

**CITY COUNCIL AGENDA ITEM**  
CITY OF SHORELINE, WASHINGTON

<b>AGENDA TITLE:</b>	Authorizing the City Manager to Execute Supplement No. 4 to Contract 8463 with H.W. Lochner, Inc. in the Amount of \$1,522,872 for Design, Right-of-Way, and Environmental Services for the SR-523 (N/NE 145 <sup>th</sup> Street) & Interstate-5 Interchange Project
<b>DEPARTMENT:</b>	Public Works
<b>PRESENTED BY:</b>	Elizabeth Kelly, City Engineer
<b>ACTION:</b>	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

**PROBLEM/ISSUE STATEMENT:**

Staff is requesting that the City Council authorize the City Manager to execute Supplement No. 4 to Contract 8463 with H.W. Lochner, Inc. (Lochner), for design, environmental and right-of-way (ROW) services related to the SR-523 (N/NE 145<sup>th</sup> Street) & Interstate-5 (I-5) Interchange Project. The proposed scope of work for this Supplement is attached to this staff report as Attachment A.

In January 2023, Lochner delivered the 100% design plans and other deliverables to City staff for review. At that time, staff also distributed the 100% plans to other project stakeholders for review and comment. This included the Washington State Department of Transportation (WSDOT), Seattle Department of Transportation (SDOT), Sound Transit (ST), Seattle Public Utilities (SPU), and Seattle City Light (SCL). The City’s and stakeholder’s reviews were completed in February 2023, and Lochner is incorporating their comments into the design plans.

This Supplement is required for Lochner to advance the design plans and specifications from 100% to Advertising-Ready status, and to complete the final construction estimate, obtain approval from SPU and SCL, obtain approval and final permits from WSDOT and SDOT, and provide technical assistance during bidding.

**RESOURCE/FINANCIAL IMPACT:**

This project is included in the adopted 2023 - 2028 Capital Improvement Plan. The project budget summary is as follows:

**EXPENDITURES**

City Staff	\$ 498,050
City Direct Expenses	\$ 25,000
<b>Consultant Contracts</b>	
HW Lochner Contract, Including Supplement 1	\$ 2,124,935
HW Lochner Supplement 2	\$ 2,471,183

HW Lochner Supplement 3	\$ 592,312
<i>HW Lochner Supplement 4 (this contract supplement)</i>	\$ 1,522,872
WSDOT Review	\$ 15,000
WSDOT Project Administration	\$ 25,000
Right-of-Way Acquisition	\$ 2,100,000
Construction Administration & Engineering	\$ 4,777,620
Interchange Construction	\$ 17,151,660
Utility Betterment and Relocation Construction	\$ 4,051,060
Construction Contingency	\$ 1,930,500
Arts Fund	\$ 171,520
<b>Total Expenditures</b>	<b>\$ 37,456,712</b>

## REVENUE

### Secured

Roads Capital Fund	\$ 771,520
Fee In-lieu	\$ 152,910
Federal STP Grant – Design	\$ 3,982,500
Federal STP Grant – Construction	\$ 4,920,000
Seattle Public Utilities	\$ 2,184,060
Seattle City Light	\$ 3,055,060
Shoreline Sewer	\$ 228,180
WSDOT Regional Mobility Grant – Construction	\$ 5,000,000
Sound Transit Agreement – ROW & Construction	\$ 10,000,000
Transportation Improvement Board – Design & Construction	\$ 5,000,000
<b>Total Revenue</b>	<b>\$ 35,294,230</b>

Supplement 4 would increase Lochner’s contract amount by \$1,522,872, from \$5,188,430 to \$6,711,302. It should also be noted that there is a nearly \$2.2 million gap between anticipated expenditures and planned revenues on this project. While staff is currently analyzing options for closing this gap, there is adequate funding to approve this contract supplement. The need for any additional revenue would be handled through a future budget amendment.

## RECOMMENDATION

Staff recommends that the City Council authorize the City Manager to execute Supplement No. 4 to H.W. Lochner’s professional services contract in the amount of \$1,522,872, for a total contract amount of \$6,711,302 for engineering design, right-of-way, and environmental permitting services for the SR-523 (N/NE 145<sup>th</sup> Street) & I-5 Interchange Project.

Approved By:            City Manager **BE**    City Attorney **MK**

## **BACKGROUND**

In 2016, the City began implementing improvements identified in the [145<sup>th</sup> Street Multimodal Corridor Study](#) to improve access and safety for all travel modes, and to improve access to ST's 145<sup>th</sup> Street Light Rail Station. Proposed improvements for the SR 523/145<sup>th</sup> Street – Interstate 5 interchange included traffic signal optimization, a new non-motorized bridge, and a new northbound I-5 on-ramp. In May 2017, the City Council authorized execution of contract 8463 with Lochner for engineering, ROW acquisition, and environmental review up to 30% design completion. The staff report for this Council authorization can be found at the following link: [City Council execution of Contract 8463 with H.W. Lochner](#).

During Lochner's initial design work in 2018, WSDOT requested a design evaluation of the intersections at the east and west ends of the existing I-5 overpass at 145<sup>th</sup> Street. As a result of the design evaluation, called an Intersection Control Evaluation (ICE), the City found that incorporating roundabouts into the design at these two locations will provide significantly greater multi-modal access and mobility than the signal-controlled intersections that were proposed in the City's 2016 corridor study, and at approximately the same total cost.

In January 2020, the City Council discussed the 145<sup>th</sup> Street/I-5 Interchange project delivery strategy ([available at Jan. 27, 2020 Council Meeting](#)). The Council concurred with staff's recommendation to continue with completion of 30% design, environmental review and ROW acquisition, and to then turn the project over to WSDOT for completion of final design, permitting, and construction. WSDOT subsequently provided a letter to the City and the US Dept. of Transportation of WSDOT's intent to accept transfer of the project but stipulating that the project must be fully funded at transfer.

In June 2020, [the City Council authorized Supplement 1 to Lochner's contract](#), providing for completion of 30% design, design documentation, environmental review and preliminary ROW acquisition work. In February 2021, Lochner delivered the 30% design plans and other deliverables to City staff for review. At that time, staff also distributed the 30% plans to other project stakeholders for review and comment, including WSDOT, SDOT, ST, SPU, and SCL. The City's and stakeholder's reviews were completed in May 2020, and Lochner has incorporated the comments into the design plans.

In July 2021, [the City Council authorized Supplement 2 to Lochner's contract](#), providing for completion of 90% design, ROW negotiations and acquisition, additional coordination with ST related to construction overlaps, and technical coordination of agreements with utilities and other agencies. The 90% plans were completed in July 2022 and the City's and other stakeholders' comments are being incorporated into the construction documents.

In October 2022, [the City Council authorized Supplement 3 to Lochner's contract](#); providing for additional design costs and advancement of plans, specifications, and the cost estimate to 100% design completion and to provide for additional costs related to

stakeholder review of the design and bidding documents.

### **DISCUSSION**

Supplement 4 to Lochner’s contract includes additional design and coordination with the ST Lynnwood Link Extension (LLE) Project, additional signal interconnection and illumination design, combining the Interchange project with the 145<sup>th</sup> Corridor project for the construction phase, additional support for utility coordination and ROW acquisition, and technical support for utility agreements with SPU and SCL, and permitting assistance with SDOT and WSDOT. The detailed scope of work is included as Attachment A.

The project is at 100% design and moving towards advertisement. The construction cost estimate was updated in February 2023 and is shown in this staff report including estimated reimbursements from SPU and SCL for utilities that will be constructed by this project on their behalf. Construction bidding is scheduled to occur in either late Spring or Fall 2023 and completion of construction is scheduled for 2025. Staff will be providing a more detailed update on this project at the May 8, 2023 Council meeting.

### **ALTERNATIVE ANALYSIS**

The recommendation is to approve this amendment and continue to progress design, ROW, and final construction planning work to advertising-ready completion as planned. The alternative is not to execute Supplement No. 4 (not recommended) which would halt the project. This would result in loss of the Federal STP and other grants and the requirement to return the approximately \$5.0M of grant funds that has already been paid to the City during design development and 100 percent completion.

### **COUNCIL GOAL(S) ADDRESSED**

This project addresses Goal 2: Continue to deliver highly valued public services through management of the City’s infrastructure and stewardship of the natural environment; and Goal 3: Continue preparation for regional mass transit in Shoreline.

### **RESOURCE/FINANCIAL IMPACT**

This project is included in the adopted 2023 - 2028 Capital Improvement Plan. The project budget summary is as follows:

#### **EXPENDITURES**

City Staff	\$ 498,050
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## **RECOMMENDATION**

Staff recommends that the City Council authorize the City Manager to execute Supplement No. 4 to H.W. Lochner’s professional services contract in the amount of \$1,522,872, for a total contract amount of \$6,711,302 for engineering design, right-of-way, and environmental permitting services for the SR-523 (N/NE 145<sup>th</sup> Street) & I-5 Interchange Project.

## **ATTACHMENTS**

Attachment A – Scope of Work for H.W. Lochner Contract Supplement No. 4.



**Washington State  
Department of Transportation**

<b>Supplemental Agreement Number 4</b>		Organization and Address	
Original Agreement Number LAA 9075		H.W. Lochner, Inc. 915 - 118th Avenue SE, Suite 130 Bellevue, WA 98005 Phone: (425) 454-3160	
Project Number STPUL-0523(011), LA9075	Execution Date	Completion Date 12/31/2026	
Project Title SR-523 (N/NE 145th Street) and I-5 Interchange Improvements	New Maximum Amount Payable \$6,711,008.00		
Description of Work Prepare plans, specifications, and engineer's opinion of cost to construct multi-lane roundabouts at intersection of I-5 south bound ramps and 5th Ave. NE on SR 523. Re channelize the existing overpass to accommodate two 11-foot lanes in each direction and a buffered two-way bike lane on the north side of the bridge deck. Contraction SUP on the north side of SR523 and sidewalk on the south side of SR 523. Relocate conflicting utilities.			

The Local Agency of City of Shoreline  
desires to supplement the agreement entered in to with H.W. Lochner, Inc.  
and executed on 5/10/2017 and identified as Agreement No. LAA 9075  
All provisions in the basic agreement remain in effect except as expressly modified by this supplement.  
The changes to the agreement are described as follows:

I

Section 1, SCOPE OF WORK, is hereby changed to read:  
The Scope of Work shall be as set forth in the attached Exhibit A-4, Scope of Work which by this referenece is made par to the Supplement 4.

II

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

III

Section V, PAYMENT, shall be amended as follows:  
Payment shall be as set forth in the attached Exhibit D-3, Fee Estimate which by this is made a part of this Supplement 4

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.

By: Jim Doyna, COO By: Bristol Ellington, City Manager

\_\_\_\_\_  
H.W. Lochner, Inc. City of Shoreline

\_\_\_\_\_  
Date

# Scope of Services – Supplement 4

Project No. STPUL-0523(011), LA 9075  
PS&E and Ad Ready Plan Development of NE 145<sup>th</sup>  
Street (SR 523) and I-5 Interchange Improvements

## City of Shoreline NE 145<sup>th</sup> Street (SR 523) & I-5 Interchange Improvements

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**Prepared for:**

City of Shoreline, Washington



*February 2023*

*Prepared by:*

**LOCHNER**

915 118<sup>th</sup> Avenue SE, Suite 130  
Bellevue, WA 98005

### **Executive Summary of Supplement #4**

Supplement #4 is being prepared to cover additional scope of previous contracted tasks or new tasks requested by the City of Shoreline. Supplement 4 has identified 30 tasks for which additional budget is needed to complete the Interchange project. Most of these tasks are related to changes in project scope as a result of the expansion of the Interchange's project scope and City's Constructability workshop and that identified cost savings with changing the wall type of Wall #1, changes in project staging to eliminate temporary roadway construction for shoo-fly, advancing construction to Seattle Public Utilities (SPU) Water Transmission Main (WTM) and pre-construction procurement of WTM pipe materials to minimize construction schedule risk, additional design tasks for the 3<sup>rd</sup> Avenue NE connection to NE 147<sup>th</sup> Street, redesign of SCL feeder line civil works, relocate Sound Transit's L200 stormwater system to eliminate Wall #4. The City has also requested additional Consultant services of public outreach, utility coordination, WSDOT Utility permitting, City of Seattle SIP permitting, and bid phase support.

