforts on broader public engagement to gather feedback on the technical options, potential tradeoffs and impacts, and decision criteria to identify a preferred solution. Outreach will include stakeholder briefings, an online open house, an inperson public event and broad public notification.

#### **10.1 Community outreach plans**

#### **Objectives**

Through collaboration with the project team, City and the surrounding community, EnviroIssues will create an overall community outreach plan and phase-specific plans that set outreach goals, methods and messaging.

## Activities/Approach

- EnviroIssues will do initial research into the community, including previous and current engagement and a demographic analysis to help guide the outreach approach.
- EnviroIssues will create a general community outreach plan that sets the overall project goals, messaging, etc.
- EnviroIssues will develop outreach plans for phase 1 and 2, outlining goals and strategies specific to each phase that allows us to build in flexibility as the project team learns more about community needs.

#### Assumptions

• EnviroIssues will lead development of community outreach plans and update consistently as community needs are better understood.

## <u>Deliverables</u>

- General community outreach plan, assumes 2 rounds of review, to be updated up to 2 times
- Phase 1 community outreach plan, assumes 2 rounds of review, to be updated up to 2 times
- Phase 2 community outreach plan, assumes 2 rounds of review, to be updated up to 2 times

#### 10.2 Stakeholder interviews, briefings and phone calls

#### **Objectives**

In the light of Covid 19 restrictions and in partnership with the project team, EnviroIssues will support City staff to schedule, develop questions and materials for, conduct, and document stakeholder interviews through website and webinar facilitations and/or phone briefings for Phases 1 and 2. Outreach to stakeholders will include area residents, businesses, community and cultural organizations, and others. The purpose of the initial interviews and follow-up briefings will be to further understand community interests, concerns and priorities related to the bridge replacement and how the community would like to stay informed and engaged during this and future phases of the project, including pre-construction and construction phases. The interviews, briefings and phone calls provide an opportunity for key stakeholders to share their unique perspectives on the project issues and potential solutions prior to broader community outreach. The interviews, briefings and phone calls also provide an opportunity for the City to get ahead of and/or proactively address stakeholder concerns and questions prior to outreach to the broader public and share how stakeholder input has been used to inform City decisions.

## Activities/Approach

- EnviroIssues, with the support of the project team, will identify project stakeholders and tailor an engagement approach that best suits individual stakeholder needs.
- A phased approach to direct engagement will be used starting with 1) interview, 2) briefings and gather feedback and correspondence to close the loop with stakeholders.
- Stay Home, Stay Safe orders will be considered when determining which engagement approach to use.

#### <u>Assumptions</u>

- Representatives from the City and consultant team will attend online interviews and briefings.
- EnviroIssues will facilitate scheduling interviews and briefings, either in person or via online platforms.
- EnviroIssues will draft meeting minutes and additional notes.
- Time billed to attending in-person activities includes up to 30 minutes of travel each way.
- EnviroIssues will record feedback received during these outreach activities in Task 10.3.

## **Deliverables**

- Assume up to 6 stakeholder interviews and summaries
- Assume up to 6 briefings and summaries
- Assume up to 10 emails
- Assume up to 10 phone calls and associated summaries

## 10.3 Online engagement

## Objectives

Online engagement will be robust as measures to address the COVID pandemic limit in-person activities. Online engagement tools will include an online open house, project website, email correspondence and an online webinar.

EnviroIssues will develop an online open house website to share project information and interact with the public. An online open house tool is particularly helpful to solicit broader public input

from those who are unable to attend the in-person meeting yet still have a desire to provide their input on the project. The online open house includes use of a custom sub-domain website that will be seamlessly linked from the City's website, have a project-specific customized layout, station tabs to match in-person meeting station materials, fully responsive design (i.e. for smart phones, tablets, etc.), integration social share, and a full report of comments submitted.

## Activities/Approach

- Develop online project-specific website within City's website which is maintained by the City
- Develop online open house to share project information and solicit community feedback
- Plan and implement an online workshop to engage with community stakeholders.
- Develop up-to-date content and coordinate with City to update the project website.
- Correspond and share information with public via email.

#### Assumptions

- EnviroIssues will coordinate with the consultant team and City to develop content and graphics for an online open house.
- EnviroIssues will use the Participate Online platform to develop the online open house.
- EnviroIssues will lead online open house development and online open house updates.
- EnviroIssues will coordinate translation of online open house in up to 4 additional languages. The City will be responsible for directs related to translation services.
- EnviroIssues will lead planning and implementation of an online webinar to coincide with the online open house. Assume 1 preparation meeting with all participating staff.
- Consultant team and City staff will attend the online webinar to provide technical and expert information.
- Community comments and feedback will be collected and tracked for the duration of the online open house.

## <u>Deliverables</u>

- Participate Online online open house, content updated up to 1 time.
- Online open house look and feel.
- Presentation for online webinar, assumes 1 round of review.
- Webinar plan assumes 1 round of review.
- Webinar agenda and annotation agenda assumes 1 round of review.
- Webinar summary assumes 1 round of review.
- Spreadsheet tracking all communications, comments, and feedback collected in this Task and task 10.2.

#### **10.4 Outreach materials**

## **Objectives**

EnviroIssues will develop a suite of materials and notifications to encourage stakeholders to engage with the project and share project information.

# Activities/Approach

- Envirolssues will develop a project look-and-feel, including branding (standards for project material color, font, etc.) and document templates, utilizing any City-established guidelines as a starting point where they are available.
- EnviroIssues will develop content for the City's project website to provide details about the project including a schedule and engagement timeline. EnviroIssues will collaborate with the City to post website content for Phase 1 and 2.
- EnviroIssues will develop content and graphics for project fact sheet/FAQs, to provide an overview of the project during Phase 1 and 2 outreach phases. EnviroIssues will also collaborate with the City to provide needed materials translation/transcreation.
- Envirolssues will develop an overview presentation to be used during Phase 1 at the stakeholder interviews and an updated presentation to be used during Phase 2 for stakeholder briefings.
- Materials will be translated into languages identified by the project team.
- Materials will present project information, including existing conditions, an outline of ways the public can provide feedback, information about design options, and project contact information.
- EnviroIssues will develop notifications for the project, including:
  - Content and graphics for a postcard to notify the local community about the project and upcoming Phase 2 online engagement opportunities.
  - Content and graphics for up to two (2) different sized display ads during Phase 2 outreach.
  - Content for up to three (3) email updates for the City to share with interested stakeholders.
  - Content and graphics for one (1) yard sign to share the online engagement site.
  - Content and images for up to two (2) rounds of social media content for Phase 2 outreach.

## Assumptions

- EnviroIssues will work with the project team and City to develop content for materials.
- EnviroIssues will circulate drafts of materials with the project team and City for approval before distributing to the public.
- EnviroIssues will assist the project team in developing graphics, including maps, and format materials.
- The City will be responsible for covering the direct costs associated with printing and mailing materials.
- EnviroIssues will coordinate translations, the City will be responsible for direct costs.
- The City will coordinate the posting of social media content on City social media accounts.
- EnviroIssues will assist in developing project website updates in coordination with the project team.
- The City will be responsible for updating the project website.
- EnviroIssues will draft project updates to be sent via City listserv.

# <u>Deliverables</u>

• Look and feel of outreach material in full collaboration with the City

- Fact sheet, assumes 1 round of review, up to 2 updates
- FAQ, assumes 1 round of review, up to 2 updates
- Presentation, assumes 2 rounds of review
- Mailed postcards, assumes 1 round of review
- Up to 2 display ads, assumes 1 round of review
- Yard signs, assumes 1 round of review
- Social media content, assumes 1 round of review, up to 2 updates
- City-provide translated versions of final materials listed above
- Draft up to 2 project website updates, assumes 1 round of review
- Draft up to 2 email listserv updates, assumes 1 round of review

## 10.5 Outreach summaries

#### **Objectives**

EnviroIssues will summarize feedback heard through the three phases of community engagement activities including online engagement, interviews, briefings and phone calls, to communicate the engagement process and how community feedback was incorporated into the final design.

#### Activities/Approach

- Outline community engagement activities and objectives.
- Summarize feedback.
- Show how feedback was used.
- Reflect on success and lessons learned of engagement activities.

## Assumptions

• The summaries will be shared with the public and partner agencies.

## <u>Deliverables</u>

- Phase 1 community outreach summary, assumes 1 round of review
- Phase 2 community outreach summary, assumes 1 round of review

Work Element 11 Type, Size, Location (TS&L) Report:

Based on the City's input and based on the results from the engineering activities associated with work elements 1 through 11, TranTech will provide structural, civil, roadway, and drainage engineering services with the goal of preparing a TS&L Report that satisfies current WSDOT BDM Section 2.1.5 requirements and will study up to four bridge replacement alternatives. Two alignment alternatives will be studied; one alternative will look at replacing the bridge in its existing location and one alternative will look at replacing the bridge location between Interurban Ave S and S 124<sup>th</sup> St.