#### **1.) Project Management:**

- a. The original project management scope included Task 1 of Supplement 2. That scope covered Project Management from March 1, 2021 through June 30, 2022. This additional Project Management task covers the period from July 1, 2022 to September 30, 2023.
- b. Estimate Budget: \$91,278

#### **2.) Prepare Traffic Control Plans for Permit through WSDOT and SDOT:**

- a. This is a new task to the contract. To reduce the time for the Contractor to mobilize the Corridor and Interchange. WSDOT and SDOT both require traffic control to be permitted by their respective agencies. This is additional scope to the original contract and prior supplements. If not completed as part of this (or another) consultant contract, this work would be required of the contractor.
- b. Estimate Budget: \$90,495

#### **3.) Prepare SWPPP and DOE Construction Stormwater Permit:**

- a. New Task. In order to reduce the time for the General Contractor to mobilize the City has decided to provide the General Contractor with the project SWPPP that can be transferred to the general contractor (GC). If not completed as part of this (or another) consultant contract, this work would be required of the contractor.
- b. Estimated Budget: \$14,921

#### **4.) Relocate L200 Stormwater Pond and Delete Wall #4:**

- a. New Task. After Sound Transit declined to construct the Early Works making the Interchange project forward compatible with Sound Transit's L200 the City took a fresh look at the Wall to see if it could be eliminated which would have resulted in a signification savings to the City's Interchange project. It was determined that relocating L200 stormwater pond to the west Wall #4 could be eliminated from the project.
- b. Estimated Budget: \$32,561

#### **5.) Integration of the Corridor and Interchange Project Contract Documents:**

- a. This was initially scoped in Task 7 for Supplement #3. Additional time is needed for coordination and Lochner as the primary author of the Project Book.
- b. Estimated Budget: \$53,774



- 6.) **TSP Signal Design Revisions and Conformance to Sound Transit’s Concept of Operations:**
- a. Based on coordination with WSDOT, Sound Transit and City of Shoreline the TSP signal was moved from the intersection of 6<sup>th</sup> Avenue and 145<sup>th</sup> Street.
  - b. Sound Transit changed the concept of operations for the transit priority signal from a bus activated signal to work more like a ramp meter.
  - c. Estimated Budget: \$27,199
- 7.) **Revise Construction Staging Plans:**
- a. Additional work to Task 12.4, Supplement 2. In order to accelerate the General Contractor’s mobilization, the City has decided to construct the WTM in the first phase and flip phases 1 and 2 as previously planned.
  - b. Estimated Budget: \$39,292
- 8.) **Change Wall #1 Wall Type from CIP to Cantilever Soldier Pile:**
- a. Change to Task 6.1, Supplement 2. City of Seattle dictated that Wall #1 be CIP. One of the results of the City’s September 30<sup>th</sup>, 2022 Constructability workshop it was determined that the Interchange Project would have significant cost savings if the type of wall were changed to Cantilever Soldier Pile.
  - b. Estimated Budget: \$126,836
- 9.) **3<sup>rd</sup> Avenue NE Access to NE 147<sup>th</sup> Street:**
- a. This is a new task. Due to WSDOT’s full limited access control the remaining homes on 3<sup>rd</sup> Avenue NE and the stormwater vault need access. The City’s unopened 3<sup>rd</sup> Avenue ROW will be opened off of 147<sup>th</sup> to provide this access. The City directed Lochner to prepare plans as part of the of the Interchange Project.
  - b. Estimated Budget: \$55,126
- 10.) **Redesign SCL Feeder Line Duct Bank on 145<sup>th</sup> Street:**
- a. This is additional work originally scoped in Task 5, Supplement 3. SCL has requested the 12.4 feeder line be underground adjacent to Wall #1. The 814 vault and terminal pole east of 6<sup>th</sup> Avenue had to be relocated due to ROW risk.
  - b. Estimated Budget: \$89,749
- 11.) **Add SCL 5<sup>th</sup> Avenue Min Duct Bank Project to the Interchange Project:**
- a. This is new work. The City and SCL agreed that it would benefit both agencies to include SCL’s mini–Duct Bank project to Interchange Project.
  - b. Estimated Budget: \$18,614
- 12.) **Integrate City of Shoreline 3<sup>rd</sup> Avenue Sanitary Sewer PS&E:**
- a. This is new work. The City found it advantageous to integrate the 3<sup>rd</sup> Avenue Sanitary Sewer project into the Interchange Project.
  - b. Estimated Budget: \$10,927
- 13.) **Prepare 6<sup>th</sup> Avenue Crosswalk Closure Memo for SDOT and WSDOT:**
- a. This is new work. Since the 5<sup>th</sup> Avenue/145<sup>th</sup> Street intersection will be converted to a roundabout and the splitter island barrier curb extends beyond 6<sup>th</sup> Avenue NE. The City found that it would be safer for pedestrians to cross NE 145<sup>th</sup> Street at 5<sup>th</sup> Avenue NE. SDOT and WSDOT required analysis and a technical memo be prepared to close this crosswalk.
  - b. Estimated Budget: \$10,640

- 14.) Extend City of Seattle SUP path to tie into L230 project limits on 5th Avenue:**
- a. This is new work. The City of Seattle has a project on 5<sup>th</sup> Avenue to construct a shared use path (SUP) and terminated south of the Interchange Project limits. Seattle requested that the SUP be extended to 145<sup>th</sup> Street and this work be incorporated into the Interchange Project.
  - b. Estimated Budget: \$19,179
- 15.) Additional Plan Preparation for Descoping Sound Transit LLE L200 Project Overlap:**
- a. This new work. Sound Transit declined to construct the Early Works. This scope needs to be added back into the Interchange Project and coordinated with Sound Transit L200 project.
  - b. Estimated Budget: \$24,400
- 16.) Project coordination with L230 Maintenance of Traffic Management:**
- a. This is new work. Sound Transit's L230 project will be constructed during the same time frame as the Interchange Project. Special Provisions needed to add to the Interchange Project Manual to have General Contractor coordinate construction traffic.
  - b. Estimated Budget: \$16,019
- 17.) Additional SDOT review process for 90% PS&E and preliminary Project Book:**
- a. This is new task. City of Seattle wanted an interim Project Manual to review between the 90% and 100% PS&E submittal.
  - b. Estimated Budget: \$13,362
- 18.) Utility Pothole for SCL and Lumen Duct Bank Crossing and SPU WTM Tie-in:**
- a. This is new task. To deconflict and compete the design of relocation SCL feed line and pre-order the pipe material for SPU's WTM utilities need to be uncovered and surveyed. A pothole plan needs to be prepared.
  - b. Estimated Budget: \$23,392
- 19.) Additional Public and Agency Outreach:**
- a. This additional work scoped in Task 8, Supplement 3. This is subconsultant scope from S&A. The City of Shoreline needed to prepare an update to City Council presentation.
  - b. Estimated Budget: \$7,505
- 20.) Additional Landscape and Urban Design:**
- a. This additional scope Task 9, Supplement 2. This subconsultant work from JA Brennan. The design for landscaping progressed to 60% was change after City maintenance staff weighed in on the design. The changes were to reduce vegetation and increase hardscape urban design.
  - b. Estimated Budget: \$8,501
- 21.) Early Procurement of SPU Water Transmission Main Pipe Materials:**
- a. This is new work. The pipe material is 6-month lead item to be delivered to the project once the order is placed. To reduce the contract time the City has decided to advance procure the pipe materials.
  - b. Estimated Budget: \$8,638
- 22.) Update 100% PS&E Submittal to City of Seattle 2023 Standard Specifications for Road, Bridge and Municipal Work and Standard Plans:**

- a. This is a new task. The City of Seattle is updating their engineering standard March 2023 and have mandated that the Project use their new standards.
  - b. Estimated Budget: \$41,348
- 23.) Acquire City of Seattle SIP Permit:**
- a. This is a new task: At the 100% submittal the City of Seattle is requiring the Interchange Project to be permitted through their SIP process.
  - b. Estimated Budget: \$94,392
- 24.) Update ROW Plan, Exhibits and Legal Descriptions:**
- a. This is additional scope to Task 14, Supplement 2, Original Contract. Lakeside School ROW was altered due to design changes to Wall #1. Access to homes that utilize the Tract parcel needed to be added.
  - b. Estimated Budget: \$25,912
- 25.) Additional Utility Coordination with SCL and SPU:**
- a. This is additional scope to Task 12, Supplement 3. Ongoing work to coordinate utility relocation.
  - b. Estimated Budget: \$37,393
- 26.) Forward Compatibly with WSDOT Thornton Creek Project:**
- a. This is a new task. Thornton Creek has request changes to the Interchange Project to be forward compatible. Wall #3 will be removed and associated walkway redesigned to be temporary.
  - b. Estimated Budget: \$34,836
- 27.) Bid Phase Support:**
- a. This is a new task. The City will need assistance through the bid an award phase.
  - b. Estimated Budget: \$41,396
- 28.) Design Civil Works for Comcast and Zayo Communications Joint Utility Trench:**
- a. This is a new task. Cast and Zayo Communications are being dislocated from SCL power poles on the eastside of the Interchange. The City needs to coordinate JUT layout with City of Seattle.
  - b. Estimated Budget: \$10,553
- 29.) WSDOT Utility Permit Support:**
- a. This a new task. SPU Water, SCL feeder line, and Lumen require WSDOT permitting within WSDOT ROW.
  - b. Estimated Budget: \$28,480
- 30.) City of Seattle Utility Permit Support:**
- a. This is a new task. The City of Seattle requires changed to third party utilities to be permitted within their ROW. In order to accelerate project permitting Lochner will assist the third-party utility.
  - b. Estimated Budget: \$27,312

**31.) Additional Transmission Main Replacement Design:**

- a. This is additional scope to Supplement 3, Task 11. This subconsultant work is performed by Varela. The delivery date for the project has extended beyond the original schedule. Additional engineering scope is needed for project coordination through the new delivery dates. Please see the attached Varela Supplement #2 to Lochner Supplement #4
- b. Estimated Budget: \$32,826

**32.) Completion of Landscape and Hardscape Design:**

- a. This is additional scope to Supplement 2, Task 9. This subconsultant work is performed by J. A. Brennen Associates. The delivery date for the project has extended beyond the original schedule and design elements have evolved through the design process. Additional design scope is needed for project delivery. Please see the attached JA Brennen Supplement X to Lochner Supplement #4
- b. Estimated Budget: \$283,365

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## EXHIBIT A-4

### BACKGROUND

Supplement 4 is being prepared to cover additional scope of previous contracted tasks or new tasks requested by the City of Shoreline. Supplement 4 has identified 30 tasks that additional budget is needed to complete the Interchange project. Most of these tasks are related to changes in project scope as a result of the expansion of the Interchange's project scope and City's Constructability workshop and that identified cost savings with changing the wall type of Wall #1, changes in project Staging to eliminate temporary roadway construction for shoo-fly, advancing construction to SPU WTM and pre-construction procurement of WTM pipe materials to minimize construction schedule risk, additional design tasks 3<sup>rd</sup> Avenue NE connection to NE 147<sup>th</sup> Street, redesign of SCL feeder line civil works, relocate Sound Transit's L200 stormwater system to eliminate Wall #4. The City has also requested additional Consultant services of public outreach, utility coordination, WSDOT Utility permitting, City of Seattle SIP permitting, and bid phase support.

### TASK 1: PROJECT MANAGEMENT

#### Task 1 Elements of Work:

#### 1. Contract Management

The CONSULTANT will provide a status/progress report with invoices every four (4) weeks, to the CITY that will describe services provided by the CONSULTANT and its team members during the current reporting period. The progress reports will be prepared in a format provided and approved by the CITY's Project Manager.

#### *Assumptions:*

1. Covers time period from July 1, 2022 to September 30, 2023 at which time the PS&E Phase and Bid Phase service scope of work will be completed.

#### *Deliverables:*

- a. Every four weeks status/progress reports, and invoice.

#### 2. Subconsultant Management

The CONSULTANT will be responsible for on-going management of the consultant team in accordance with the provisions of this Agreement.

#### *Deliverables:*

- a. None

#### 3. Project Management

The CONSULTANT will provide a project manager to prepare interdisciplinary design team monthly and biweekly work plans to complete Ad Ready Plans and procure WSDOT and City of Seattle permits, schedule and assign work and to individual design team members. Prepare project schedule to show overlapping construction activities and construction staging.

#### *Deliverables:*

- a. Project Construction Schedule

### TASK 2: Prepare traffic control plans and permit through WSDOT and SDOT

**Background:**

Due to the construction of the combined Corridor and Interchange project late in the 2023 construction season, and getting the Contractor started with construction at the earliest date after notice to proceed has been issued by the City, the City has determined that Traffic Control plans for street use permit from City of Seattle and WSDOT will be pared and submitted for permitting.

**Assumptions:**

1. References:
  - a. WSDOT Traffic Manual M 51-02Control
  - b. Manual of Uniform Traffic Control Devices (MUTCD)
  - c. WSDOT Standard Specifications for Roads and Bridge, and Municipal Construction
2. SDOT will issue traffic control permits for ROW within the municipal boundary of the City of Seattle
3. WSDOT will issue traffic control permits for WSDOT ROW within I-5 ROW and SR 523 ROW
4. Contractor to prepare Class B traffic control plans for SDOT/WSDOT approval.

**Task 2 Elements of Work:**

1. Agency Coordination
  - a. Facilitate workshop meeting with SDOT to expedite permit process.
  - b. Facilitate workshop meeting with WSDOT to expedite permit process.
  - c. Meet with SDOT reviewers to resolve comments (up to two meetings).
  - d. Meet with WSDOT reviews to resolve comments (up to two meetings).
2. Prepare Class A traffic control plans for SDOT and WSDOT to permit for each of the five (5) project phases.
  - a. Class A traffic control plans to show:
    - i. Signage and pavement marking type and location.
    - ii. Analysis to re-time signal phases
    - iii. Shift signal heads to line up with temporary lanes.
3. Respond to SDOT/WSDOT review comments up to two reviews.

**Deliverables:**

- a. Class A Traffic plans for each project phase.

**TASK 3: Prepare Project SWPPP and permit through City of Shoreline City of Seattle****Background:**

Due to the construction of the combined Corridor and Interchange project starting late in the 2023 construction season, and getting the Contractor started with construction at the earliest date after notice to proceed has been issued by the City, the City has determined that the Stormwater Pollution Prevention Plan (SWPPP) be prepared and approved by the City prior to issuance of the NTP.

**Assumptions:**

1. SWPP will follow Washington State Department of Ecology requirements.
2. SWPP approved by City of Shoreline and City of Seattle.



**Task 3 Elements of Work:**

1. Agency Coordination
  - a. Facilitate workshop meeting with SDOT to expedite permit process.
2. Prepare SWPPP using Department of Ecology template for the combined Corridor and Interchange project.
3. Respond to City of Shoreline and SDOT review comments up to one (1) review.

**Deliverables:**

- a. Project SWPPP for approval.

**TASK 4: Relocate L200 Stormwater Pond to Delete Wall #4****Background:**

The designed and permitted location Sound Transit's LLE L200 stormwater detention pond project required a concrete cast-in-place retaining wall from the bridge abutment on SR523 to the I-5 NB on-ramp on the west side of 5<sup>th</sup> Avenue NE. Shifting the stormwater detention pond to the west will allow the roadway embankment to be constructed to support the shared use path on the west side of 5<sup>th</sup> Avenue and eliminate the concrete cast-in-place retaining wall resulting in a cost savings to the Interchange project and Sound Transit's LLE L200 project.

**Assumptions:**

1. Sound Transit will be the engineer of record for stormwater system changes to relocate the stormwater detention pond and roadway embankment.
2. Sound Transit LLE L200 project will revise stormwater drainage and grading plans for City of Shoreline Construction permit revision.
3. Sound Transit will revise stormwater report to reflect changes to stormwater system.
4. Sound Transit will get approval from WSDOT to modify the stormwater system owned and operated by WSDOT that is the discharge point for the stormwater detention pond.

**Task 4 Elements of Work:**

1. Agency Coordination
  - a. Meetings with L200 project team to review pond and drainage design changes necessary to delete wall #4
  - b. Meet with WSDOT to discuss design changes to WSDOT owned system and outfall.
2. Prepare plan/cad file to relocate pond as designed within ST ROW
3. Prepare concept plan to adjust storm drainage system inflow and outflow from pond.
4. Prepare new grading plan to delete wall #4
5. Revise Interchange Structural plans removing Wall #4 and design elements

**Deliverables:**

- a. Grading plan (CAD files to L200 design team)
- b. Concept pond and stormwater conveyance (CAD files to L200 design team)

**TASK 5: Integration of Corridor and Interchange Project Contract Documents****Background:**

Due to the timing of construction for the Corridor and Interchange project to be constructed at the same time and having common project boundaries the City determined that it would be more efficient to construct both projects with one contract. Lochner was delegated the task to compile



the contract special provisions for both projects. This task was initially scoped under Task 7, Supplement #3. Integration of the Corridor Project's special provisions and bid schedule with the Interchange Project was initially under-scoped. Special provisions for the Corridor Project were written towards amending the WSDOT Standard Specifications and not using City of Seattle's Standard Provisions. Furthermore, bid items compared to the Interchange were not consistent and need to conform to the Interchange project units, nomenclature and pay item description as not to manufacture unwarranted change orders by the Contractor. Additional meetings with the Corridor design team are needed as well as assigning the Interchange Project as the primary author of the Project Manual.

**Assumptions:**

1. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction
2. WSDOT General Special Provisions
3. City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction
4. WSDOT specification compiler will be used to assemble the contract special provisions.

**Task 5 Elements of Work:**

1. Additional coordination with Jacobs Corridor project design team (weekly meetings)
2. Prepare combined contract special provisions for Corridor and Interchange projects.

**Deliverables:**

- a. Special provision for combined Corridor and Interchange project

**TASK 6: TSP Signal Design Revisions and Conformance to Sound Transit's Concept of Operations**

**Background:**

The City of Shoreline has agreed to construct a transit priority signal (TSP) on NE 145<sup>th</sup> Street at 6<sup>th</sup> Avenue NE to provide transit priority for east bound traffic. Lochner's initial design of the sign was changed due to WSDOT and Sound Transit's concept of operation for the TSP.

**Assumptions:**

1. TSP will be designed in accordance with Sound Transit's concept of operations as approved by WSDOT.
2. The signal will be owned and operated by WSDOT.
3. The signal will be designed in accordance with WSDOT standards.
4. The signal will be constructed by Sound Transit's BRT project.

**Task 6 Elements of Work:**

1. Agency Coordination
  - a. Design review meeting with WSDOT and Sound Transit BRT project
  - b. Coordination with Sound Transit LLE L200 ITS
  - c. Coordination with WSDOT ITS and CCTV
  - d. Submit design of TSP to WSDOT and Sound Transit for review and approval
2. Prepare signal design 30%, 60%, 90% and Final PS&E for integration into Interchange project for construction.
3. Design and prepare PS&E for ITS system compatible with WSDOT system located at I-5 NB on-ramp.
4. Design and prepare PS&E for WSDOT CCTV for east bound traffic on SR 523
5. Respond to City of Shoreline and SDOT review comments up to one (1) review.

**Deliverables:**

- a. 30% 60% 90% and FINAL PS&E for integration into Sound Transit's BRT project
- b. PS&E elements for forward compatibility to be integrated into Interchange project.

**TASK 7: Revise Construction Staging Plans****Background:**

On October 15<sup>th</sup>, the City of Shoreline convened a constructability review of the Interchange project. An outcome of the constructability review was to have the phasing plans provide more detail on the roundabout construction. The construction phasing phase was initially 5 sheets. Adding the additional detail for the two roundabouts the construction staging plans are now 29 sheets. The constructability review also recommended advance procurement of water transmission main materials which enables the northside of 145<sup>th</sup> to be constructed in Phase 1 of the project and avoids construction of a temporary by-pass lanes for temporary traffic.

**Assumptions:**

1. None.

**Task 7 Elements of Work:**

1. Agency Coordination meeting with City of Shoreline
2. Prepare additional sheets for construction staging plans to detail roundabout construction phasing.
3. Modify staging plans to begin roadway construction on the north side of 145<sup>th</sup> Street west of I-5 in Phase 1.
4. Prepare revised plans for Construction workshop.

**Deliverables:**

- a. Additional and revised construction staging plans Final PS&E.

**TASK 8: Change Wall #1 wall type from CIP to Cantilever Soldier Pile****Background:**

On September 30, 2022, the City convened a Constructability review workshop. A recommendation of the Workshop was to lower the wall height of wall #1 and change the wall type from cast-in-place (CIP) concrete to cantilever soldier pile in effort to reduce the construction cost of Wall #1. City of Seattle Department of Transportation (SDOT) will be the asset manager for Wall #1. On October 5, 2022, a meeting with SDOT staff and the City of Shoreline was convened to discuss changing the wall type from CIP to Soldier Pile. As a result of this meeting SDOT approved the change to Wall #1 with the provision that the soldier pile wall will have no tie-backs.

**Assumptions:**

1. Soldier Pile wall will have no tie-backs;
2. The ground above the wall can be sloped back with maximum slope 2:1.
3. The soldier pile wall will be designed for shear, bending, and axial stresses according to the latest LRFD-BDS and Geotechnical Design Manual M 46-03 design criteria.
4. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction will be used to specify materials, construction methods and inspection of the soldier pile wall.
5. Wall height will be minimized to avoid use of sub-terrain tie-backs.

- Pile will be installed using drilled shafts with concrete embedment.

#### **TASK 9: 3<sup>rd</sup> Avenue NE Access to NE 147<sup>th</sup> Street**

##### **Background:**

The access to 3<sup>rd</sup> Avenue NE from 145<sup>th</sup> Street will be closed as a result of the Interchange Project. Three homes are still occupied on 3<sup>rd</sup> Avenue which residence will need access to NE 147<sup>th</sup> Street. An access drive will connect existing 3<sup>rd</sup> Avenue NE at mid-block to NE 147<sup>th</sup> Street.

##### **Assumptions:**

- Access will meet City of Shoreline Engineering Development Manual, 2022 edition for driveways and will be no wider than 12-feet.

##### **Task 9 Work Items:**

- Prepare 100% and Ad Ready PS&E for Driveway and connect to 3<sup>rd</sup> Avenue NE and NE 147<sup>th</sup> Street.
- Prepare plan and profile sheets.
- Prepare DTM for driveway.
- Design reinforced earth slope.
- Coordination design with Corridor project stormwater vault.
- Coordinate design with City of Shoreline Stormwater Maintenance Division.

##### **Deliverables:**

- Preliminary layout of 3<sup>rd</sup> Avenue NE.
- 100% PS&E of 3<sup>rd</sup> Avenue NE.
- Ad Ready PS&E of 3<sup>RD</sup> Avenue NE.

#### **TASK 10: Redesign SCL Feeder Line Duct Bank on NE 145<sup>th</sup> Street**

##### **Background:**

On September 30, 2022, the City convened a Constructability review workshop. A recommendation of the Workshop was to lower the wall height of Wall #1 and change the wall type from cast-in-place (CIP) concrete to cantilever soldier pile in effort to reduce the construction cost of Wall #1. This change deleted the wide footing for the wall. Consequently, the design for the underground vaults and duct banks could be changed to reduce the length of the duct bank and number of underground vaults thus reducing cost of relocation of the SCL 12.4 kV feeder line. The affected feeder line design is between 1<sup>st</sup> Avenue NE and I-5 SB ramps. SCL has also raised safety concerns that someone standing at the top of retaining Wall #1 could be within the safety zone of feeder line if it remained overhead. SCL has expressed their opinion that the feeder line should be underground in the zone adjacent to Wall #1. In addition to this the 814-feeder line vault originally planned to be sited east of 6<sup>th</sup> Avenue needed to be relocated along with routing the feeder line duct bank due to Sound Transit not having acquired needed ROW to accommodate the 814 vault.

##### **Assumptions:**

- Overhead power can stay within the amenity strip on the south side of 145<sup>th</sup> Street.
- Use SCL Standard Details and Specifications.
- Where SCL Standard Details and Specifications are deficient then SDOT Standard and WSDOT Standard will be used in this order.

4. SCL to design overhead power relocation, power poles and guy wire, and power conductor replacement and splices.
5. Civil designer responsibility will terminate at riser on SCL terminal poles.
6. SCL to provide one-line diagram of feeder line relocation.
7. Final Plans, special provisions to be integrated into Interchange Project Ad Ready PS&E.

**Task 10 Elements of Work: Design civil works for 12.4 kV feeder line relocation:**

1. Agency Coordination
  - a. Meet with SCL Engineering Division for:
    - i. Initial scoping of new feeder line layout on the west side of I-5.
    - ii. Over-the-shoulder review of intermediate design (30% and 90%)
    - iii. Final design review and approval
2. Conceptual Design
  - a. Prepare roll plot conceptual design of civil elements to be relocate of move portions of the 12.4 kV feeder line below ground.
  - b. Meet with SCL for over the shoulder review of conceptual design.
3. 30% Design
  - a. Once conceptual design has been approved by SCL, the Consultant will prepare 30% Plans and Engineer's Opinion of Cost. 30% Plans will consist of scaled drawings showing feeder line elements to be removed and new civil element for be install in plan view. Cost estimate will be prepare using unit cost based on specific civil element quantities.
  - b. Submit to 30% Plan and Estimate to SCL for review and approval.
  - c. Two over the shoulder review meetings with SCL and resolve SCL comments.
4. 90% Design Submittal
  - a. plans will be prepared showing plan and profile of civil elements of the feeder line and associated details and or references to SCL standard plans.
  - b. 90% cost estimate will be prepared.
  - c. Special Provisions for technical specifications will be prepared as needed for construction feeder line civil works.
  - d. Respond to SCL review comments.
  - e. Two over the shoulder review meetings with SCL
5. Design and Construction Coordination Workshop
6. Final Design
  - a. Prepare final plans, special provisions and estimate for civil design of 12.4 kV feeder line relocation.

**Deliverables:**

- a. Conceptual Design
- b. 30% Plans and Cost Estimate
- c. 90% Plans, Special Provisions and Cost Estimate
- d. Final Plans, Special Provision and Cost Estimate

**TASK 11: Add SCL 5th Avenue Mini Duct Bank Project to Interchange project**

The City of Shoreline and Seattle City Light (SCL) has agreed to integrate SCL's 5<sup>th</sup> Avenue Duct Bank project into the Interchange project package for construction.

**Assumptions:**

1. SCL will provide ad ready plans, specifications and bid documents to be integrated into the Interchange Ad Ready package.

**Task 11: Work Elements**

1. Agency Coordination
  - a. Convene bi-weekly coordination meeting with SCL Duct Bank design team.
2. Add SCL Duct Bank plans, special provisions and bid document to Corridor/Interchange PS&E package.

**Deliverables:**

- a. Integrated PS&E

**TASK 12: Integrate City of Shoreline 3rd Avenue Sanitary Sewer PS&E**

The City of Shoreline will upgrade the sanitary sewer from NE 145<sup>th</sup> Steet to NE 147<sup>th</sup> Street along 3<sup>rd</sup> Avenue NE. The City has completed the preparation of plans, specification and bid documents. The City has determined that it would be effect to have the Corridor/Interchange project contractor construct the 3<sup>rd</sup> Avenue sewer.

**Assumptions:**

1. City of will provide ad ready plans, specifications and bid documents to be integrated into the Corridor/Interchange Ad Ready package.

**Task 12: Work Elements**

1. Agency Coordination
  - a. Convene periodic coordination meetings with City's sanitary sewer designer.
2. Add 3<sup>rd</sup> Avenue Sanitary Sewer plans, special provisions and bid document to Corridor/Interchange PS&E package.

**Deliverables:**

- a. Integrated PS&E 100% and Ad Ready submittals

**TASK 13: Prepare 6th Avenue Crosswalk Closure Memo for SDOT and WSDOT**

**Background:**

With the signalized intersection being converted to a roundabout, and the roundabout has crosswalks with RFFBs at each crosswalk. The intersection of 145<sup>th</sup> Street and 6<sup>th</sup> Avenue will be traffic operation of this intersection will be converted to right-in-right-out operation. The Cities of Shoreline and Seattle have decided to prohibit pedestrian crossing of 145<sup>th</sup> Street and 6<sup>th</sup> Avenue. To close the crosswalk the City of Seattle and WSDOT require a Crosswalk Memo be prepared to justify the crosswalk closure.

**Assumptions:**

1. References:
  - a. WSDOT Traffic Manual M 51-02Control
  - b. Manual of Uniform Traffic Control Devices (MUTCD)

- c. WSDOT Standard Specifications for Roads and Bridge, and Municipal Construction
2. SDOT will review and approve the Crosswalk memo.
3. WSDOT will review and approve the Crosswalk memo.

**Task 13 Work Items:**

1. Agency Coordination
  - a. Meet with SDOT reviewers to resolve comments (up to two meetings)
  - b. Meet with WSDOT reviews to resolve comments (up to two meetings)
2. Prepare crosswalk closure memo.
3. Respond to SDOT/WSDOT review comments up to two reviews.

**Deliverables:**

- a. Crosswalk Closure memo

**TASK 14: Extend City of Seattle SUP path to tie into L230 project limits on 5th Avenue**

**Background:**

The City of Shoreline and City of Seattle has agreed to extend the shared use path on the east side of 5<sup>th</sup> Avenue NE from the south side of NE 145<sup>th</sup> Street tying into the future SUP on the east side of 5<sup>th</sup> Avenue that City of Seattle and Sound Transit L230 will construct.

**Assumptions:**

1. References:
  - a. WSDOT Design Manual M 22-01
  - b. Manual of Uniform Traffic Control Devices (MUTCD)
  - c. WSDOT Standard Specifications for Roads and Bridge, and Municipal Construction
  - d. City of Seattle Standard Specifications for Road, Bridge, and Municipal Construction
2. City of Seattle will review and approve construction documents for the SUP south of NE 145<sup>th</sup> Street.