Evaluation criteria for comparing different alternatives will be developed and scoping level engineering designs and cost estimates for each alternative will be provided.

All activities associated with this task will be closely coordinated with the City and the design team will work as an extension of the City staff for recommending a preferred bridge replacement alternative.

The following describes the design subtasks associated with this work element:

## 11.1 - Civil/ Roadway Design

#### a. Alignment and Right-of-Way Plans

Consultant will prepare the preliminary alignment and ROW plan to include proposed right-of-way acquisitions, proposed preliminary permanent easements layout, and proposed preliminary temporary construction easements (TCEs) layout, for each studied alternative.

#### b. Site Preparation and Demolition Plans

A preliminary Site Preparation and Demolition plan will be prepared for each of the studied alternatives. These plans will show topography, existing utilities, existing surface features and items for demolition, removal, or salvage.

#### c. <u>Roadway Plans & Profiles</u>

A preliminary Plan and Profile plan will be prepared for each of the studied alternatives in accordance with City and AASHTO design standards as appropriate for the projected 20-year ADT level of traffic. The City shall provide all current and historical traffic count data available to assist in determining an approximate 20-year ADT projection. It is assumed a formal traffic count will be conducted as part of this scope of work for 42<sup>nd</sup> Ave, 124<sup>th</sup> Street and Interurban Ave. For the alignment option at S 124<sup>th</sup> Street traffic modeling will be completed by the Transpo Group as described in work element 8. The modeling will be utilized to determine if a roundabout (single lane or two lane) or a signal is the best intersection option for the S 124<sup>th</sup> Street and Interurban Avenue S location. The modeling, coordination with the City and King County, and estimates for each option will be utilized for arriving at the recommended S 124<sup>th</sup> Street and Interurban Avenue S intersection option. Feasible connection options to the Green River Trail will be included. For the TS&L phase it is assumed the intersection at 42<sup>nd</sup> Ave S and S 124<sup>th</sup> Street will be a stop controlled intersection similar to other intersections along 124<sup>th</sup> Street, such as 43<sup>rd</sup> to 49<sup>th</sup> Ave S. and

this will not be modeled or designed for during the TS&L portion of the project. If the 124<sup>th</sup> Street location is selected, the intersection of 124<sup>th</sup> Street and 42<sup>nd</sup> Ave intersection will be designed in a future phase.

## d. <u>Coordination with Districts, Utilities, and Stakeholders</u>

Construction of this project will affect multiple parties. Coordination will occur as part of Work Element 11. Additional coordination with outside utilities will occur as part of Work Element 6. Coordination with City utilities will occur with this Work Element. This element will include implementing results of Work Element 11 into the TS&L.

#### e. Conceptual stormwater management plan

Construction of a new bridge and approaches will require pavement replacement. A conceptual stormwater management approach will be developed for each project alternative to identify whether stormwater runoff treatment and/or stormwater flow control thresholds will be exceeded. For each alternative the Low Impact Development Performance Standard will be evaluated and possible scenarios for meeting this requirement will be explored.

#### 11.2 TS&L Report

Consultant will prepare horizontal and vertical alignment alternatives for the project to support the analysis of up to four bridge alignment alternatives. The horizontal alignment for the project has been determined by the existing roadway alignment. However, the exact alignment remains to be fixed based on detailed survey information.

An opinion of cost will be prepared based on the alternatives. The opinion of cost will be based on unit prices and incorporate about a 30% contingency to account for the level of completeness of plan preparation, and to reflect experience on similar projects within the region.

An evaluation matrix will be developed for purpose of comparing the costs, construction feasibility, staged construction flexibility, and other criteria as may be developed during the work. Selection of the preferred alternative will be made by the City stakeholders, and the preferred alternative will be carried forward in the design.

#### **Deliverables:**

- Up to four alternative roadway/bridge plans and profiles
- Opinion of Cost for each alternative
- Evaluation matrix

## Design Criteria for Civil, Roadway, Stormwater, and Traffic Control Elements:

Reports, plans, and estimates, to the extent feasible, shall be developed in accordance with the latest edition and amendments of the following:

- City Standards and Specifications.
- AASHTO 2011, "A Policy of Geometric Design of Highways and Streets; 6<sup>th</sup> Edition";

- AASHTO 2004, "A Guide for Achieving Flexibility in Highway Design of Highways; 1st Edition";
- Washington State Department of Transportation, "Standard Specifications for Road and Bridge Construction";
- Washington State Department of Transportation, "Design Manual";
- Washington State Department of Transportation, "Standard Plans"
- Washington State Department of Transportation, "Materials Laboratory Outline";
- Washington State Department of Transportation, "Construction Manual";
- Washington State Department of Transportation, "Local Agency Guidelines";
- Highway Research Board's Manual entitled "Highway Capacity";
- FHWA and USDOT, "Manual on Uniform Traffic Control Devices for Streets and Highways";
- WSDOT Highway Runoff Manual;
- WSDOT Hydraulics Manual;
- King County 2016 Edition of the King County Surface Water Design Manual

# 11.3 Structural Design

Based on input from the City and engineering activities associated with work elements 1 through 11, TranTech's structural team will perform preliminary structural design associated with up to four viable bridge replacement alternatives for each of the investigated alignments (i.e., existing and S124th). The design will follow most current WSDOT Bridge Design Manual (BDM), AASHTO, and City requirements.

Throughout the structural design activities, special care will be given to incorporate low impact design approaches like noise reduction, minimization of traffic impacts, Life Cost Analysis based on City-desired parameters, and environmental protection.

Our bridge design activities start with a review of the gathered data provided by team members including survey, geotechnical, hydrology, traffic, civil, etc.

Throughout our preliminary structural assessment/design of the studied alternatives, we will be in continuous communication with the City for consultations on parameters like structure location, length and vertical clearance. Also, required roadway elevations would be addressed.

Our approach will be to work together with the City and our design team to address all engineering aspects of this bridge replacement project to optimally assess up to four viable bridge replacement alternatives for each of the investigated alignments. The team will recommend one alternative for a preferred alignment that possesses most of the City-desired attributes to advance to full design stage.

All engineering work will be done per AASHTO LRFD Bridge Design Specifications - sixth Edition, WSDOT Standard Specifications 2020 M41-10, WSDOT Bridge Design Manual M 23-50, June 2019 and current City Standards.

All data and final products will become the property of City upon project completion. All data will be provided in a mutually agreeable format.

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## **Deliverables:**

- Draft TS&L Report
- Final TS&L Report

# WORK ELEMENT 12 30% P&E

This work element is performed by TranTech to provide 30% level P&E documentation in accordance with WSDOT LAG Manual.

# 12.1 30% Plans and Opinion of Cost

This work element item encompasses all the activities associated with the preparation of the 30% Plans and engineer's opinion of construction cost Estimate (P&E) documents. Constructability Review and QA/QC activities are an inherent part of this element.

## Assumptions:

City to provide:

• Title block and CAD standards

# <u>Deliverables:</u>

- Two 11x17 (half size) copies of Plans.
- Two copies of the quantity Estimates and opinion of construction cost.
- Electronic PDF copies of the Plans and opinion of construction cost in both PDF and Excel.

# WORK ELEMENT 13 - PHASE 2 SUPPLEMENT- AD-READY DESIGN

At the discretion of the City additional design phase services may be added as a supplement to this contract.

WORK ELEMENT 14 - PHASE 2 SUPPLEMENT - CONSTRUCTION PHASE SERVICES:

At the discretion of the City construction phase services may be added as a supplement to this contract.

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TranTech Engineering, LLC (Prime CONSULTANT) is a certified Underutilized, Disadvantaged Business (UDBE) D2W0025137. Our Partners, 1 Alliance Geomatics, (UDBE D4M0022928), Ott-Sakai (UDBE #D4M0023226), EnviroIssues (DBE #D2F0022763) and Makers (DBE #D2F0022439) are also UDBE and DBE certified.

Agreement Number: 20 -116

In this Exhibit the agency, as applicable, is to provide a description of the format and standards the consultant is to use in preparing electronic files for transmission to the agency. The format and standards to be provided may include, but are not limited to, the following:

- I. Surveying, Roadway Design & Plans Preparation Section
  - A. Survey Data

Please see Exhibit A-Scope of Work for description of format and standards to be used.

B. Roadway Design Files

Please see Exhibit A-Scope of Work for description of format and standards to be used.

C. Computer Aided Drafting Files

Please see Exhibit A-Scope of Work for description of format and standards to be used.

Agreement Number: 20 - 110

D. Specify the Agency's Right to Review Product with the Consultant

E. Specify the Electronic Deliverables to Be Provided to the Agency As needed per Exhibit A

F. Specify What Agency Furnished Services and Information Is to Be Provided See Exhibit A

Agreement Number: 70 - 11/1

II. Any Other Electronic Files to Be Provided

Please see Exhibit A-Scope of Work for electronic deliverables per task.

III. Methods to Electronically Exchange Data

Email, CD, flash drive, file share, FTP site.

A. Agency Software Suite

B. Electronic Messaging System
 Outlook, text

C. File Transfers Format

See attached Exhibits

Agreement Number: 20-1110

**Exhibit D - Prime Consultant Cost Computations Summary** 

City of Tukwila - 42nd Ave S Bridge Replacement

**TRANTECH** Engineering LLC

# TRANTECH TEAM BUDGET BREAKDOWN

TranTech	\$	629,461
1 Alliance	Ś	89,614
Landau- Geotechnical	S	72,328
Landau- Environmental	\$	31,660
Makers	Ś	26,623
Ott-Sakai	Ś	25,781
Transpo	\$	49,693
Envirolssues	÷	55,283

TOTAL PROJECT BUDGET	\$ 980,443
MANAGEMENT RESERVE	\$ 98,044
TOTAL CONTRACT BUDGET	\$ 1,078,487

Exhibit D - Prime Consultant Cost Computation City of Tukwila - 42nd Ave S Bridge Replacement	ant Cost Computation S Bridge Replacement													
Work Element 1, 6	Work Element 1, 6, 9, 11, and 12 - TranTech													
		Principal Engr	Ma	Structural	Structural	Structural	Structural	Senior	Senior	Staff	Const.	Senior CAD	Admin 2	
				Engineer	Engineer	Engineer 2	Engineer 1	Engineer	Engineer	Engineer	Estimator			
Work Element 1 - Project Management	gement													
Design Team Meetings			120											
Project Team Meetings (Incl. City)	il. City)		120											
PM - Progress Reports, Sci	tedule and Invoicing		<b>9</b>										180	
Work Element 6 - Utility Coordination	nation	2	æ					60		24			60	
Work Element 9. Illumination and Simona	Cinneca													
Illumination TS&L		9							9			16		
Illumination 30% Design		2							8			ą		
Work Element 11 - TS&L Report	-													
11.1 - Type, Size and Location (	TS&L) Report													
Concept Development				120	120	120	98	140	100	140		Q.		
Plans & Estimation				\$	120	120	80	80	80	9	60	220		T
Report		ą	\$	54	54			24	24				40	
Work Element 12 - 30% Design														
30% Desion														
30% P&E (plans and quantities)	d quantities)			100	160	160	160	120	100	160	24	160		
30% GC Review		9								3	5	8		
Work Element 13 - Ad-ready Design (*)	sign (*)													
Work Element 14 - Construction Phase Services (*)	n Phase Services (*)													
	(*) Efforts for these Work Element are not		ed in this Contra	act and will be so	Included in this Contract and will be scored and budneted at a later date	ied al a later da								
					B		i							
Total Staff Hours		8	428	346	424	400	320	101	101	10	84	2	art.	
Direct Hourty Rate		\$79.00	\$75.00	\$65.00	\$60.00	\$48.00	<b>\$45.00</b>	\$60.00	\$60.00	\$40.00	\$82.00	\$45.00	\$35.00	4,046
Total Direct Salary Cost		\$7,110	\$32,100	\$22,360	\$25,440	\$19,200	\$14,400	\$25,440	\$24,240	\$16,160	\$6,385	\$22,320	\$7,980	\$223,638.00
											Tota	Total Direct Labor Cost	Cost	\$223,638.00
											Profit at	Profit at 30.17% of Direct Labor	ct Labor	\$70,893,25
					_									
											S	Subtotal (Labor)		\$627,461.14
Direct Costs (trave) production Eader atc)	t Fadar alc)													
														\$2,000
												1		1
												Grand lotal	1	\$629,461
Notes:														

Exitibile - sup-corisularit cost computations				-						
City of Tukwila - 42nd Ave S Bridge Replacement	-									
Work Element 2 - Surveying - 1 Alliance										
		1.1.1		0000						
	Luiding	Manager	Project	CAUU	1900	lecn	ASSIST	Admin	Total	
		Manager	Infat Inc	2	•	0	E .			
Work Element 2										
2.1 Survey PM, Admin, QA/QC	4	16	4				80	80		
2.2 Survey Control	2	4	8	24	30	30				
2.3 Field Mapping	2	80			6	06				
2.4 Utility Surveying	2	80		-	90	30				
2.5 Office Processing	2	16	40	100		-				
2.6 Right-of-Way	80	16	80	16						
Total Staff Hours	20	68	132	140	150	150	8	œ	676	
Direct Rates	\$84.50	\$54.50	\$50.50	\$44.50	\$39.00	\$33.00	\$34.00	\$33.50		
Total Direct Salary Cost	\$1,690	\$3,706	\$6,666	\$6,230	\$5,850	\$4,950	\$272	\$268	\$29,632	
	-									
							lota	Total Labor Cost	\$29,632	
						ō	OH at 133.05% of Direct Labor	Direct Labor	\$39,425	
						Pro	Profit at 28.20% of Direct Labor	Direct Labor	\$8,356	
					-			Total	\$77,414	
Direct Costs (Mileage, Reproduction, Shipping, etc.)									-	
		-				3D	3D Laser Scanner		\$3,500	
						nG	UG Utility Locates		\$5,700	
							Traffic Control		\$1,500	
							Mileage		\$1,500	
							Gr	Grand Total:	\$89,614	

1 Alliance

Exhibit E	Exhibit E - Sub-consultant Cost Computations							
City of T	City of Tukwila - 42nd Ave S Bridge Replacement							
	Work Element 3 - Geotechnical - Landau							
		Principat	Senior	Senior	Project	CAD/GIS	Project	Total
			Associate	Project		Tech	Coordinator	
Work Element 3	hent 3						-	
3.1 - Revie	3.1 - Review Existing Geotechnical Information	4		16			4	
3.2 - Geote	3.2 - Geotechnical Investigation Program	4		16	64		4	
3.3 - Prelin	3.3 - Preliminary Geotechnical Engineering Analysis	16		60		2		
3.4 - Draft	3.4 - Draft and Final Preliminary Geotechnical Reports	16		60	16	8	12	
3.5 - Meeti	3.5 - Meeting Participation	4		12				
Total Staff Hours	Hours	44	0	164	80	10	24	322
<b>Direct Rates</b>	98	\$83.08	\$60.10	\$43.27	\$38.61	\$40.75	452	200
Total Direc	Total Direct Salary Cost	\$3,656	\$0	\$7.096	\$3.089	\$408		\$15 DBG
								20061
						Total L	Total Labor Cost	\$15.086
					OHa	OH at 212.63% of Direct Labor	rect Labor	\$32.078
					Profit	Profit at 27.60% of Direct Labor	rect Labor	\$4,164
							Total	\$51,328
Direct Cos	Direct Costs (Mileage, Reproduction, Shipping, etc.)							62ED
Drilling Su	Drilling Subcontractor							\$16 ADD
Excavatior	Excavation Subcontractor							\$1400
Private Uti	Private Utility Locator							2400
Site Resto	Site Restoration Mulch/Straw							\$500
Laboratory Testing	∕ Testing							\$2,050
						Grai	Grand Total:	\$72,328

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	Exhibit E - Sub-consultant Cost Computations							
City of	City of Tukwila - 42nd Ave S Bridge Replacement							
	Work Element 4 - Permitting - Landau							
		Principal	Senior	Senior	Project	CAD/GIS	Project	Total
			Associate	Project		Tech	Coordinator	
Work Element 4	ment 4							
4.1 - Wet!	4.1 - Wetland/Waterway Delineation	-	32		50	8	9	
4.2 - WSE	4.2 - WSDOT NEPA CE Form		6		8			
4.3 - Agei	4.3 - Agency Preapplication Meetings		34		14	5	7	
4.4 - Permit Matrix	nit Matrix	-	14		4			
Total Staff Hours	ff Hours	6	80	-	76	10	10	180
Direct Rates	Ites	\$83.08	\$60.10	\$43.27	\$38.61	\$40.75	\$34	2
Total Dire	Total Direct Salary Cost	\$166	65 349	9	\$2 924	\$408		¢0 776
			2-2'24	\$	10014			017'04
						Total	Total Labor Cost	\$9,276
					HO	OH at 212.63% of Direct Labor	irect Labor	\$19,723
					Profit	Profit at 27.60% of Direct Labor	Irect Labor	\$2,560
		_			1		Total	\$31.560
DIrect CO	Direct Vosts (mineage, Keproauction, Snipping, etc.)							\$100
						Gra	Grand Total:	\$31,660