**Task 14 Work Items:**

1. Agency Coordination
  - a. Meet with SDOT reviewers to resolve comments (up to two meetings).
2. Prepare engineered drawing for construction.
3. Prepare cost estimate of elements to be constructed for SUP.
4. Prepare special provisions for SUP construction.
5. Respond to SDOT/WSDOT review comments up to two reviews.

**Deliverables:**

- b. Plans, Specifications and estimated to be included in Interchange project PS&E submittal packages.

**TASK 15: Additional Plan Preparation for Descoping Sound Transit LLE L200 Project Overlap**

**Background:**

The City's Interchange project and Sound Transit's L200 project overlaps on the east side of I-5 at the intersection of NE 145<sup>th</sup> Street and 5<sup>th</sup> Avenue NE. Sound Transit requested the City prepare a set of plans that show the elements of the L200 project that were not forward compatible with the Interchange project and should be removed from the scope of the L200 project.

**Assumptions:**

1. Sound Transit will coordinate descopeing the L200 with SKH.
2. Sound Transit will provide drawings and CAD files of the L200 project area to descope.
3. Sound Transit will revise the L200 SIP with Cit of Seattle.

**Task 15 Work Items:**

1. Take Sound Transit L200 plans and prepare plans that show elements of the L200 to be descopeed.
2. Meeting with Sound Transit to review descopeed L200 Plans.
3. Provide Sound Transit CAD files of descopeed plans.

**Deliverables:**

- c. PDF files of descopeed L200 project elements.

**TASK 16: Project coordination with L230 Maintenance of Traffic Management****Background:**

Sound Transit will construct a light rail transit station at NE 130<sup>th</sup> Street and I-5 Interchange (L230) at the same time. The NE 145<sup>th</sup> Street and I-5 Interchange project is underway. The L230 will periodically close the NE 130<sup>th</sup> Street Interchange. Sound Transit and WSDOT desire to coordinate closure of this Interchange with NE 145<sup>th</sup> Street and I-5 Interchange project.

**Assumptions:**

1. Sound Transit L230 project and WSDOT will provide liaison staff to coordinate with the City of Shoreline's Interchange project.

**Task 16 Work Items:**

1. Agency Coordination
  - a. Meet with Sound Transit L230 project team to coordinate Interchange project special provisions (up to three meetings)
2. Prepare contract special provisions for Interchange contractor and L230 contractor traffic management coordination.

**Deliverables:**

- d. Special provision for Contractor traffic management coordination

**TASK 17: Additional SDOT review process for 90% PS&E and preliminary Project Book****Background:**

City of Seattle Public Utilities requested that an interim submittal Project Book be prepared for review between the 90% and 100% PS&E submittal.

**Assumptions:**

1. Project Book will combine the Corridor and Interchange project.

**Task 17 Work Items:**



1. Prepare interim Project Book submittal of project to include:
  - a. Cover for Bid Proposal
  - b. Location of Bid Dropoff
  - c. Funding Group Declarations
  - d. Title VI Compliance
  - e. Bidders Check List
  - f. Proposal Inclusion Reminder
  - g. Proposal Form
  - h. Bid Schedule
  - i. Proposal Signature Page
  - j. Non-Collusion Declaration
  - k. Wage Compliance - Form 272-009
  - l. Title VI Compliance Acknowledgement
  - m. Recycled Materials Bid Form
  - n. Local Agency Certification for Federal Aid - Form 272-040A
  - o. Acknowledgement of Apprentice Utilization
  - p. Dear Bidder DBE Utilization
  - q. Disadvantaged Business Enterprise Utilization Certificate w/Inst.
  - r. DBE Written Confirmation
  - s. Proposal Deposit or Bid Bond
  - t. Subcontractor List
  - u. Bidder Qualifications
  - v. Responsible Bidder Certification - Agency
  - w. Cover for Post Award Forms
  - x. Construction Contract
  - y. Performance Bond
  - z. Payment Bond
  - aa. Contract Provisions Cover
  - bb. Bid Package Cover (Notice To Plan Holders, Engineer's Cert.)
  - cc. Notice of Invitation to Bids
  - dd. Project Description
  - ee. Table of Contents
  - ff. Table of Contents for Special Provisions
  - gg. WSDOT Special Provisions
  - hh. City of Seattle Special Provisions
  - ii. Appendix A - 0 Cover for Federal Aid Provisions
  - jj. Appendix A - 1 Federal Aid Provisions - FWHA 1273
  - kk. Appendix B - 0 Cover for Federal Wages
  - ll. Appendix B - 1 Federal Wages (Davis Bacon)
  - mm. Appendix C - 0 Cover for WA Prevailing Wage
  - nn. Appendix C - 1 Prevailing Wage Rates - King
  - oo. Appendix C - 2 Supplemental to Wage Rates
  - pp. Appendix C - 3 Benefit Code Key
  - qq. Appendix D - 0 Cover for Geotechnical General Notes
  - rr. Appendix D - 1 Geotechnical General Notes
  - ss. Appendix E - 0 Cover for NPDES
  - tt. Appendix E - 1 Transfer of Coverage
  - uu. Appendix E - 2 Coverage Letter
  - vv. Appendix E - 3 CSWGP
  - ww. Appendix E - 4 Coverage Packet



- xx. Appendix F - 0 Cover for Standard Plans
- yy. Appendix F - 1 Standard Plans - WSDOT
- zz. Appendix F - 2 Standard Plans -City of Seattle
- aaa. Appendix G - 0 Cover for Proposal
- bbb. Appendix G - 1 Bid Proposal Cover Page
- ccc. Appendix G - 2 Location of Bid Dropoff
- ddd. Appendix G - 3 Funding Groups Declaration
- eee. Appendix G - 4 Proposal Inclusion Reminder
- fff. Appendix G - 5 Proposal
- ggg. Appendix G - 6 Non-Collusion Declaration
- hhh. Appendix G - 7 Certification for Federal Aid
- iii. Appendix G - 8 Dear Bidder DBE Utilization
- jjj. Appendix G - 9 Instructions for DBE
- kkk. Appendix G - 10 DBE Utilization Cert
- lll. Appendix G - 11 DBE Written Confirmation
- mmm. Appendix G - 12 Proposal Signature Page
- nnn. Appendix G - 13 Proposal Bond
- ooo. Appendix G - 14 Subcontractor List
- ppp. Appendix G - 15 Bidder Qualifications
- qqq. Appendix H - 0 Cover for Temporary Construction Easements
- rrr. Appendix H - 1 Temporary Construction Easements
- sss. Appendix I - 0 Cover for Construction Permits
- ttt. Appendix I - 1 WSDOT General Permit Application
- uuu. Appendix I - 1 SDOT Permit Application
- vvv. Appendix J - 0 Contract Plans Cover Bid Proposal

***Deliverables:***

- e. Project Book in PDF format

**TASK 18: Utility Pothole for SCL and Lumen Duct Bank Crossing and SPU WTM Tie-in**

***Background:***

The City has decided to pre-purchase WTM pipe. Before the pipe order can be placed, the City will need to pothole the WTM in three locations. In addition to the City has designed a duct bank for SCL that crosses NE 145<sup>th</sup> Street at 6<sup>th</sup> Avenue NE. The SCL duct bank will cross Lumen's communication duct bank at this location and will require pothole survey to deconflict and complete the design.

***Assumptions:***

1. City will use On-Call contractor for pothole work.
2. City's On-Call contractor will submit work zone traffic control plans to City of Seattle
3. City will use On-Call surveyor.
4. City of Seattle Minor Utility Street permit can be re-opened.

***Task 18 Work Items:***

1. Prepare pothole plan.
2. Coordinate pothole permit with City of Seattle permit portal.

***Deliverables:***

- f. Pothole plan

## TASK 19: Additional Public and Agency Outreach

### *Background:*

A project presentation to City of Shoreline Council was prepared to update the Council on progress of the Interchange project and path forward to complete the project. S&A participated in preparing the City Council presentation, Lochner prepared graphics and content and presentation.

### **1. PROJECT MANAGEMENT AND ADMINISTRATION**

General administration, progress reporting and invoicing (up to 24 months)

### **2. PUBLIC INVOLVEMENT PLAN UPDATE**

The CONSULTANT will update and manage the implementation of the Public Involvement Plan (PIP) in accordance with City of Shoreline's public communications requirements. Once the PIP has been approved, a work plan will be developed and actively managed. At approximately 90% design, the CONSULTANT will develop a preconstruction communications plan.

### *Assumptions*

- a. CONSULTANT developed a PIP for outreach activities during 30% design. CONSULTANT will update this version of the PIP for final design.
- b. CONSULTANT will draft a Key Messages appendix as part of the PIP.
- c. CONSULTANT will have one planning meeting with City of Shoreline to review the plan and discuss implementation.
- d. CONSULTANT will develop and manage a project work plan that provides a schedule and outline for implementation of the PIP.

### *Deliverables*

- a. One (1) update to the Public Involvement Plan
- b. Key messages document (up to two (2) updates)
- c. Preconstruction communications plan – one (1) draft and one (1) final.

### **3. PROJECT MEETINGS AND TEAM COORDINATION**

The CONSULTANT will plan, facilitate, and report on communication coordination meetings with the CITY, and the CONSULTANT. The purpose of these meetings will be to plan and coordinate outreach and communication efforts with CITY staff. CONSULTANT staff will plan and meet regularly as a team to coordinate work.

#### **City of Shoreline 145th Corridor Communications Team Meetings**

The CONSULTANT will attend weekly 145th Corridor Team Coordination meetings. for up to six (6) months. These meetings will occur online.

#### **Consultant Team Meetings**

The CONSULTANT will plan and facilitate up internal consultant team meetings to coordinate work. These meetings will be 30 minutes and will occur online with up to three consultant staff at

each meeting. Meetings will occur weekly from Feb – March 2022. Meetings might occur biweekly from April to December 2022.

### **Internal Team Coordination Meetings**

The CONSULTANT will meet to coordinate internal tasks. Up to two (2) staff will attend.

#### **Assumptions:**

- a. Six (6) months of 145th Corridor Communications meetings.
- b. Twelve (12) weeks of Consultant Team Coordination meetings.
- c. These meetings will occur online.

#### **Deliverables:**

- a. Agenda and attendance at Consultant Team Coordination Meetings.

## **4. BRIEFINGS AND COMMUNITY PRESENTATIONS**

CONSULTANT, in coordination with City of Shoreline, schedule, prepare for, staff and report on one-on-one meetings, stakeholder briefings and community presentations. This includes briefing support with City Council, neighborhood associations and adjacent property owners. Prepare graphics and content for Power Point presentation.

#### **Assumptions:**

- a. Assumes up to four (4) briefings.
- b. City of Shoreline will provide existing property owner contact information.
- c. City of Shoreline will participate in briefings.
- d. One (1) CONSULTANT staff and Lochner Project Manager will attend these briefings and presentations.
- e. CONSULTANT will coordinate interpretation services, if required. City of Shoreline will pay for interpretation services, if required

#### **Deliverables:**

- a. Materials and graphics for one (1) City Council presentation.
- b. Draft and Final briefing reports (up to 4) (electronic copy).

## **5. COMMUNICATIONS MATERIALS DEVELOPMENT**

CONSULTANT will coordinate with City of Shoreline and the project team to facilitate preparation, production, and distribution of communications materials, including email updates and frequently asked questions (FAQ) and topic sheets (topic-specific sheets might describe elements of roundabouts).

#### **Assumptions:**

- a. CONSULTANT will draft email update content.
- b. City of Shoreline will review, approve, and send final email update.

- c. CONSULTANT will coordinate translation services.
- d. City of Shoreline will be invoiced directly translation services.

**Deliverables:**

- a. Project email updates: one (1) draft and one (1) final for each of the two (2) updates (at 60% and 90%) (electronic copy)
- b. Project FAQ update: one (1) draft and one (1) final for each of the two (2) updates (at 60% and 90%) (electronic copy)
- c. Project topic sheets: one (1) draft and one (1) final, for one (1) topic sheet (electronic copy)

## 6. CORRESPONDENCE & REPORTING

CONSULTANT will support City in the development of responses to public communications and reporting of project related community outreach during design.

**Assumptions:**

- a. CONSULTANT will draft responses. The City will review, finalize, and distribute responses.
- b. CONSULTANT will draft a summary of community outreach activities that details how the community was informed of, and involved in, the project. This report will be drafted in a manner that it may be used with internal and external audiences.

**Deliverables:**

- a. Up to twenty-five (25) draft communication responses (electronic copy)
- b. One (1) draft and one (1) final community outreach report

## 7. ONLINE, SOCIAL AND MEDIA ENGAGEMENT

To increase project reach and accessibility of project information, and to provide additional avenues for the public to engage with the project, CONSULTANT will, in close coordination with City of Shoreline, employ online tools and tactics.

Elements include:

1. City of Shoreline project webpage development and updates:
2. CONSULTANT will provide updates to City of Shoreline for City-hosted page. Webpage updates will be submitted to City of Shoreline for review, approval, and posting.
3. Virtual open house: CONSULTANT will plan, develop content, set up, assess, support promotions, and report on one (1) joint virtual open house for the 145th Corridor Projects. The virtual open house will have up to eight (8) pages, contact project and City of Shoreline branding elements, and include a survey.
4. Online presentation: CONSULTANT will plan, coordinate, promote and attend one (1) online presentation to be coordinated with the 145th Corridor Projects. The online presentation will provide information and answer questions about both projects. CONSULTANT will prepare a detailed event plan for each online presentation that identifies goals, team member roles, promotions, and a work back schedule for meeting preparation. Two (2) practice sessions for each online presentation will be facilitated by CONSULTANT.