Exhibit	Exhibit E - Sub-consultant Cost Computations						
City of 1	City of Tukwila - 42nd Ave S Bridge Replacement						
	Work Element 5 - Bridge Aesthetics - Makers						
		Project	Principal	Senior	Landscp	Clerical	Total
		Manager		Designer	Architect		
			-				
Work Element XX	ment XX						
6.1-a	Review		2	8			
6.1-b	Sketch concepts		12	20	12		
6.1-c	Review w/ staff		0	2	5		
6.1-d	Assist w/ open house		4		4		
6.1-e	Review resultrs		2	2	2		
6.1-f	Prepare 30% drawings		16	80	40		
6.1-g	Prepare 30% cost estimate		2	9	9		
<b>Total Staff Hours</b>	f Hours	0	43	118	71	0	232
<b>Direct Rates</b>	les	\$0.00	\$64.93	\$34.00	\$37.17	\$0.00	
Total Dire	Total Direct Salary Cost	\$0	\$2,792	\$4,012	\$2,639	\$0	\$9,443
					Total L	Total Labor Cost	\$9,443
				OH at 1	OH at 156.18% of Direct Labor	ect Labor	\$14,748
				Profit at	Profit at 25.75% of Direct Labor	ect Labor	\$2,432
						Total	\$26,623
Direct Co:	Direct Costs (Mileage, Reproduction, Shipping, etc.)					-	
					Gran	Grand Total:	\$26,623

Exhibit E - Sub-consultant Cost Computations City of Tukwila - 42nd Ave S Bridge Replacement					
Work Element 7 - Constructability Review, Constru	Review, Construction CPM and Estimation - Ott Sakai	ation - Ott Sa	kai		
	Principal	Senior	Contract	Clerical	Total
		Construct.	Manager		
		Specialist			
Work Element 7					
Project Management			8		
7.1 Constructability Review, and Cost Estimate	20	60			
Total Staff Hours	50	60	ω	0	118
Direct Rates	\$114.00	\$114.00	\$80.00	\$0.00	
Total Direct Salary Cost	\$5,700	\$6,840	\$640	0\$	\$13,180
	-		-Ľ	Total Labor Cost	\$13,180
			OH at 70%	OH at 70% of Direct Labor	\$9,226
		<b>Ľ</b>	ofit at 25.61%	Profit at 25.61% of Direct Labor	\$3,375
				Total	\$25,781
Direct Costs (Mileage, Reproduction, Shipping, etc.)					
				Grand Total:	\$25.781
					• > • • • • •

mt         Freiset         Fraighteer         Engineer         Engineer         Engineer         Engineer         Engineer         Engineer         Engineer         Engineer         Cierical           Manager         4         4         4         3	Exhibit E - Sub-consultant Cost Computations								
Project         Principal         Engineer         Engineer         Engineer         Engineer         Engineer         Clarical           Manager	City of Tukwila - 42nd Ave S Bridge Replacement								
Project Internation         Project Francipal         Engineer Fragineer         Engineer         Engineer         Cientral           Manager	Work Element 8 - Traffic Control - Transpo								
Project         Principal         Engineer         Engineer         Engineer         Engineer         Engineer         Clerical           Manager         N         III         III         III         II         <									
Manager         Imanger         Imanger <t< td=""><td></td><td>Project</td><td>Princinal</td><td>Fnoinear</td><td>Fndineer</td><td>Endineer</td><td></td><td>-looked</td><td></td></t<>		Project	Princinal	Fnoinear	Fndineer	Endineer		-looked	
8     4     4     3       2     12     4     3       2     12     4     3       4     4     8     24       4     8     24       6     8     24       6     10     12       7     16     24       8     20       10     112     26       116     2     48       116     2     48       8     132     51.05       9     132     53.33       9     132     53.01       9     132     53.01       9     132     53.01       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     132     54.55       9     148     148    1		Manager						CIALICAL	1 0(3)
8     4     4     3       2     12     4     3       2     12     2     12       4     8     20       6     8     20       6     8     20       6     6     2       10     12     26       16     2     4       16     2     4       16     2     12       23     13     23       4     30     4       9     12     26       9     12     26       9     13     30.73       532.68     54.81     51.06       55.28     54.81     51.06       55.28     51.96     237.74       55.78     51.96     53.74       55.78     54.91.06     53.77       55.81     51.96     53.77       55.81     51.96     53.77       56     53.77     53.725       57.81     51.96     53.77       57.81     51.96     53.77       57.81     51.96     53.77       57.81     51.96     53.77       57.81     51.96     53.77       57.91     9     9									
8     4     4     3       2     12     4     3       2     12     24     3       4     2     12     24       4     8     2       8     2     4       8     2     4       8     16     4       8     16     4       9     16     2       10     12     26       16     2     48       552.16     \$34.81     \$61.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.81     \$51.06       \$552.16     \$34.82     \$1.32       \$552.16     \$34.92     \$1.32       \$552.16     \$34.92     \$1.36       \$61.06     \$50.77     \$31.25       \$61.06     \$61.06     \$60.77       \$61.06     \$61.96     \$61.96       \$61.06     \$61.96     \$61.96       \$61.06     \$61.96 </td <td>Work Element 09 18.1 - Traffic Analysis</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Work Element 09 18.1 - Traffic Analysis								
2     12     4     24     2       2     4     2     2     4     2       4     2     4     2     2     4     2       4     2     4     2     4     2     2       4     2     4     2     4     2     2       6     2     2     4     2     4     2       10     10     16     2     4     12     26       16     2     4     30     48     32     3       552.16     \$4.81     \$61.06     \$4.087     \$37.74     \$30.77     \$31.26       552.16     \$54.81     \$61.06     \$4.087     \$37.74     \$30.77     \$31.26       552.16     \$54.81     \$61.06     \$4.087     \$37.74     \$30.77     \$31.26       552.16     \$54.81     \$61.06     \$4.087     \$37.74     \$30.77     \$31.26       552.16     \$54.81     \$61.06     \$4.88     \$132     \$128     \$4.88     \$128       552.16     \$54.81     \$61.06     \$4.88     \$132     \$128     \$128       552.17     \$51.96     \$4.98     \$132     \$132     \$132     \$128       56.9     \$53.9	**PM/Coordination/Invoicing	8		4				6	
24     8     24     8     20       4     4     8     16     4     8       6     6     2     12     24     3       8     2     12     24     3       8     2     12     24       9     10     12     26       10     16     2     48     32       16     2     48     32     3132       55216     54.81     561.06     540.87     537.74       552.16     54.81     561.06     540.87     537.74       552.16     54.81     561.06     540.87     537.74       552.16     54.81     537.74     330.77     531.26       552.16     54.81     537.74     330.77     531.26       552.16     54.81     537.74     330.77     531.26       552.16     54.81     537.74     330.77     531.26       553     51.96     54.93     74     331.26       554.10     54.93     74     330.77     531.26       557.74     530.77     531.26     54.332     54.332       557.74     54.33     51.73     54.330     54.330       557.74     54.33     77.74<	**Future Demand	5		12	4			n	
4     4     2     12     24     24       4     2     12     24     3       8     16     4     3     3       8     10     12     26     3       10     12     26     3       16     2     4     3       16     2     48     32       88     4     30     48     32       16     2     48     32     3       88     4     30     48     32       9     5339     \$1,832     \$1,962     \$331/35       9     54,590     \$339     \$1,832     \$1,962       9     54,590     \$339     \$1,832     \$1,962       9     132     \$36,07% of Direct Labor       10     1     10     10	**Traffic Ops and LOS	2			. 80				
4     2     12     24     12     24     12       8     2     8     16     4     3     3       6     6     12     12     24     3       6     6     12     24     3       10     10     12     26     3       11     10     12     26     3       12     26     48     32     3       16     2     48     32     3       88     4     30     48     33       852.16     \$339     \$1,832     \$1,32     \$31,25       \$552.16     \$339     \$1,832     \$1,32     \$31,25       \$552.16     \$339     \$1,832     \$1,33     \$31,25       \$552.16     \$339     \$1,832     \$1,33     \$31,25       \$552.16     \$339     \$1,832     \$1,33     \$31,25       \$563.16     \$339     \$1,832     \$1,33     \$31,25       \$563.16     \$339     \$1,832     \$1,33     \$31,25       \$573.17     \$31,25     \$33,73     \$31,25       \$563.17     \$1,30     \$1,30     \$1,30       \$563.17     \$1,30     \$1,30     \$1,30       \$61     \$1,30     \$1,30<	**Evaluate Options	4		4	000				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	**Conceptual Drawings x 3	4		2	12				
8     2     8     3       6     6     8     3       8     10     12     26       10     16     2     48     32       16     2     48     32     3       16     2     48     30     3       9     132     537.14     530.77     531.25       9     132     51,962     54,917     531.74       9     5339     51,832     51,962     54,307       9     5339     51,832     51,962     54,302       9     5339     51,832     51,962     530.77       9     5339     51,832     51,962     54,902       9     5339     51,832     51,962     54,902       9     531     132     54,962     53,077       9     531     531,74     530.77     531.25       9     5324     132     54,962     54,962       9     531     51,783     5324       9     531     51,783     5324       9     54,962     54,962     54,960       9     54,962     54,962     54,960       9     54,962     54,960     54,960       9	**Summary Report	4		80	16				
8     2     8     3       6     6     10     12     26       10     16     2     48     32       16     2     48     32     3       16     2     48     32     3       16     2     48     32     3       16     2     48     30     7     3       16     2     48     30     7     3       16     2     48     30     7     3       16     2     4     30     48     32       55216     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77       54590     \$339     \$1,832     \$1,962     \$4,982     \$1,785       54,962     \$31,962     \$4,982     \$1,785     \$31.25       17041     132     \$1,783     \$30.77     \$31.25       17041     132     \$1,783     \$30.77     \$31.25       16     1     132     \$4,98.07% of Direct Labor       1     1     1     1     1       1     1     1     1     1       1     1     1     1     1       1     1     1     1     1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
8     2     1     3       6     1     1     1     3       8     1     1     1     3       16     2     48     3     3       16     2     48     3     3       16     2     48     3     3       16     2     48     3     3       16     2     48     3     3       88     4     30     48     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3     3       9     3     3     3	8.2 - Traffic Control								
6       1       12       26         10       10       12       26         11       2       12       26         16       2       4       32       3         16       2       4       30       48       32         16       2       4       30       48       32       3         88       4       30       48       132       58       9       9         88       4       30       48       132       58       9       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10	**PM/Coordination/Invoicing	80	2					e	-
8       10       12       26       1         10       10       12       26       3         11       2       2       48       32       3         16       2       48       32       58       9         88       4       30       48       132       58       9         88       4       30       48       132       58       9         88       4       30       48       132       58       9         88       54,590       \$339       \$1,832       \$1,952       \$4,982       \$1,785       \$281         9       9       132       \$5,077       \$31,255       \$5,077       \$31,255         9       9       132       \$5,077       \$5,077       \$51,255         9       9       132       \$5,077       \$51,255       \$54,982       \$53,125         9       9       132       \$581       \$52,165       \$54,982       \$1,785       \$281         9       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       1	**Team Meetings x 3	9							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	**Neighborhood Meetings x 2	80							
16     2     48     32     3       16     2     48     32     3       88     4     30     48     132     58       88     4     30     48     132     58       88     8     4     30     48     132       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,962       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,981     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,981     \$31.25       \$61     \$1,962     \$4,982     \$1,962     \$4,981     \$31.25       \$61     \$1,962     \$4,982     \$1,962     \$4,982     \$1,962       \$61     \$1,962     \$4,983     \$61.06     \$61.06     \$61.06       \$61     \$61     \$61.06     \$61.06     \$61.06     \$61.06       \$61     \$61     \$61.06     \$61.06     \$61.06       \$61     \$61     \$61.06     \$61.06     \$	**TCPs x 4	10				12			
16     2     48     32     3       16     2     48     32     32     3       88     4     30     48     132     58     9       852.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$54,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$64,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     9     \$1,832     \$1,962     \$4,960     \$1,061       9     9     9     9     \$1,962     \$4,960     \$1,061       10     9     9     9     9     \$1,962     \$4,600       10     9     9     9     9     9     \$1,962       10     9     9     9     9     9     9       10 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
16     2     48     32     3       16     4     30     48     32     5       88     4     30     48     132     58     9       88     8     4     30     48     132     58     9       88     8352.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     9     9     9     9     9       9     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9     9     9     9     9     9     9       9	8.3 - Traffic Signal Design								
16     16     48     32     32     32       88     4     30     48     132     58     9       852.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$31.25       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$31.25       \$54,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$64,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$64,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$64,590     \$339     \$1,832     \$1,962     \$4,960     \$1,661     \$281       \$64,690     \$1,962     \$4,960     \$1,661     \$1,960     \$281       \$64,690     \$1,962     \$1,962     \$4,960     \$1,661     \$1,960       \$64,690     \$1,962     \$1,962     \$1,960     \$1,960     \$1,960       \$64,690     \$1,962     \$1,962     \$1,962     \$1,960     \$1,960       \$64,690     \$1,962     \$1,962     \$1,962     \$1,960     \$1,960       \$64,690     \$1,962     \$1,962     \$1,962	**PM/Coordination/Invoicing	16	2					e	
88     4     30     48     132     58     9       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$84,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785       \$84,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785       \$84,590     \$631     \$1,962     \$4,982     \$1,785     \$281       \$1041     \$1076     \$1,962     \$4,960     \$1664     \$1066       \$1041     \$1066     \$1066     \$1066     \$1066     \$1066       \$1041     \$1066     \$1066     \$1066     \$1066     \$1066       \$1041     \$1066     \$1066     \$1066     \$1066     \$1066       \$1041     \$1066     \$1066     \$1066     \$1066     \$1066       \$1066     \$1066     \$1066     \$1066     \$1066     \$1066       \$1066     \$1066     \$1066     \$1066     \$1066     \$1066       \$1066     \$10	**Perm Signal Plans x 4	16				48		- -	
88     4     30     48     132     58     9       \$52.16     \$84.81     \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       \$61.06     \$40.87     \$37.74     \$30.77     \$31.25       \$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,355       \$61.06     \$1,832     \$1,832     \$1,962     \$4,982     \$21.25       \$61.06     \$339     \$1,832     \$1,832     \$1,962     \$281       \$61.06     \$61.06     \$61.06     \$61.07%     \$61.066     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06       \$61.06     \$61.06     \$61.06     \$61.06     \$61.06     \$61.06	2-1-10-011								
\$52.16       \$84.81       \$61.06       \$40.87       \$37.74       \$30.77       \$31.25         \$4,590       \$339       \$1,832       \$1,962       \$4,982       \$1,785       \$281         \$4,590       \$339       \$1,832       \$1,962       \$4,982       \$1,785       \$281         \$1,962       \$3,982       \$1,785       \$5281       Total Labor Cost       Total Labor Cost         \$1,962       \$1,862       \$4,982       \$1,962       \$4,962       \$1,962       \$1,962         \$1,962       \$1,862       \$1,962       \$4,960       Direct Labor       Total Labor         \$1,963       \$1,964       \$1,964       \$1,962       \$1,966       \$1,966       \$1,966         \$1,964       \$1,966       \$1,966       \$1,966       \$1,966       \$1,966       \$1,966       \$1,966       \$1,966         \$1,966	Total Staff Hours	88	4	30	48			6	369
\$4,590     \$339     \$1,832     \$1,962     \$4,982     \$1,785     \$281       Total Labor Cost       Profit at 28.4% of Direct Labor     Profit at 28.4% of Direct Labor     Total Labor Cost       Profit at 28.4% of Direct Labor     Profit at 28.4% of Direct Labor       Profit at 28.4% of Direct Labor     Profit at 28.4% of Direct Labor	Direct Rates	\$52.16	\$84.81	\$61.06	\$40.87			\$31.25	
Total Labor Cost       OH at 186.07% of Direct Labor       Profit at 28.4% of Direct Labor       Total	Total Direct Salary Cost	\$4,590	\$339	\$1,832	\$1,962	\$4,982		\$281	\$15,770
OH at 186.07% of Direct Labor       Profit at 28.4% of Direct Labor       Total       Total       Total       Carand Total:							Total L	abor Cost	\$15 770
Profit at 28.4% of Direct Labor						OH at 186	5.07% of Di	rect Labor	\$29.344
Grand Total:						Profit at 2	28.4% of Di	rect Labor	\$4,479
Total Carl Total: \$40									
Grand Total:								Total	\$49,593
Grand Total:									
	Direct Costs (Mileage, Keproduction, Shipping, etc.)								\$100
_								_	
							Grai	d Total:	\$49,693