**Assumptions:**

1. CONSULTANT will provide content updates, photos, and graphics to City of Shoreline for review, approval and posting.
2. Up to two (2) drafts, one final and maintenance of virtual open house site for up to three weeks.
3. Will utilize CONSULTANT's virtual open house platform infocommunity.org.
4. The virtual open house will meet City branding standards and guidelines.
5. Google translate will be utilized for translations.
6. Graphics will be provided by the other design team members.
7. CONSULTANT will coordinate printing and mailing, and translation services.
8. The City of Shoreline will be invoiced directly for printing and mailing, and translation and interpretation services.
9. The City of Shoreline will use their communication channels to actively promote the online presentation and online open house.
10. Assumes one (1), 1-hour events with closed captioning. Interpretation services will be provided upon request and coordinated by CONSULTANT.
11. Assumes up to two (2), 2-hour practice sessions per online presentation.
12. Up to three (3) CONSULTANT staff will attend the online presentation.

**Deliverables:**

- a. Website update content (up to 3)
- b. Virtual open house comment form/question
- c. Virtual open house and survey, two (2) drafts and one (1) final
- d. Review of up to five hundred survey responses
- e. Virtual open house activity reports (2)
- f. Virtual open house activity and survey report (1 draft, one final)
- g. Detailed event plan for one (1) online presentation
- h. Mailer/postcard for one (1) online presentation (jointly promoting online open house)
- i. One (1) draft and one (1) final online presentation activity report and summary.

**8. MOT WORKSHOPS**

CONSULTANT will plan, facilitate, and report on up to five (5) workshops. Workshops will be organized around the following focus areas: Utilities, Traffic, Transit, Communications and Capital Projects. CONSULTANT will work with project team to set the agenda and prepare for the workshops. CONSULTANT will lead discussion during Communications workshop.

**Assumptions:**

1. CONSULTANT will take notes and provide a list of action items in planning sessions.
2. CONSULTANT will provide a summary report of the strengths, opportunities, weaknesses, and threats identified at each of the five (5) focused workshops.

**Deliverables:**

- a. Workshop planning session agenda and summary
- b. Project team planning workshop, agenda, and summary report

**TASK 20 Additional Landscape and Urban Design****Tasks 20 Work Items:**

1. Coordinate Urban design with structural wall design.

**See JA Brennan's Scope of work attached as appendix A to this document.**

**TASK 21: Early Procurement of SPU Water Transmission Main Pipe Materials****Background:**

Due to the long procurement time to acquire the pipe material and the construction of the water transmission main (WTM) is on the critical path and also scheduled to be constructed in Phase 1 of the Interchange project. The City has determined that it will benefit the City to procure the pipe material in advance and provide the pipe material to the Contractor to install.

**Assumptions:**

1. SPU technical specifications from the PS&E package for the Interchange will be used.
2. Drawings prepared by Varela for the WTM construction can be used.
3. Pipe will be purchased sole source purchase for NW Pipe.
4. Buy America Act applies to pipe purchase.
5. Use City procurement policy to prepare procurement package.

**Task 21 Work Items:**

1. Prepare technical package that include SPU special provisions and standard specifications and plans of the WTM.
2. Prepare contract package for material procurement.
3. Respond to one round of contract package review with City and SPU
4. Review technical submittal and pipe laying drawings.
5. Coordinate with SPU for technical submittal review.

**Deliverables:**

- a. Contract package for advance procurement of WTM materials.

**TASK 22: Update 100% PS&E Submittal to City of Seattle 2023 Standard Specifications for Road, Bridge and Municipal Work and Standard Plans****Background:**

The City of Seattle is in the process of updating their standard specifications and plans and desire to use the 2023 edition which is scheduled to be published late February 2023.

**Assumptions:**

1. References:
  - a. City of Seattle Standard Specifications for Road, Bridge and Municipal Construction, 2023 edition
  - b. City of Seattle Standard Plans for Municipal Construction, 2023 edition

**Task 22 Work Items:**

1. Convert 100% PS&E documents from City of Seattle standard specifications and plans from 2020 edition to 2023 edition. Conversion will be part of Interchange design team response to SDOT 100% PS&E review.
  - a. Update GSPs to 2023 edition
  - b. Updated Bid schedules.

**Deliverables:**

- c. Revised Plans, Specifications, General Special Provisions and Bid Forms.

**TASK 23: Acquire City of Seattle SIP Permit****Background:**

The City of Seattle has determined that SDOT will issue a Street Improvement Permit for the Combined Corridor and Interchange project.

**Assumptions:**

1. References:
  - a. City of Seattle Services Permit Portal – SIP permit

**Task 23 Work Items:**

1. Process SIP permit for Corridor and Interchange project.
  - a. Respond to City of Seattle comments.
  - b. Comment resolution meeting with City of Seattle
  - c. Prepare document for resubmittal.
  - d. Process document through City of Seattle permit portal

**Deliverables:**

- a. SIP permit for Corridor and Interchange project.

**TASK 24: Update ROW Plan, Exhibits and Legal Descriptions****Background:**

Wall #1 was redesigned changing the wall type from Cast-in-Place to Solider Pile. As a result, Wall #1 requires less Right-of-Way (ROW) and permanent easement. In addition to the Chuo parcel submitted application for development thus requiring reduction in temporary construction easement (TCE), and the legal description for three homes on 3<sup>rd</sup> Avenue NE required revision to add access to 147<sup>th</sup> Street.

**Assumptions:**

1. None:

**Task 24 Work Items:**

1. Revise ROW plan for ROW and TCE and Easement required for Wall #1 on Lakeside School parcel.
2. Coordinate updated ROW, TCE and easement with Surveyor to prepare ROW and TCE exhibits and legal description.
3. Revise ROW plan for TCE reduction on Chuo parcel.
4. Coordinate TCE reduction with Surveyor to prepare TCE exhibit and legal description.



5. Revise ROW plan to show access point for 3<sup>rd</sup> Avenue to 147<sup>th</sup> Street.
6. Coordinate 3<sup>rd</sup> Avenue access with surveyor to prepare TCE exhibit and legal description.
7. Coordinate ROW plan revisions, ROW and TCE exhibits and legal description revisions with ROW Consultant.

***Deliverables:***

2. Revised ROW Plans, ROW and TCE exhibits, and Legal Description

**TASK 25: Additional Utility Coordination with SPU and SCL**

***Background:***

The Interchange project widens SR 523 and lowers the grade for SR 523. The geometric changes of SR 523 have resulted in numerous utility conflicts that will cause the utilities to relocate. The following utilities need relocation:

1. SPU water transmission main
2. SPU sanitary sewer
3. SCL 12.4 kV feeder line
4. Lumen Communications duct banks
5. PSE gas main
6. Comcast Communications lines
7. Zayo Communications lines

***Assumptions:***

1. None.

***Task 25 Work Items:***

1. Attend weekly and bi-weekly meetings with utility purveyors.
2. Attend utility design meetings.
3. Coordinate Interchange design with affected utilities.
4. Deconflict utilities that are relocated.
5. Coordinate pothole for utility de-conflicting and design.

***Deliverables:***

- a. Coordinated utility design for SCL duct bank for 12.4 kV feeder line.
- b. Coordinated utility design for SPU WTM.
- c. Coordinated utility design for SPU sanitary sewer.

**TASK 26: Forward Compatibly with WSDOT Thornton Creek Project**

***Background:***

WSDOT is moving forward with the daylighting of Thornton Creek that passes through the project area. WSDOT has requested that the Interchange project make specified design changes to make the Interchange project forward compatible with the Thornton Creek project.

***Assumptions:***

2. None.

***Task 26 Work Items:***

1. Delete Wall #3 and replace with 2:1 fill slope.
2. Design a 2:1 fill slope with 4-foot maintenance bench behind traffic barrier.
3. Design temporary HMA surface for walkway.



4. Design temporary traffic barrier.
5. Coordinate location of SCL 814 splice vault for 12.4 kV feeder line.
6. Prepare 100% PS&E plans to reflect changes.
7. Design team bi-weekly meetings with Thornton Creek design team
8. Update quantities and bid schedule.

**Deliverables:**

- a. Revised 100% Plans

**TASK 27: Bid Phase Support**

**Background:**

It is anticipated the combined Corridor and Interchange project will go on advertisement on May 9, 2023, for bidding purposes. The City has requested Consultant services for bid phase support during the advertisement period for bidding purposes.

**Assumptions:**

1. Scope of Services is only for the Interchange project.

**Task 27 Work Items:**

1. Support City with bid analysis
2. Deliverables: Draft the advertisements for publishing.
3. Post the construction documents at Plan Centers.
4. Assist the City in maintaining a listing of bidders.
5. Field bidder questions and provide clarifications, as necessary.
6. Assist the City with addressing Contractor RFI's during the bid phase.
7. If necessary, prepare up to two contract addendums.
8. Attend pre-bid conference and site visit to answer questions or provide design clarifications to potential bidders and subcontractors.

**Deliverables:**

1. Draft advertisement notice.
2. Written responses to contractor requests for information.
3. Contract Addenda, as required.
4. Updated engineer's estimate incorporating addenda, as required.
5. Updated "Issued for Construction" drawings and bid proposal form, as required.

**TASK 28: Design Civil Works for Comcast and Zayo Communications Joint Utility Trench**

**Background:**

Since the overhead 12.3 kV feeder line poles on the east side of I-5 to 6<sup>th</sup> Avenue NE are being removed and the feeder line going underground Comcast and Zayo Communications will have to be moved underground into a joint utility trench (JUT):

**Assumptions:**

1. SCL design standards apply to location of JUT, current edition.
2. Comcast and Zayo Communications will provide JUT design criteria.

3. Comcast and Zayo Communications will design cabling for JUT and overhead support and guy anchors.

**Task 28 Work Items:**

1. Develop concept of plan of JUT on roll plot for SCL review
2. Coordination with SCL, Comcast and Zayo Communications

**Deliverables:**

- a. Preliminary layout of JUT roll plot format and CAD files

**TASK 29: WSDOT Utility Permit Support**

**Background:**

The Interchange project is partially in WSDOT right-of-way for SR 523 and Interstate 5. WSDOT requires utilities with State ROW to be permitted. Since there are numerous utilities on the Project was determined that WSDOT could expedite the permit process having one point of contact to coordinate with on utility permitting. The following utilities will require WSDOT Utility permitting:

- Seattle City Light
- Seattle Public Utilities
- Lumen Communications
- Puget Sound Energy
- Zayo Communications
- Comcast
- City of Shoreline (Sanitary Sewer)

**Assumptions:**

1. None:

**Task 29 Work Items:**

1. Prepare draft utility permit applications.
2. Coordinate application with WSDOT NWR Utilities Division
3. Coordinate application with Utilities.

**Deliverables:**

- a. WSDOT Utility applications for Utility submittal

**TASK 30: City of Seattle Utility Permit Support**

**Background:**

The Interchange project is partially in City of Seattle right-of-way for NE 145<sup>th</sup> Street. The City of Seattle requires utilities with their ROW to submit a Major Street Utility permit for the project. Since there are numerous utilities on the Project was determined that the City of Seattle could expedite the permit process having one point of contact to coordinate with on utility permitting. The following utilities will require Major Street Utility permitting:

- Lumen Communications
- Puget Sound Energy
- Zayo Communications
- Comcast

**Assumptions:**

1. None:

**Task 30 Work Items:**

1. Prepare draft utility permit applications.
2. Coordinate application with City of Seattle Utilities Division
3. Coordinate application with Utilities.

**Deliverables:**

- a. City of Seattle applications for Utility submittal

**TASK 31: Additional Transmission Main Replacement Design**

**Background**

As the delivery date for the project has been extended beyond the original schedule, additional engineering scope is needed to complete the project to the satisfaction of the City of Seattle. This supplement will allow for the completion of the deliverables identified below. See the attached Scope, Supplement #2 to Lochner Supplement #4.

**Deliverables:**

- a. Ad-Ready Plan Sheets, GSP's, Special Provisions, Details, Opinion of Probable Cost.

**TASK 32: Completion of Landscape and Hardscape Design**

**Background**

This is additional scope to Supplement 2, Task 9. This subconsultant work is performed by J. A. Brennen Associates. The delivery date for the project has extended beyond the original schedule and design elements have evolved through the design process. Additional design scope is needed for project delivery. Please see the attached JA Brennen Supplement X to Lochner Supplement #4

**Deliverables:**

- a. See the attached JA Brennan Supplement X to Lochner Supplement #4 for complete list of deliverables.

Exhibit A-4  
Lochner Supplement 4  
Sub-consultant Scope of Work  
Varlea & Assoc.  
JA Brennan

**SCOPE SUPPLEMENT #2**  
**TO LOCHNER SUPPLEMENT #4**

**ATTACHMENT 1**

**Scope of Project, Scope of Services, Compensation, Schedule, Authorization to Proceed**

**Lochner**

**Shoreline Interchange Transmission Main Replacement**

**1. SCOPE OF PROJECT**

The City of Shoreline, WA has retained Lochner to design improvements to the SR523 (N/NE 145<sup>th</sup> St) & I-5 interchange. The improvements include two new roundabouts and associated improvements to the connected streets.

**2. SCOPE OF SERVICES**

The improvements to the interchange will affect a 24-inch water transmission main owned by Seattle Public Utilities (SPU). Initially earthquake resistant ductile iron pipe (ERDIP) was chosen as the material to replace the existing 24-inch main. However, due to concerns related to supply chain disruption, high demand, and potential long lead times for ERDIP, the City of Shoreline decided to change to welded steel pipe for the replacement material for the 24-inch main. In Refer to Scope Supplement #1 for the additional engineering scope granted by Lochner to Varela for updating and adapting the design for the new pipe material and coordinating SPU's additional requirements for the welded steel material type. Scope Supplement #1 also included additional scope for replacement of SPU's valve chamber at NE 145<sup>th</sup> St & 5<sup>th</sup> Ave NE.

As Lochner worked out the construction phasing for the project they determined that pre-purchase of the steel main would likely be necessary to ensure the construction sequence can proceed as desired. Additional engineering scope is needed to modify the plans and specifications for pre-purchase of the steel main. In addition, the delivery date for the project has extended beyond the original schedule. Additional engineering scope is need for project coordination through the new delivery dates. This Scope Supplement adds engineering scope for the preceding items.

The scope of services included are final design phase as described and further detailed in Attachment 2 Engineering Scope and Cost Worksheets.

**3. COMPENSATION**

All T&E tasks will be performed on a time and expenses (T&E) basis in accordance with the T&E Schedule contained in Attachment 3 to the Agreement. The estimates shown are good faith estimates of the work and level of effort appropriate for each task. The sum of the respective T&E estimates shown for tasks for which the Owner authorizes Engineer to proceed shall not be exceeded without authorization from the Owner.

**4. SCHEDULE**

The following outlines the dates for completing deliverables:

- Ad-Ready Plan Sheets, GSPs, Details, Opinion of Probable Cost 4/25/2023

Ability to meet schedule hinges on responsiveness/coordination with both Lochner and SPU.

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**[Supplement X – Task A] TO LOCHNER SUPPLEMENT #4**

**TASK A: Administration/Coordination**

***Background:***

Administration tasks include meeting coordination, scheduling, and contract administration.

***Assumptions:***

1. The client will provide coordinated review of each submittal. Additional fee will be required for additional review steps.
2. J.A. Brennan Associates will not be responsible for working with adjacent landowners or developers, except at public meetings, if applicable. No public meetings are anticipated.
3. The client will be responsible for the reproduction and distribution of all documents.
4. Arborist services are included as an expense item.

***Task A:***

1. Scheduling and invoicing
2. General project management, correspondence, meeting coordination, issue tracking

***Deliverables:***

- Invoices

Jan 9, 2023

[Supplement X – Task B] TO LOCHNER SUPPLEMENT #4

## TASK B: Construction Documents 60%/Over Shoulder review, 90% and Final

### **Background:**

J.A. Brennan Associates (JAB) will advance the preliminary design approved by the client. Construction documents will be submitted for client review at 60%/over the shoulder review and 90% design comments will be incorporated prior to issuing final design. Design elements will include detailed design of all 30% design features based on client direction received at the end of 30% design and by end of November 2022.

Task B includes the 60%/over the shoulder review, 90% and final plans, cost estimate, and specifications for the streetscape and gateway urban design elements and landscape areas as developed in the JAB 30% design submittal (Nov 2, 2022) and as directed by City of Shoreline on Nov. 9, 2022. JA Brennan will engage an arborist subconsultant (Tyler Holladay, Urban Forestry Services Bartlett Consulting) for existing tree assessment, tree removal and tree mitigation requirements determination and arborist report for the full extents of the Project. (See Bartlett Consulting's Arboricultural Services Proposal, attached.) JAB will coordinate with the arborist to provide available survey, existing and proposed site plans and limits of disturbance needed to facilitate their work. JAB will prepare a tree mitigation summary memo, based on information provided by the arborist report and will provide coordination with City of Seattle Urban Forester related to meeting City of Seattle tree mitigation requirements. JAB will provide tree removal plans, draft and final, for documentation of project existing trees to be removed with a summary table for City of Seattle trees to be removed, as required for coordination with City of Seattle Urban Forester.

JA Brennan shall provide roundabout landscape accent lighting fixture selection and coordination. Light fixture installation details will be provided by others; JAB will review. JA Brennan will provide irrigation, planting and urban design detailing with documentation in plans, details, Roundabout (RAB) detail plans and sections, for the SR523 & I-5 Interchange area gateway/intersections. Wall face elevations and details will be developed and refined from the previous 30% design phase. JA Brennan will provide input for wall finishes only. Wall design by others.

JA Brennan will develop special provisions to City of Shoreline/WSDOT 2022 Standard Specifications and City of Seattle 2020 Standard Specifications as a part of Lochner Engineer's two project manuals, based on a determination of jurisdictional asset. Specifications will be in outline format at 60% completion with full versions at 90% and Final. It is assumed that the project will be published for bidding electronically, by others. Estimate of Probable Construction Cost will be prepared at 60% and updated at 90% and Final. A project bid item list, cost estimate and summary of quantities list will be provided for the City of Shoreline and separately for the City of Seattle.

JA Brennan will provide a public interest finding letter as may be required for specification of custom or proprietary items selected for the project, where no equal products are available. Unique and/or proprietary items anticipated include concrete wall formliners, proprietary metal handrail and accent lighting products.



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JAB will provide review of the project's interlocal agreement, as required to tailor special provisions and cost estimates to each jurisdiction.

JAB will provide a brief maintenance recommendation memorandum addressing landscape, irrigation, wall, and paving long term maintenance requirements/considerations. The design tech memo provided by JAB is considered complete and will not be revised. JAB will provide input to Lochner's Issues Matrix for tracking decisions.

JA Brennan will join in client review meetings and web meetings with Lochner and HBB, as identified in the Supplement #3 Fee Schedule. Additional meeting and coordination time may be required if there is a change to the project schedule. These services can be provided within a future contract supplement proposal.

**Assumptions:**

1. JAB will be designing for the areas and elements identified in the 30% design, along with the added 3rd Ave NE project area. Fee is associated with number of plan sheets required to cover the project area at 20 scale. Additional areas or design elements may require additional fee.
2. Changes to the site plan which increase or decrease impacts, significantly change proposed design elements, or where stated assumptions in the scope of work are not met, may require a change in scope and fee with a contract supplement.
3. J.A. Brennan does not provide contaminated soils remediation services.
4. JAB will use Lochner title block and will match Lochner project CAD standards.
5. The client will review cost estimate assumptions and bid schedule areas prior to initiation of cost estimating quantity take-off work.
6. Arborist services will be provided by subconsultant to JA Brennan. Lochner will provide property owner coordination and will acquire rights of entry to properties, as required for arborist on site tree evaluations. Lochner will provide additional tree location survey as required for the work.
7. It is assumed that City of Shoreline existing trees removed for the Interchange project will not require to be mitigated for if the removed trees are within the project ROW or on private property that will be redeveloped within the project implementation period.
8. All structural engineering is by others.
9. All submittals will be provided in pdf format unless otherwise noted. Final bid set will be provided in AutoCad.
10. Special provisions to the WSDOT/City of Shoreline APWA 2022 standard specifications and a second set of special provisions to the 2020 City of Seattle Standard Specifications are anticipated. JAB will provide limited custom special provision sections that relate to landscape, concrete formliners for walls, color and sealer finishes for walls and railings, patterned concrete paving, accent lighting products and irrigation design elements.
11. It is anticipated that the 90% landscape, irrigation and urban design special provisions developed for the 145th Corridor project will be the starting point for the Project landscape, irrigation and urban design special provisions and JAB will review and provide input to these. JAB will also provide input to Lochner special provisions, where these include JAB design elements. Where both JAB and HBB have provided design and review to specification special provisions, these will be stamped by each firm.



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12. Additional gateway elements and lighting special provisions by others.
13. It is assumed that proprietary items may be specified, as long as there are at least 2 additional equal products identified in the special provisions or plans.
14. Signage design work is by others.
15. The client will provide a current topographic and boundary survey that includes all utilities, trees, vegetation edge, and built elements. The client is responsible for meeting surveying criteria as defined by local jurisdiction. JAB is not responsible for discrepancies between survey and actual conditions.
16. Grading and planting design for natural drainage stormwater features is not anticipated. All grading design is by Lochner. JAB will provide limited review and input.
17. The client will provide coordinated review of each submittal. Additional fee will be required for additional review steps.
18. J.A. Brennan Associates will not be responsible for working with adjacent landowners or developers, except at public meetings, if applicable. No public meetings are anticipated.
19. The client will be responsible for the reproduction and distribution of all documents.
20. Detailing, specifications and cost estimating of railings and walls will be in coordination with Lochner structural engineers.
21. Arborist services are included as an expense item.
22. JAB will consolidate, edit, and print up to 3 copies of contract documents at review stages, and 2 copies of the final plans and specifications.

**Task B:**

1. Arborist subconsultant coordination
  - a. Existing Tree Species Identification & General Health Assessment
  - b. Tree Mitigation Coordination
2. Prepare Tree Mitigation Summary Memo for SDOT, Shoreline and WSDOT Trees
  - a. Submit draft & final
3. Prepare Tree Removal Plan set, draft and final
4. Lighting fixture (at roundabouts) selection and coordination (up to 2 types)
5. Prepare sheet set:
  - a. Irrigation Plan, Schedule, and Set Cover
  - b. Planting Plan, Plant List, and Set Cover
  - c. Roundabout Sections and Detail Area Plans
  - d. Urban Design Sheets, Schedule, and Set Cover
  - e. Wall #1 Formliner Layout Elevation
  - f. Railing Formliner Layout Elevation
  - g. Urban Design, Irrigation, and Planting Details
    - i. Coordinate with and provide review and input to HBB's details
6. Prepare Cost Estimate
  - a. Prepare separate bid schedules for City of Shoreline/WSDOT and City of Seattle
7. Prepare Specifications
  - a. Separate (APWA) special provisions for City of Shoreline/WSDOT and City of Seattle
8. Prepare Public Interest Finding Letter (draft and final) for up to 2 proprietary and/or custom items

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9. Prepare JAB Maintenance Recommendations Memorandum
10. Attend Web Meetings with Lochner weekly through end of February (Up to 17)
11. Attend Web Meetings with HBB (up to 3) and general project team lead coordination
12. Attend up to 3 client review meetings

***Deliverables:***

- Tree Mitigation Summary Memo – draft and final
- Tree Removal Plan set, draft and final (8 sheets)
- Irrigation Plan (8 sheets)
- Irrigation Schedule & Set Cover (2 sheets)
- Planting Plan (8 sheets)
- Plant List & Set Cover (2 sheets)
- Sections at Roundabouts (up to 1 sheet)
- Roundabout Detail Area Plans (1 sheet)
- Urban Design Plan (5 sheets)
- Urban Design Schedule & Set Cover (up to 1 sheet)
- Wall #1 Formliner Layout Elevation (3 sheets)
- Railing Formliner Layout Elevation (up to 2 sheets)
- Details: Wall Formliner Details (up to 3 types) (1 sheet)
- Details: Railing Design Details (up to 2 railing types; up to 2 sheets)
- Stamped Concrete Patterns & Colors, and Color Banding Details (1 sheet)
- Irrigation Details (2 sheets)
- Planting Details (up to 5 sheets)
- Cost Estimate (2 submittals):
  - Bid Schedule for City of Shoreline/WSDOT
  - Bid Schedule for City of Seattle
- Summary of Quantities (2 sets: City of Shoreline/WSDOT and City of Seattle)
- Specifications (2 sets: City of Shoreline/WSDOT and City of Seattle)
- Public Interest Finding Letter (draft and final)
- JAB Maintenance Recommendations Memorandum (up to 4 pages; draft and final)

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[Supplement X – Task C] TO LOCHNER SUPPLEMENT #4

## TASK C: Permit Support

### **Background:**

This task includes City of Shoreline Right-of-Way and City of Seattle Street Improvement Permit (SIP) support services. JA Brennan will provide support to Lochner Engineers (lead) by providing plans showing planting, irrigation and hardscape within the City of Seattle street right-of-way, on SDOT title block. Up to two submittals of permit plans will be provided as a part of the SDOT SIP process. For City of Shoreline Right-of-Way permit, JAB will provide plans showing existing trees to be removed, planting, irrigation and pedestrian hardscape within City of Shoreline right-of-way, as required by City of Shoreline Planning & Community Development Public Works. Up to two submittals of permit plans will be provided as a part of the City of Shoreline ROW permit process.

### **Assumptions:**

1. Permit support other than that specifically identified below, is not included in this scope of work.
2. Changes to the site plan which increase or decrease impacts, significantly change proposed design elements, or where stated assumptions in the scopes of work are not met, may require a change in scope and fee with a contract supplement.
3. The client will provide coordinated review of each submittal. Additional fee will be required for additional review steps.
4. The client will be responsible for the reproduction and distribution of all documents.

### **Task C:**

1. Coordination with Project Team
  - a. Respond to limited permit review comments
2. Prepare Seattle SIP Plans
3. Prepare Shoreline ROW Permit Plans

### **Deliverables:**

- Seattle SIP Plans: hardscape; irrigation; planting; hardscape details & wall elevations (up to 28 sheets) Draft and Final
- Shoreline ROW Permit Plans: hardscape; irrigation; planting; hardscape details (up to 24 sheets) Draft and Final

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**[Supplement X – Task D]** TO LOCHNER SUPPLEMENT #4

## **TASK D: Bid Support**

### **Background:**

Bid support tasks include attendance at one on-site pre-bid meeting, providing response to bidder questions, assistance to Lochner in development of addenda and review of bid results with Lochner and client.

### **Assumptions:**

1. JAB will consolidate, edit, and print up to 3 copies of contract documents at review stages, and 2 copies of the final plans and specifications.
2. The project will be bid in 1 package, together with the 145<sup>th</sup> Corridor project. Each project will have a separate set of plans, bid list/cost estimate, but one consolidated set of special provisions (The project manual will be split into one manual for City of Seattle and one for City of Shoreline). More than one bid package can be provided for additional fee.
3. The project is slated to be at bid-ready completion by April 2023. Advertisement for bidding is anticipated to be in early May 2023. If the schedule extends significantly beyond this period, additional project management, meeting and coordination time may be required and can be provided as a part of an additional services proposal.
4. Construction support is not included in this scope of work.
5. City of Shoreline and/or Lochner Engineers will lead bid support and construction administration.