Page 8

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				Total								ľ			489		\$19,076	\$13,070	\$30,592	\$5,065	\$54,733		\$550	\$55,283
																		I UTAI LADOT COST	Direct Labor	Direct Labor	Total			Grand Total: \$55,283
				Web Dec	=						-	30			 30	\$42.00	\$1,260	 101	OH at 160.37% of Direct Labor	Profit at 26.55% of Direct Labor	 	 		 פֿ
				Web Dev	Ξ							22			22	\$52.00	\$1,144	_	Б	Profi				
				Graphic	Designer	_						13	19		 32	\$30.00	\$960	 			 			 -
				Graphic	Designer	-				4		2	8		19	\$38.00	\$722							
				Senior	Associate					80	4	30	7	4	53	\$63.00	\$3,339							
-			 	Associate 1	1		7			σ	29	59	39	8	151	\$41.00	\$6,191	-						
				Project	Coordinator		2			5	44	65	49	12	 182	\$30.00	\$5,460							
Exhibit E • Sub-consultant Cost Computations	City of Tukwila - 42nd Ave S Bridge Replacement	Work Element 10 - Community Outreach - Envirolesues						nent 1	nent 11	11.1 - Community outreach plans	ceholder interviews, briefings and phone calls	11.3 - Online engagement	11.4 - Outreach materials	11.5 • Outreach summaries	f Hours	66 Sec. 2010	Total Direct Salary Cost						Direct Losts (mileage, Keproduction, Snipping, etc.)	
Exhibit E	City of Tr	Nort Ele	-				i	WORK Element 1	Work Element 11	11.1 - Comr	11.2 - Stake	11.3 - Onlin	11.4 - Outre	11.5 - Outre	Total Staff Hours	<b>Direct Rates</b>	Total Direct						DIRECT COST	

The CONSULTANT shall not sub-contract for the performance of any work under this AGREEMENT without prior written permission of the AGENCY. Refer to section VI "Sub-Contracting" of this AGREEMENT.

See attached Exhibits

During the performance of this AGREEMENT, the CONSULTANT, for itself, its assignees, and successors in interest agrees as follows:

- 1. Compliance with Regulations: The CONSULTANT shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the AGENCY, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "REGULATIONS"), which are herein incorporated by reference and made a part of this AGREEMENT.
- 2. Non-discrimination: The CONSULTANT, with regard to the work performed during this AGREEMENT, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of sub-consultants, including procurement of materials and leases of equipment. The CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the REGULATIONS, including employment practices when this AGREEMENT covers a program set forth in Appendix B of the REGULATIONS.
- 3. Solicitations for Sub-consultants, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiations made by the CONSULTANT for work to be performed under a sub-contract, including procurement of materials or leases of equipment, each potential sub-consultant or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this AGREEMENT and the REGULATIONS relative to non-discrimination on the grounds of race, color, sex, or national origin.
- 4. Information and Reports: The CONSULTANT shall provide all information and reports required by the REGULATIONS or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the AGENCY, the STATE, or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such REGULATIONS, orders and instructions. Where any information required of a CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information, the CONSULTANT shall so certify to the AGENCY, the STATE, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- 5. Sanctions for Non-compliance: In the event of the CONSULTANT's non-compliance with the nondiscrimination provisions of this AGREEMENT, the AGENCY shall impose such AGREEMENT sanctions as it, the STATE, or the FHWA may determine to be appropriate, including, but not limited to:
  - Withholding of payments to the CONSULTANT under this AGREEMENT until the CONSULTANT complies, and/or;
  - Cancellation, termination, or suspension of this AGREEMENT, in whole or in part.
- 6. Incorporation of Provisions: The CONSULTANT shall include the provisions of paragraphs (1) through (5) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the REGULATIONS, or directives issued pursuant thereto. The CONSULTANT shall take such action with respect to any sub-consultant or procurement as the STATE, the AGENCY, or FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance.

Provided, however, that in the event a CONSULTANT becomes involved in, or is threatened with, litigation with a sub-consultant or supplier as a result of such direction, the CONSULTANT may request the AGENCY enter into such litigation to protect the interests of the STATE and/or the AGENCY and, in addition, the CONSULTANT may request the United States enter into such litigation to protect the interests of the United States. Agreement Number:

- Exhibit G-1(a) Certification of Consultant
- Exhibit G-1(b) Certification of
- Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters -Primary Covered Transactions
- Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying
- Exhibit G-4 Certificate of Current Cost or Pricing Data

#### Exhibit G-1(a) Certification of Consultant

I hereby certify that I am the and duly authorized representative of the firm of TranTech Engineering, LLC whose address is 365 118th Ave SE Suite #100, Bellevue, WA 98005 and that neither the above firm nor I have:

- a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above CONSULTANT) to solicit or secure this AGREEMENT;
- b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out this AGREEMENT; or
- c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above CONSULTANT) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this AGREEMENT; except as hereby expressly stated (if any);

I acknowledge that this certificate is to be furnished to the Washington State Department of Transportaion and the Federal Highway Administration, U.S. Department of Transportation in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

TranTech Engineering, LLC

Consultant (Firm Name)

Signature (Authorized Official of Consultant)

11/4/20

Date

#### Exhibit G-1(b) Certification of

I hereby certify that I am the:

Project Manager

Other

of the City of Tukwila

, and City of Tukwila

or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this AGREEMENT to:

- a) Employ or retain, or agree to employ to retain, any firm or person; or
- b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as hereby expressly stated (if any):

I acknowledge that this certificate is to be furnished to the

and the Federal Highway Administration, U.S. Department of Transportation, in connection with this AGREEMENT involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

eSigned via SeamiessDocs.com Hari Ponnekanti Key: 2030-2805/87/1206007/876/2000(600008

11/10/2020

Signature

1.1

Date

#### Exhibit G-2 Certification Regarding Debarment, Suspension and Other Responsibility Matters - Primary Covered Transactions

- I. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - B. Have not within a three (3) year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State anti-trust statues or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - C. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - D. Have not within a three (3) year period preceding this application / proposal had one or more public transactions (Federal, State and local) terminated for cause or default.
- II. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### TranTech Engineering, LLC

Consultant (Firm Name)

Signature (Authonized Official of Consultant)

11/4/20 Date

Agreement Number: 20 - 116

# Exhibit G-3 Certification Regarding the Restrictions of the Use of Federal Funds for Lobbying

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative AGREEMENT, and the extension, continuation, renewal, amendment, or modification of Federal contract, grant, loan or cooperative AGREEMENT.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative AGREEMENT, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00, and not more than \$100,000.00, for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier sub-contracts, which exceed \$100,000, and that all such sub-recipients shall certify and disclose accordingly.

TranTech Engineering, LLC

Consultant (Firm Name)

Signature (Authorized Official of Consultant)

11/4/20

Date

#### Exhibit G-4 Certificate of Current Cost or Pricing Data

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 2.101 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.403-4) submitted, either actually or by specific identification in writing, to the Contracting Officer or to the Contracting Officer's representative in support of  $42^{MA}AVE 5$ . Bridge Leplace mentare accurate, complete, and current as of 11/4/20

This certification includes the cost or pricing data supporting any advance AGREEMENT's and forward pricing rate AGREEMENT's between the offer or and the Government that are part of the proposal.

Firm: TranTech Engineering, LLC

Title Signature

Date of Execution\*\*\*:

<sup>\*</sup>Identify the proposal, quotation, request for pricing adjustment, or other submission involved, giving the appropriate identifying number (e.g. project title.) \*\*Insert the day, month, and year, when price negotiations were concluded and price AGREEMENT was reached.

<sup>\*\*\*</sup>Insert the day, month, and year, of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

#### To Be Used Only If Insurance Requirements Are Increased

The professional liability limit of the CONSULTANT to the AGENCY identified in Section XII, Legal Relations and Insurance of this Agreement is amended to \$

The CONSULTANT shall provide Professional Liability insurance with minimum per occurrence limits in the amount of \$

Such insurance coverage shall be evidenced by one of the following methods:

- Certificate of Insurance.
- Self-insurance through an irrevocable Letter of Credit from a qualified financial institution.

Self-insurance through documentation of a separate fund established exclusively for the payment of professional liability claims, including claim amounts already reserved against the fund, safeguards established for payment from the fund, a copy of the latest annual financial statements, and disclosure of the investment portfolio for those funds.

Should the minimum Professional Liability insurance limit required by the AGENCY as specified above exceed \$1 million per occurrence or the value of the contract, whichever is greater, then justification shall be submitted to the Federal Highway Administration (FHWA) for approval to increase the minimum insurance limit.

If FHWA approval is obtained, the AGENCY may, at its own cost, reimburse the CONSULTANT for the additional professional liability insurance required.