### **Task D:**

1. Attend on-site pre-bid meeting (1)
2. Answer questions during bidding phase (up to 5)
3. Assist with Addendums (up to 3)
4. Assist with review of bid results

### **Deliverables:**

- Response to bidder questions (up to 5)
- Written input to Addenda (up to 3)
- Bid results review comments

# Exhibit D-4 Lochner Supplement 4 Budget

**City of Shoreline  
Contract Supplement 4 - Labor Budget**

**Project Name: SR 523 (NE 145th Street) and I-5 Interchange Improvements - Supplement 4 Labor Estimate**

**Design Estimate Cost Worksheet**

**Firm Name: H.W. Lochner, Inc.**

<b>WSDOT Classification</b>	<b>Hours</b>	<b>Direct Labor Rate</b>	<b>Cost</b>
SR. PRINCIPAL, VICE PRESIDENT	60	\$110.58	\$ 6,634.80
TRANSPORTATION PLANNING SPECIALIST 5	57	\$82.82	\$ 4,720.74
TRANSPORTATION PLANNING SPECIALIST 5	1287	\$80.71	\$ 103,873.77
CONSTRUCTION PROJECT COORDINATOR 4	1014	\$50.49	\$ 51,196.86
BRIDGE ENGINEER 3	56	\$50.99	\$ 2,855.44
BRIDGE ENGINEER 4	17	\$54.60	\$ 928.20
BRIDGE ENGINEER 7	208	\$86.16	\$ 17,921.28
BRIDGE ENGINEER 3	416	\$49.50	\$ 20,592.00
TRANSPORTATION ENGINEER 5	382	\$69.30	\$ 26,472.60
TRANSPORTATION ENGINEER 5	166	\$70.17	\$ 11,648.22
CIVIL ENGINEER 4	126	\$65.39	\$ 8,239.14
CIVIL ENGINEER 4	426	\$62.07	\$ 26,441.82
CIVIL ENGINEER 3	135	\$59.11	\$ 7,979.85
CIVIL ENGINEER 3	100	\$48.15	\$ 4,815.00
CIVIL ENGINEER 2	772	\$43.46	\$ 33,551.12
CIVIL ENGINEER 2	1122	\$43.27	\$ 48,548.94
CIVIL ENGINEER 2	138	\$42.31	\$ 5,838.78
CIVIL ENGINEER 2	6	\$32.65	\$ 195.90
CIVIL ENGINEER 2	16	\$37.50	\$ 600.00
CIVIL ENGINEER 2	96	\$37.26	\$ 3,576.96
ADMINISTRATIVE ASSISTANT 5	68	\$32.45	\$ 2,190.38

Total Hours      6668      \$      388,821.80

Subtotal Direct Labor      \$      388,821.80  
Escalation @ 6%      \$      23,329.31  
Total Direct Labor      \$      412,151.10

**Overhead & Fee**

Overhead Cost @	159.09% of Direct Labor	\$	655,691.19
Fee @	30.0% Direct Labor	\$	123,645.33

**Total Direct Labor, Overhead and Fee      \$      1,191,487.62**

**Direct Non-Salary Costs**

	<b>Cost</b>
Automobile ( 1500 Mi. @ \$ 0.625)	
Photocopies (5000 @ \$ 0.05 / copy)	
Origin & Destination Survey	
Intersection Turning Movement Counts	
Postage / Delivery (allowance)      Est.	

**Direct Non-Salary Costs Total      \$      -**

**Prime Subtotal      \$      1,191,487.62**

**Subconsultant Expenses**

JA Brennan	\$	288,365.00
Varela & Associates	\$	38,225.00
James Wonneberg Consultant	\$	4,500.00

**Total Subconsultant Expense      \$      331,090.00**

**Total      \$      1,522,577.62**

**Rounded      \$      1,522,578**

**Exhibit B – Fee Estimate****City of Shoreline – SR 523 (145<sup>th</sup> Street) and I-5 Interchange Improvements****Supplement 4 – Task Budget Summary**

<b>Task</b>	<b>Description</b>	<b>Budget</b>
1	Project Management	\$91,278
2	Prepare Traffic Control Plans for Permit through WSDOT and SDOT	\$90,495
3	Prepare SWPPP and DOE Construction Stormwater Permit	\$14,921
4	Relocate L200 Stormwater Pond and Delete Wall #4	\$32,561
5	Integration of the Corridor and Interchange Project Contract Documents	\$53,774
6	TSP Signal Design Revisions and Conformance to Sound Transit's Concept of Operations	\$27,199
7	Revise Construction Staging Plans	\$39,292
8	Change Wall #1 Wall Type from CIP to Cantilever Solider Pile	\$126,836
9	3 <sup>rd</sup> Avenue NE Access to NE 147 <sup>th</sup> Street	\$55,126
10	Redesign SCL Feeder Line Duct Bank on 145 <sup>th</sup> Street	\$89,749
11	Add SCL 5 <sup>th</sup> Avenue Min Duct Bank Project to the Interchange Project	\$18,614
12	Integrate City of Shoreline 3 <sup>rd</sup> Avenue Sanitary Sewer PS&E	\$10,927
13	Prepare 6 <sup>th</sup> Avenue Crosswalk Closure Memo for SDOT and WSDOT	\$10,640
14	Extend City of Seattle SUP path to tie into L230 project limits on 5th Avenue	\$19,179
15	Additional Plan Preparation for Descoping Sound Transit LLE L200 Project Overlap	\$24,400
16	Project coordination with L230 Maintenance of Traffic Management	\$16,019
17	Additional SDOT review process for 90% PS&E and preliminary Project Book	\$13,362
18	Utility Pothole for SCL and Lumen Duct Bank Crossing and SPU WTM Tie-in	\$23,392
19	Additional Public and Agency Outreach	\$7,505
20	Additional Landscape and Urban Design	\$8,501
21	Early Procurement of SPU Water Transmission Main Pipe Materials	\$8,638
22	Update 100% PS&E Submittal to City of Seattle 2023 Standard Specifications for Road, Bridge and Municipal Work and Standard Plans	\$41,348
23	Acquire City of Seattle SIP Permit	\$94,392
24	Update ROW Plan, Exhibits and Legal Descriptions	\$25,912
25	Additional Utility Coordination with SCL and SPU	\$37,393
26	Forward Compatibly with WSDOT Thornton Creek Project	\$34,836
27	Bid Phase Support	\$41,396
28	Design Civil Works for Comcast and Zayo Communications Joint Utility Trench	\$10,553
29	WSDOT Utility Permit Support	\$28,480
30	City of Seattle Utility Permit Support	\$27,312





Project Name: SR 523 (NE 145th Street) and I-5 Interchange Improvements - Supplement 4 Labor Estimate

Prime: H.W. Lochner, Inc.

Employee Name	Aaron Butters	Robert McCaughey	John Tuttle	Richard Hill	David Horvath	Megan Briden	Brian Byrne	Brian Haman	Gerald Wilhelm	Yongliang Zhu	Joshua Phillips	Miguel Sandoval	Matt Randall	Andrew Robinson	Karlo Velez	Gage Bull	Juyong Alan Kim	Brittany Chung	Eli Magnan	Roberto Gomez	Heather Gallagher	
WSDOT Classification	SR, PRINCIPAL VICE PRESIDENT	TRANSPORTATION PLANNING SPECIALIST 5	TRANSPORTATION PLANNING SPECIALIST 5	CONSTRUCTION PROJECT COORDINATOR 4	BRIDGE ENGINEER 3	BRIDGE ENGINEER 4	BRIDGE ENGINEER 7	BRIDGE ENGINEER 3	TRANSPORTATION ENGINEER 5	TRANSPORTATION ENGINEER 5	CIVIL ENGINEER 4	CIVIL ENGINEER 4	CIVIL ENGINEER 3	CIVIL ENGINEER 3	CIVIL ENGINEER 2	CIVIL ENGINEER 2	CIVIL ENGINEER 2	CIVIL ENGINEER 2	CIVIL ENGINEER 2	CIVIL ENGINEER 2	ADMINISTRATIVE ASSISTANT 5	
Direct Labor Rate	1	\$110.58	\$82.82	\$80.71	\$50.49	\$50.99	\$54.60	\$86.16	\$49.50	\$69.30	\$70.17	\$65.39	\$62.07	\$59.11	\$48.15	\$43.46	\$43.27	\$42.31	\$32.65	\$37.50	\$37.26	\$32.45
Overhead Rate FYE 2022	159.09%	\$175.92	\$131.76	\$128.40	\$80.32	\$81.12	\$86.86	\$137.07	\$78.75	\$110.25	\$111.63	\$104.03	\$98.75	\$94.04	\$76.60	\$69.14	\$68.84	\$67.31	\$51.94	\$59.66	\$59.28	\$51.62
Fixed Fee/Profit	30.00%	\$33.17	\$24.85	\$24.21	\$15.15	\$15.30	\$16.38	\$25.85	\$14.85	\$20.79	\$21.05	\$19.62	\$18.62	\$17.73	\$14.45	\$13.04	\$12.98	\$12.69	\$9.80	\$11.25	\$11.18	\$9.74
Loaded Labor Rate		\$319.68	\$239.42	\$233.32	\$145.96	\$147.41	\$157.84	\$249.08	\$143.10	\$200.34	\$202.85	\$189.04	\$179.44	\$170.88	\$139.20	\$125.64	\$125.09	\$122.31	\$94.39	\$108.41	\$107.71	\$93.81
1a.i	Initial scoping of new feeder line layout on the west side of I-5.	6														6						
1a.ii	Over-the-shoulder review of intermediate design (30% and 90%)	9			5											4						
1a.iii	Final design review and approval	4														4						
2	<b>Conceptual Design</b>																					
2a	Prepare roll plot conceptual design of civil elements to be relocate of	40														40						
2b	Meet with SCL for over the shoulder review of conceptual design	4														4						
3	<b>60% Design</b>																					
3a	Prepare plans	85			5											80						
3b	Prepare Cost Estimate	26			2											24						
3c	SCL Review meetings	8			2											6						
4	<b>90% Design Submittal</b>																					
4a	Prepare Plans	84			4											80						
4b	Prepare Cost Estimate	82			2		40									40						
4c	Prepare Special Provisions	72			40											32						
4d	Respond to SCL comments	24			12											12						
4e	OTS meetings with SCL	38			6											32						
5	<b>Design and Construction Coordination Workshop</b>	12														12						
6	<b>Final Design</b>																					
6a	Prepare Plans	60			6											54						
6b	Prepare Special Provisions	24			12											12						
6c	Prepare Cost Estimate	34			2		24									8						
11	<b>Add SCL 5th Avenue Ductbank project to Interchange project</b>	100	-	-	46	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	Agency Coordination - Bi-week coordination meetings with SCL	12			6		6															
2	Integrate 5th Ave Ductbank and PS&E into Interchange Project	88			40		48															
12	<b>Integrate City of Shoreline 3rd Avenue Sanitary Sewer project into</b>	60	-	-	22	-	6	-	-	-	-	-	-	20	-	-	12	-	-	-	-	-
1	Agency Coordination - Convene periodic coordination meetings with	16			8									8								
2	Plan revision and integration	16			6		2							8								
3	Add 3 <sup>rd</sup> Avenue Sanitary Sewer plans, special provisions and bid	28			8		4							4			12					
13	<b>Prepare 6th Avenue cross walk closure memo for SDOT and WSDOT</b>	58	-	-	4	-	-	-	-	-	42	-	-	-	-	-	-	-	-	-	12	-
1	<b>Agency Coordination</b>																					
1a	Meet with SDOT reviewers to resolve comments (up to two meetings)	7			1						6											
1b	Meet with WSDOT reviews to resolve comments (up to two meetings)	7			1						6											
2	Prepare crosswalk closure memo	37			1						24											12
3	Respond to SDOT/WSDOT review comments up to two reviews	7			1						6											
14	<b>Extend SUP path to tie into L230 project limits on 5th Avenue</b>	136	-	-	12	-	-	-	-	-	-	-	-	60	40	24	-	-	-	-	-	-
1	Agency Coordination - Meet with SDOT reviewers to resolve	4			4																	
2	Prepare engineered drawing for construction.	114			2									60	40	12						
3	Prepare cost estimate of elements to be constructed for SUP.	6			2											4						
4	Prepare special provisions for SUP construction	6			2											4						
5	Respond to SDOT/WSDOT review comments up to two reviews	6			2											4						
15	<b>Additional plan preparation for descoping L200 Project overlap Additional</b>	162	-	-	26	-	-	-	-	-	-	32	-	-	-	80	-	-	-	-	24	-
1	Take Sound Transit L200 plans and prepare plans that show elements	132			16							32				60					24	
2	Meeting with Sound Transit to review descoped L200 Plans.	26			10											16						
3	Provide Sound Transit CAD files of descoped plans.	4			4											4						
16	<b>Project coordination with L230 for intersection design and traffic closures</b>	106	-	-	24	4	-	-	-	12	-	-	-	-	18	-	-	-	-	-	48	-
1	Coordinate design interface at the intersection of 5 <sup>th</sup> Avenue NE and I-	12			12																	
2	Intersection design and traffic channelization	60														12					48	
3	Grading and paving match	6														6						
4	Meetings with SDOT and L230 design team.	4			4																	
5	Prepare contract special provision for coordination of MOT with L230	24			8		4			12												
17	<b>Additional SDOT review process for 90% PS&amp;E and preliminary Project Book</b>	76	-	-	24	48	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
1	Prepare interim Project Book submittal of project to include:	76			24	48					4											
18	<b>Utility Pothole for SCL and Lumen duct bank crossing and SPU WTM Tie-in</b>	144	-	24	-	40	-	-	-	8	-	-	-	32	-	24	-	-	-	16	-	-
1	1. Prepare pothole plan	40														24				16		
2	2. Coordinate pothole permit with City of Seattle permit portal	104		24		40				8			32									
19	<b>Additional Public Outreach</b>	60	-	-	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	-	-	-
1	Additional Graphics preparation for City Council Presentation	60														60						
20	<b>Additional Landscape and Urban Design</b>	48	-	-	4	-	-	-	12	32	-	-	-	-	-	-	-	-	-	-	-	-
1	Coordination Urban Design with Structural Design	48			4				12	32												
21	<b>Early Procurement of WMT pipe materials</b>	52	-	-	12	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	Prepare documents for material purchase	52			12	40																
22	<b>Update 100% PS&amp;E Submittal to City of Seattle 2023 Standard Specifications for Road, Update 100% PS&amp;E Submittal to City of Seattle</b>	222	-	-	64	86	-	-	12	12	12	-	-	12	-	-	-	-	-	-	-	-
1	Update Special Provisions	142			40	54			8	8	8			8								
1a	Updated GSPs	40			12	16			2	2	2			2								
1b	Update Bid Schedule	40			12	16			2	2	2			2								
23	<b>Acquire City of Seattle SIP Permit</b>	560	-	-	90	160	-	-	32	80	-	-	40	40	24	40	54	-	-	-	-	-
1	<b>City of Seattle SIP Permit</b>																					
1a	Respond to City of Seattle Comments	18								8												
1b	Comment Resolution meetings with City of Seattle	18								8												
1c	Resubmittal of 100% PS&E for permitting	474			60	120			16	80			40	40	24	40	54					
1d	Processing documents through City Permit Portal	50			10	40																
24	<b>Update ROW Plan, Exhibits and Legal Descriptions</b>	176	-	-	36	-	-</															



Exhibit E-4  
Sub-consultants Budget  
to Lochner Supplement 4  
Varlea & Assoc.  
JA Brennan

<b>SCOPE SUPPLEMENT #2 TO LOCHNER SUPPLEMENT #4</b> <b>ATTACHMENT 2 - Engineering Scope and Cost Worksheets</b> <b>LOCHNER</b> <b>SHORELINE INTERCHANGE TRANSMISSION MAIN REPLACEMENT (190-01)</b> <b>January 12, 2023</b>						
<b>Consultant Fee Determination - Summary Sheet</b>						
<b>Task 1 - Project Management, Administration, and Inter-Agency Coordination</b>						
	<b>Classification</b>	<b>Man-Hours:</b>	<b>x</b>	<b>Rate:</b>	<b>=</b>	<b>Cost:</b>
	Principal Engineer - Jesse Cowger	56.00		\$ 51.49		\$ 2,883.44
	Senior Engineer	24.00		\$ 47.16		\$ 1,131.84
	Design Engineer	0.00		\$ 42.64		\$ -
	Technician	0.00		\$ 37.40		\$ -
	Admin. Asst.	8.00		\$ 26.39		\$ 211.12
					DSC Subtotal	\$ 4,226.40
					Overhead	\$ 6,183.65
					Fixed Fee	\$ 1,267.92
					Fee Subtotal	\$ 11,677.97
<b>Task 2 - T-main Replacement Design</b>						
	<b>Classification</b>	<b>Man-Hours:</b>	<b>x</b>	<b>Rate:</b>		
	Principal Engineer - Jesse Cowger	44.00		\$ 51.49		\$ 2,265.56
	Senior Engineer	76.00		\$ 47.16		\$ 3,584.16
	Design Engineer	0.00		\$ 31.01		\$ -
	Technician - Tran Pham	44.00		\$ 37.40		\$ 1,645.60
	Admin. Asst.	6.00		\$ 26.39		\$ 158.34
					DSC Subtotal	\$ 7,653.66
					Overhead	\$ 11,198.07
					Fixed Fee	\$ 2,296.10
					Fee Subtotal	\$ 21,147.83
<b>Task 3 - T-main Bid Period &amp; Construction Engineering</b>						
	<b>Classification</b>	<b>Man-Hours:</b>	<b>x</b>	<b>Rate:</b>		
	Principal Engineer	0.00		\$ 51.49		\$ -
	Senior Engineer	0.00		\$ 47.16		\$ -
	Design Engineer	0.00		\$ 42.64		\$ -
	Technician	0.00		\$ 37.40		\$ -
	Admin. Asst.	0.00		\$ 26.39		\$ -
					DSC Subtotal	\$ -
					Overhead	\$ -
					Fixed Fee	\$ -
					Fee Subtotal	\$ -
<b>Task 4 - T-main Record Drawings</b>						
	<b>Classification</b>	<b>Man-Hours:</b>	<b>x</b>	<b>Rate:</b>		
	Principal Engineer	0.00		\$ 51.49		\$ -
	Senior Engineer	0.00		\$ 47.16		\$ -
	Design Engineer	0.00		\$ 42.64		\$ -
	Technician	0.00		\$ 37.40		\$ -
	Admin. Asst.	0.00		\$ 26.39		\$ -
					DSC Subtotal	\$ -
					Overhead	\$ -
					Fixed Fee	\$ -
					Fee Subtotal	\$ -
<b>Overhead:</b>						
	(OH Cost -- including Salary Additives):					
		OH Rate x DSC =	<b>146.31%</b>			
<b>Fixed Fee (FF):</b>						
		FF Rate x DSC =	<b>30%</b>			
<b>Reimbursables:</b>						
	None					
					<b>Total Fee This Supplement</b>	<b>\$32,825.79</b>

**SCOPE SUPPLEMENT #2 TO LOCHNER SUPPLEMENT #4**  
**ATTACHMENT 2 - Engineering Scope and Cost Worksheets**  
**LOCHNER**  
**SHORELINE INTERCHANGE TRANSMISSION MAIN REPLACEMENT (190-01)**  
**January 12, 2023**

	Estimated Hours						JJC
	Principal Engineer	Senior Engineer	Design Engineer	Technician	Admin Assistant	Other	
<b>Task 1 - Project Management, Administration, and Inter-Agency Coordination</b>							
<i>Scope to be added to this task listed below:</i>							
Allowance for general project administration assistance and inter-agency coordination Supplement 1 covered meetings thru 8/1/22. This Supplement covers Meetings from 8/1/22 to current advertisement date of 4/25/23.	24	24			8		
Assume 16 meetings, one hour each, plus half hour prep, and half hour follow up (bi-weekly utility coordination meetings)	32						
Total	56	24	0	0	8	\$0	
<b>Task 2 - T-main Replacement Design</b>							
<i>Scope to be added to this task listed below:</i>							
Allowance for coordination with steel main supplier and inclusion of submittal data in plans/specifications	24	24		24			
Adapt Specifications, Special Provisions for pre-purchased steel pipe	8	24					
Update bid items	2	8		4			
Update Opinion of Probable Cost (t-main and appurtenances only)	2	8		4			
Allowance for final revisions based on SPU comments	8	12		12	6		
Total	44	76	0	44	6	\$0	
<b>Task 3 - T-main Bid Period &amp; Construction Engineering</b>							
<i>No change to this task</i>							
Total	0	0	0	0	0	\$0	
<b>Task 4 - T-main Record Drawings</b>							
<i>No change to this task</i>							
Total	0	0	0	0	0	\$0	

**5. AUTHORIZATION TO PROCEED**

Execution of this Agreement by Owner shall authorize Engineer to proceed with all tasks.

**SCOPE SUPPLEMENT #2 TO LOCHNER SUPPLEMENT #4****ATTACHMENT 3  
Time and Expenses Schedule****Lochner  
Shoreline Interchange Transmission Main Replacement****PROFESSIONAL SERVICES**

Professional services will be invoiced in accordance with the Cost Plus Fixed Fee calculation shown in Attachment 2.

**REIMBURSABLE EXPENSES**

The following items of direct project expense will be invoiced as follows:

1. Automobile travel at the current allowable Federal mileage rate
2. Travel, meals, lodging expenses as incurred (or per diem if specified).
4. Shipping costs for samples, equipment, documents, or other items as required
5. Materials or other expendable items expended in the course of the work
6. Rentals, fees, permits or other charges for special services or special equipment necessary for the work.
7. Outside services utilized for the work, including outside reproduction of drawings, documents, reports or specifications

J.A. Brennan Associates, PLLC

January 12, 2023

Exhibit A - Amendment #2 Fee Schedule **TO LOCHNER SUPPLEMENT #4**  
for Lochner Engineers

**City of Shoreline SR 532 & I-5 Interchange - 60%/Over Shoulder Review, 90%, Final Construction Documents - Supplement #3**

WORK ITEM Rate	DESCRIPTION	JB PIC \$219.96	TW PM/PLA \$129.28	DC RLA \$124.16	SS Designer \$93.49	VS/SY Admin \$121.24	Total JAB Hours	Total Labor	Total Expenses	Grand Total
<b>A Administration / Coordination</b>										
1	Scheduling and invoicing	1	3		1	10	15	\$1,914		\$1,914
2	General project management, correspondence, meeting coordination, issue tracking	1	24		2		27	\$3,510		\$3,510
<b>Total Task A</b>		<b>2</b>	<b>27</b>	<b>0</b>	<b>3</b>	<b>10</b>	<b>42</b>	<b>\$5,423</b>	<b>\$0</b>	<b>\$5,423</b>
<b>B Construction Documents 60%/Over Shoulder review, 90% and Final</b>										
1	Existing Tree Species Identification & general health Assessment (Arborist subconsultant coordination)	2	12	2	12	5	33	\$3,968	\$27,858	\$31,826
2	Tree Mitigation Summary Memo - for SDOT, Shoreline and WSDOT Trees (JAB) (draft & final)	1	10	1	10		22	\$2,572	\$100	\$2,672
3	Tree Mitigation Coordination (with arborist)	1	10		12		23	\$2,635	\$50	\$2,685
4	Tree Removal Plan (8 shts 20 scale)	2	40		76		118	\$12,716	\$450	\$13,166
5	Lighting fixture (@RABs) selection and coordination (up to 2 types)	1	10		14		25	\$2,822	\$100	\$2,922
6	Irrigation Plan (8 shts 20 scale)	3	54	16	98		171	\$18,790	\$450	\$19,240
7	Irrigation Schedule & Set Cover (up to 2 shts)	1	10	3	16		30	\$3,381	\$150	\$3,531
8	Planting Plan (8 shts 20 scale)	8	65	16	106		195	\$22,059	\$450	\$22,509
9	Plant list ; Planting Set Cover (up to 2 shts)	3	16	4	24		47	\$5,469	\$150	\$5,619
10	Sections at RABs (up to 1 sht)	1	16	2	30		49	\$5,341	\$65	\$5,406
11	RAB Detail Area Plans (1 sht)	2	24	2	40		68	\$7,531	\$65	\$7,596
12	Urban Design Plan (5 shts 20 scale)	7	35	14	65		121	\$13,880	\$450	\$14,330
13	Urban Design Schedule & Set Cover (up to 1 sht)	1	6	3	10		20	\$2,303	\$65	\$2,368
14	Elevations: Wall Formliner Layout (Wall #1) (3 shts) - (1/4 scale)	3	24	10	30		67	\$7,809	\$200	\$8,009
15	Elevations: Railing Design (Wall #3 and #4) (up to 2 shts) Scale TBD	1	12	8	30	2	53	\$5,812	\$150	\$5,962
16	Coordination with fabricator (re: custom railing)	1	8		8	2	19	\$2,245	\$100	\$2,345
17	Details: Wall Formliner Details (up to 3 types) (1 sht)	1	8	2	16		27	\$2,998	\$65	\$3,063
18	Details: Railing Design Details (2 railing types) (up to 2 shts)	3	20	6	26		55	\$6,421	\$150	\$6,571
19	Details: Stamped Concrete Patterns and Colors & Color Banding (1 sht)	1	10		16		27	\$3,009	\$65	\$3,074
20	Details: Planting (up to 5 shts) - Review HBB details & add ST mixes & new mixes	3	20	5	45		73	\$8,073	\$350	\$8,423
21	Details: Irrigation (2 shts) - Review/Input HBB details	1	12	4	14		31	\$3,577	\$150	\$3,727
22	Cost Estimate (2 submittals & bid item coordination) (assume 2 separate bid schedules - WSDOT and Seattle)	6	28	8	34	4	80	\$9,597	\$50	\$9,647
23	Summary of Quantities (2 sets; 2 submittals) (include in drawing set)	2	20	5	24	4	55	\$6,375	\$150	\$6,525
24	Specifications - two sets - Shoreline/WSDOT & Seattle (APWA Specials)	6	80	10	20	30	146	\$18,411	\$200	\$18,611
25	Public Interest Finding Letter (draft and final) (for up to 2 proprietary and/or custom items)	3	10			2	15	\$2,195	\$20	\$2,215
26	JAB Maintenance Recommendations Memorandum (up to 4 pages; draft and final)	3	10	2		1	16	\$2,322	\$20	\$2,342
27	Web Meetings with Lochner (up to 17 - weekly thru end Feb - 1 hour)	4	20		8		32	\$4,213	\$20	\$4,233
28	Web Meetings with HBB (up to 3) and general project team lead coordination	3	16		6		25	\$3,289	\$20	\$3,309
29	Up to 3 client review meetings	3	12		5		20	\$2,679	\$60	\$2,739
<b>Total Task B</b>		<b>77</b>	<b>618</b>	<b>123</b>	<b>795</b>	<b>50</b>	<b>1,663</b>	<b>\$192,490.19</b>	<b>\$32,173.00</b>	<b>\$224,663.19</b>
<b>C Permit Support</b>										
1	Seattle SIP Plans: hardscape; irrigation; planting; hardscape details & wall elevations (up to 28 sheets)	12	50	40	94		196	\$22,858	\$200	\$23,058
2	Shoreline ROW Permit Plans: hardscape; irrigation; planting; hardscape details (up to 24 sheets)	12	44	30	84		170	\$19,906	\$150	\$20,056
3	Coordination with Team and response to permit review comments	3	20		8		31	\$3,993	\$20	\$4,013
<b>Total Task C</b>		<b>27</b>	<b>114</b>	<b>70</b>	<b>186</b>	<b>0</b>	<b>397</b>	<b>\$46,757.18</b>	<b>\$370.00</b>	<b>\$47,127.18</b>
<b>D Bid Support</b>										
1	Attend on-site pre-bid meeting		8		4		12	\$1,408	\$40	\$1,448
2	Answer questions during bidding phase (up to 5)	2	6		6		14	\$1,777	\$25	\$1,802
3	Assist with Addendums (up to 3)	3	6		8		17	\$2,183	\$20	\$2,203
4	Assist with review of bid results	2	2				4	\$698		\$698
<b>Total Task D</b>		<b>7</b>	<b>22</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>47</b>	<b>\$6,066.70</b>	<b>\$85.00</b>	<b>\$6,151.70</b>
<b>LANDSCAPE ARCHITECTURE TOTAL</b>		<b>113</b>	<b>781</b>	<b>193</b>	<b>1,002</b>	<b>60</b>	<b>2,149</b>	<b>\$250,737.42</b>	<b>\$32,628.00</b>	<b>\$283,365.42</b>

Note:  
Specifications will include specials for: wall finishes, concrete colors, stamped concrete, light fixtures, custom railing and review/edits to HBB landscape and irrigation specs.  
Detailing, specifications and cost estimating of railings and walls will be in coordination with Lochner structural engineers.  
Arborist services are included as an expense item.