Notes: Cost of added insurance requirements: \$

- Include all costs, fee increase, premiums.
- This cost shall not be billed against an FHWA funded project.
- For final contracts, include this exhibit.

The purpose of this exhibit is to establish a procedure to determine if a consultant's alleged design error is of a nature that exceeds the accepted standard of care. In addition, it will establish a uniform method for the resolution and/or cost recovery procedures in those instances where the agency believes it has suffered some material damage due to the alleged error by the consultant.

#### Step 1 Potential Consultant Design Error(s) is Identified by Agency's Project Manager

At the first indication of potential consultant design error(s), the first step in the process is for the Agency's project manager to notify the Director of Public Works or Agency Engineer regarding the potential design error(s). For federally funded projects, the Region Local Programs Engineer should be informed and involved in these procedures. (Note: The Director of Public Works or Agency Engineer may appoint an agency staff person other than the project manager, who has not been as directly involved in the project, to be responsible for the remaining steps in these procedures.)

#### Step 2 Project Manager Documents the Alleged Consultant Design Error(s)

After discussion of the alleged design error(s) and the magnitude of the alleged error(s), and with the Director of Public Works or Agency Engineer's concurrence, the project manager obtains more detailed documentation than is normally required on the project. Examples include: all decisions and descriptions of work; photographs, records of labor, materials and equipment.

#### Step 3 Contact the Consultant Regarding the Alleged Design Error(s)

If it is determined that there is a need to proceed further, the next step in the process is for the project manager to contact the consultant regarding the alleged design error(s) and the magnitude of the alleged error(s). The project manager and other appropriate agency staff should represent the agency and the consultant should be represented by their project manager and any personnel (including sub-consultants) deemed appropriate for the alleged design error(s) issue.

#### Step 4 Attempt to Resolve Alleged Design Error with Consultant

After the meeting(s) with the consultant have been completed regarding the consultant's alleged design error(s), there are three possible scenarios:

- It is determined via mutual agreement that there is not a consultant design error(s). If this is the case, then the process will not proceed beyond this point.
- It is determined via mutual agreement that a consultant design error(s) occurred. If this is the case, then the Director of Public Works or Agency Engineer, or their representatives, negotiate a settlement with the consultant. The settlement would be paid to the agency or the amount would be reduced from the consultant's agreement with the agency for the services on the project in which the design error took place. The agency is to provide LP, through the Region Local Programs Engineer, a summary of the settlement for review and to make adjustments, if any, as to how the settlement affects federal reimbursements. No further action is required.
- There is not a mutual agreement regarding the alleged consultant design error(s). The consultant may request that the alleged design error(s) issue be forwarded to the Director of Public Works or Agency Engineer for review. If the Director of Public Works or Agency Engineer, after review with their legal counsel, is not able to reach mutual agreement with the consultant, proceed to Step 5.

#### Step 5 Forward Documents to Local Programs

For federally funded projects all available information, including costs, should be forwarded through the Region Local Programs Engineer to LP for their review and consultation with the FHWA. LP will meet with representatives of the agency and the consultant to review the alleged design error(s), and attempt to find a resolution to the issue. If necessary, LP will request assistance from the Attorney General's Office for legal interpretation. LP will also identify how the alleged error(s) affects eligibility of project costs for federal reimbursement.

- If mutual agreement is reached, the agency and consultant adjust the scope of work and costs to reflect the agreed upon resolution. LP, in consultation with FHWA, will identify the amount of federal participation in the agreed upon resolution of the issue.
- If mutual agreement is not reached, the agency and consultant may seek settlement by arbitration or by litigation.

The purpose of this exhibit is to describe a procedure regarding claim(s) on a consultant agreement. The following procedures should only be utilized on consultant claims greater than \$1,000. If the consultant's claim(s) are a total of \$1,000 or less, it would not be cost effective to proceed through the outlined steps. It is suggested that the Director of Public Works or Agency Engineer negotiate a fair and reasonable price for the consultant's claim(s) that total \$1,000 or less.

This exhibit will outline the procedures to be followed by the consultant and the agency to consider a potential claim by the consultant.

#### Step 1 Consultant Files a Claim with the Agency Project Manager

If the consultant determines that they were requested to perform additional services that were outside of the agreement's scope of work, they may be entitled to a claim. The first step that must be completed is the request for consideration of the claim to the Agency's project manager.

The consultant's claim must outline the following:

- Summation of hours by classification for each firm that is included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Timeframe of the additional work that was outside of the project scope;
- Summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work; and
- Explanation as to why the consultant believes the additional work was outside of the agreement scope of work.

#### Step 2 Review by Agency Personnel Regarding the Consultant's Claim for Additional Compensation

After the consultant has completed step 1, the next step in the process is to forward the request to the Agency's project manager. The project manager will review the consultant's claim and will met with the Director of Public Works or Agency Engineer to determine if the Agency agrees with the claim. If the FHWA is participating in the project's funding, forward a copy of the consultant's claim and the Agency's recommendation for federal participation in the claim to the WSDOT Local Programs through the Region Local Programs Engineer. If the claim is not eligible for federal participation, payment will need to be from agency funds.

If the Agency project manager, Director of Public Works or Agency Engineer, WSDOT Local Programs (if applicable), and FHWA (if applicable) agree with the consultant's claim, send a request memo, including backup documentation to the consultant to either supplement the agreement, or create a new agreement for the claim. After the request has been approved, the Agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit. No further action in needed regarding the claim procedures.

If the Agency does not agree with the consultant's claim, proceed to step 3 of the procedures.

Agreement Number: AO-110

#### Step 3 Preparation of Support Documentation Regarding Consultant's Claim(s)

If the Agency does not agree with the consultant's claim, the project manager shall prepare a summary for the Director of Public Works or Agency Engineer that included the following:

- Copy of information supplied by the consultant regarding the claim;
- Agency's summation of hours by classification for each firm that should be included in the claim;
- Any correspondence that directed the consultant to perform the additional work;
- Agency's summary of direct labor dollars, overhead costs, profit and reimbursable costs associated with the additional work;
- Explanation regarding those areas in which the Agency does/does not agree with the consultant's claim(s);
- Explanation to describe what has been instituted to preclude future consultant claim(s); and
- Recommendations to resolve the claim.

#### Step 4 Director of Public Works or Agency Engineer Reviews Consultant Claim and Agency Documentation

The Director of Public Works or Agency Engineer shall review and administratively approve or disapprove the claim, or portions thereof, which may include getting Agency Council or Commission approval (as appropriate to agency dispute resolution procedures). If the project involves federal participation, obtain concurrence from WSDOT Local Programs and FHWA regarding final settlement of the claim. If the claim is not eligible for federal participation, payment will need to be from agency funds.

#### Step 5 Informing Consultant of Decision Regarding the Claim

The Director of Public Works or Agency Engineer shall notify (in writing) the consultant of their final decision regarding the consultant's claim(s). Include the final dollar amount of the accepted claim(s) and rationale utilized for the decision.

#### Step 6 Preparation of Supplement or New Agreement for the Consultant's Claim(s)

The agency shall write the supplement and/or new agreement and pay the consultant the amount of the claim. Inform the consultant that the final payment for the agreement is subject to audit.

## **COUNCIL AGENDA SYNOPSIS**



# Meeting Date Prepared by Mayor's review Council review 10/26/20 JR 11/02/20 JR



#### **ITEM INFORMATION**

		STAFF SPO	NSOR: ADAM COX		Origina	L AGENDA DATE:	10/26/20					
Agenda Item Ti			outh Bridge Re onsultant Selec	placement tion and Agreem	ent with Trar	Tech Engineer	ing					
Category $\square I$	Discussion	Motion	Resolution	Ordinance	Bid Award	Public Hearing	□ Other					
		Mtg Date <b>11/02/</b> 2		Mtg Date	Mtg Date	Mtg Date	Mtg Date					
SPONSOR C	ouncil Ma	ayor []HR	DCD Finan	ice Fire TS			Court					
SPONSOR'S       Council is being asked to approve the 30% design contract with TranTech Engineering for         SUMMARY       the 42nd Ave S Bridge Replacement Project. TranTech was selected from four design         consulting firms. This project will replace a 1949 bridge that has reached its lifespan. The         project is funded with City funds and solid waste utility taxes. Council is being asked to         approve the TranTech Engineering 30% design agreement, which includes the Type, Size         and Location report, for \$1,078,487.00.         REVIEWED BY       Trans&Infrastructure												
REVIEWED BY	Trans&	Infrastructure	CommunitySv	·	ce Comm. Comm.	Planning/Econ Planning Com						
	_	)/21/20 & 1				LOSTRINOS JOH						
RECOMMEN	SPONSOR	/Admin. Pub	lic Works Depa vard to Commi	rtment ttee of the Whol	e							
		CC	ST IMPACT	/ FUND SOU	RCE		:					
\$1,0	TURE REQUI <b>78,487.00</b>	)	\$1,0	nt Budgeted <b>79,000.00</b>	А	PPROPRIATION RE <b>\$0.00</b>	QUIRED					
Fund Source: 10 Comments: <b>p</b> a		& ARTERIAL S										
MTG. DATE	]		RECOR		IL ACTION							
10/26/20	ļ	_										
11/02/20		<u> </u>										
MTG. DATE				ATTACHMEN	ITS							
10/26/20	Informa	tional Memo	randum dated	09/18/20 and re	evised 10/16/	20						
		d 2021 CIP,										
		nt Scoring S		greement with s	Scope of Worl	( & Foo						
				frastructure Co			10/19					
		P										
11/02/20												

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(https://lni.wa.gov/agency/contact/#office-locations) between 8-5 Pacific Time weekdays, or dial 360-902-5800. Local offices are closed to the public. Please call your nearest L&I office for local assistance

Washington State Department of Labor & Industries

# **Debarred Contractors List**

A debarred contractor may not bid on, or have a bid considered on, any public works contract. You can search and filter this list using the options presented below.

Company Name: TranTech							
WA UBI Number:							
License Number:	· · · · · · · · · · · · · · · · · · ·						
Principal;							
RCW; All							
From: MM/DD/YYYY	To	Το: ΜΜ/DD/ΥΥΥ	JYY	۲			
Penalty Due:							
All <							
Wage Due:							
All <							
Apply Filters Reset							
Download all debarment data	Ð						
Show 25 < per page							
Showing 0 records							
FirstPreviousNextLast							
Company Name UBI License Principals Status RCW Debar Begins Debar Ends Penalty Due Wages Due	rincipals	Status	RCW	Debar Begins	Debar Ends	Penalty Due	Wages Due
There are no records that match your search criteria.	ur search c	riteria.					

https://secure.lni.wa.gov/debarandstrike/ContractorDebarList.aspx

Show 25 V per page

11/4/2020

Showing 0 records FirstPreviousNextLast

via mutera tel

https://secure.lni.wa.gov/debarandstrike/ContractorDebarList.aspx

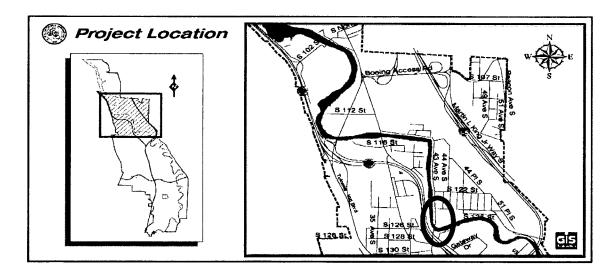
#### CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT:	42nd Ave S Bridge Replacement	Project No. 91810404
DESCRIPTION:	Design and construct a replacement structure for the existing 42nd Ave S Center. Council approved 30% design with City funding of \$1M in 2020, re	
JUSTIFICATION:	The current bridge has a sufficiency rating of 7.6 (out of 100), is load restri and is structurally deficient. Truck speed was reduced to 15 mph in 2018.	cted for AASHTO Type 3 trucks
STATUS:	In 2017 and 2019, Bridge Replacement Advisory Committee (BRAC) fundi Staff will apply for future BRAC funding during the next call. Applying for St design.	
MAINT. IMPACT:	New bridge.	
COMMENT:	STP funding has 13.5% match requirement. BRAC funding would be at 80 partners may include FMSIB & BNSF Railroad as they have over 1,800 trip	

partners may include FMSIB & BNSF Railroad as they have over 1,800 trips a day on the 42nd Ave S Bridge and it is the only ingress/egress available for their intermodal yard. Also State TIB for \$3M.

FINANCIAL (in \$000's)	Through 2019	Estimated 2020	2021	2022	2023	2024	2025	2020	DEVOND	TOTAL
EXPENSES	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	TOTAL
Design	19	200	878		1 252					2 240
-	19	200	0/0		1,252					2,349
Land (R/W)					30					30
Const. Mgmt.					250	1,650	1,650			3,550
Construction						7,800	7,800			15,600
TOTAL EXPENSES	19	200	878	0	1,532	9,450	9,450	0	0	21,529
FUND SOURCES										
Awarded Grant										0
Proposed BRAC Gra	nt					6,000	6,000			12,000
Proposed STP Grant						1,000	1,000			2,000
Proposed TIB						1,500	1,500			3,000
Proposed FMSIB							500			500
Solid Waste Utility Ta	x		650	700	700	710	720	549		4,029
City Oper. Revenue	19	200	228	(700)	832	240	(270)	(549)	0	0
TOTAL SOURCES	19	200	878	0	1,532	9,450	9,450	0	0	21,529



**Consultant Selection** 

yue Yue		2						~										
Total	200	555	138.8	163	147	174	71	584	146.0	180	165	167	72	 166	#DIV/0!			
Ιυξεινiew	100	309	77.3	80	72	86	71	320	80.0	06	80	78	72	0	#DIV/0!			
leĵoĵdu <sup>2</sup>			82.0	83	75	88		 	88.0	06	85	89			55.3	60	55	51
Experience with Utility and Third Party Coordination	10	21	7.0	ω	2	∞		30	10.0	10	10	10		13	4.3	5	2	3
Qualifications/Expertise of Team	20	58	19.3	18	20	20		57	19.0	19	20	18		 36	12.0	11	10	15
Qualifications/Expertise of Project Manager	20	47	15.7	17	15	15		 58	19.3	20	20	18		 37	12.3	12	10	15
Project Understanding and Approach	30	75	25.0	25	20	30		 72	24.0	27	20	25		50	16.7	22	20	8
Approach to DBE Goal	20	45	15.0	15	15	15		 47	15.7	14	15	18		90 90	10.0	10	10	10
42nd Ave S Bridge Replacement	Submitter	KPFF	Average Score	Henry	Hari	Adam	Peter	TranTECH	Average Score	Henry	Hari	Adam	Peter	SCJ Alliance*	Average Score	Henry	Hari	Adam Peter



#### CITY OF TUKWILA REQUEST FOR PROPOSALS (RFP) FOR South 42nd Avenue Bridge Replacement Due: Tuesday, May 19, 2020 by 5:00 p.m.

The City of Tukwila solicits interest from consulting firms with expertise in Civil and Structural Engineering Design. This agreement will be for approximately one year in duration with the option for the City of Tukwila to extend it for additional time and money if necessary. Consultants will be considered for the following project.

The City of Tukwila reserves the right to amend terms of this "Request for Proposals" (RFP) to circulate various addenda, or to withdraw the RFP at any time, regardless of how much time and effort consultants have spent on their responses.

### Please review the full RFP in the following pages which includes a link to the project documents.

#### **Project Description**

The work to be performed by the CONSULTANT consists of preparing a type, size and location study; final design (30%, 60%, 90%, and 100% submittals) and bid-ready documents; and environmental permitting for the <u>South 42<sup>nd</sup> Avenue Bridge Replacement</u>. All work performed by the CONSULTANT shall be in accordance with the Local Agency and Guidelines (LAG) manual. **This project does not currently have a mandatory DBE goal established; however, it is anticipated that a DBE goal will be assigned as the project advances.** ROW acquisition is not anticipated but could become necessary as the design progresses.

Key Elements:

- Type, Size and Location report (WSDOT)
- NEPA, SEPA, Shoreline, environmental studies, and WSDOT approvals
- Preliminary Design
- Final design and PS&E
- Coordination with Burlington Northern Santa Fe (BNSF) Intermodal yard
- Coordination with Baker Commodities
- Mandatory DBE goal TBD

The City of Tukwila reserves the right to retain the services of the successful firm(s) for any subsequent phases (R/W, CN) associated with this project.

#### Evaluation Criteria

Submittals will be evaluated and ranked based on the following criteria:

- 1) Approach to a DBE Goal
- 2) Project understanding and project approach
- 3) Qualification and expertise of the Project Manager
- 4) Qualification and expertise of the Project Team
- 5) Experience with utility and Third-Party coordination/compliance

#### <u>Submittal</u>

Submittals should be no longer than 10 pages, excluding dividers, and should be on 8-1/2 by 11 paper using 11-point fonts. Pages that are 11 by 17 may be used for charts, exhibits and other illustrative and graphical information only. Submittals should also include the following information: firm name, phone and fax numbers; name of principal-in-charge and project manager; and number of employees in each firm proposed to project.

Please submit FOUR bound paper copies of your Proposal to: