PARKS & PUBLIC WORKS COUNCIL COMMITTEE & COMMITTEE OF THE WHOLE REGULAR MEETING

Tuesday, September 20, 2022, at 5:00 PM

Snoqualmie City Hall, 38624 SE River Street & Zoom

CALL TO ORDER & ROLL CALL

COMMITTEE MEMBERS
Bryan Holloway, Chair
Jolyon Johnson, Councilmember
Ethan Benson, Councilmember

This meeting will be conducted in person and remotely using teleconferencing technology provided by Zoom.

Join by Telephone at 5:00 PM: To listen to the meeting via telephone, please call **253.215.8782** and enter Webinar ID **867 8554 3964** and Password **1700050121** if prompted.
Press *9 to raise your hand to speak. Raising your hand signals the meeting moderator that you have a comment.
Press *6 to mute and unmute.

Join by Internet at 5:00 PM: To watch the meeting over the internet via your computer, follow these steps:
1) Click this link.
2) If the Zoom app is not installed on your computer, you will be prompted to download it.
3) If prompted for Webinar ID, enter **867 8554 3964**; Enter Password **1700050121**
4) Please confirm that your audio works prior to participating.

PUBLIC COMMENTS

MINUTES

1. Approval of minutes dated September 7, 2022

DISCUSSION

AGENDA BILLS

2. AB22-117: Washington Department of Commerce grant contract for Riverwalk Phase 1

3. AB22-127 Consultant Services Agreement with Otak for Design of Kimball Creek Bridges Restoration

4. AB22-129: Meadowbrook Bridge Load Rating Update

5. AB22-134: Consultant Services Agreement with KPG-Psomas, for Design of Snoqualmie Parkway Rehabilitation Project

6. AB22-138: Community Center Expansion Project -- Alternative Public Works Contracting Options

7. AB22-139: Job Order Contracting Consulting Services Contract with the Gordian Group.

ADJOURNMENT

PARKS & PUBLIC WORKS COUNCIL COMMITTEE & COMMITTEE OF THE WHOLE REGULAR MEETING MINUTES SEPTEMBER 7, 2022

This hybrid meeting was conducted in-person and remotely using teleconferencing technology provided by Zoom in accordance with Governor Inslee's Proclamation 20-28.

CALL TO ORDER & ROLL CALL

Committee Chair Holloway called the meeting to order 5:01 PM

Committee Members:
Committee Chair Bryan Holloway, Councilmember Ethan Benson, and Councilmember Jolyon Johnson were present. Council Committee of the Whole member, Cara Christensen.

Mayor Katherine Ross was also present.

City Staff:
Mike Chambless, Parks & Public Works Director
Joan Quade, Administrative Assistant
Pat Fry, P.E., Project Engineer
Mike Sauerwein, City Administrator
Andy Latham, IT Support
Drew Bouta, Finance Manager
Phil Bennett, Interim Parks & Maint. Supervisor

PUBLIC COMMENTS

None

MINUTES

August 16, 2022 minutes were approved as written.

AGENDA BILLS

AB22-115	Awarding an Engineering Contract with Parametrix for the 384th Avenue SE Sewer Replacement
Recommendation:	**Add to Council agenda, off-consent**
AB22-125	Sandy Cove Park Bank Protection and Restoration – Phase 2 Rescoping: Contract Amendment with NHC
Recommendation:	**Add to Council consent agenda, off-consent**
AB22-126	Amendment #4 with Aspect Consulting for Water Rights Permitting Support and Geotechnical Monitoring
Recommendation:	**Add to Council consent agenda, off-consent**

DISCUSSION ITEMS

1. Director Chambless announced that internal candidate, Matt Hedger, has been promoted to Water Superintendent.

ADJOURNMENT

There being no further business to come before the Committee, Committee Chair Holloway adjourned the meeting at 5:36 PM.

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-117
September 26, 2022
Committee Report

AGENDA BILL INFORMATION

TITLE:	AB22-117: Washington Department of Commerce grant contract for Riverwalk Phase 1	☐ Discussion Only ☒ Action Needed:
PROPOSED ACTION:	Approve Grant Agreement No. CD16-96503-033 between Washington Department of Commerce and the City of Snoqualmie for the Snoqualmie Riverfront aka "Snoqualmie Riverwalk Phase 1" Project and authorize the Mayor to sign.	☒ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	9/15/2022
	Finance	Drew Bouta	9/15/2022
	Legal	Bob Sterbank	9/15/2022
	City Administrator	Mike Sauerwein	9/15/2022

DEPARTMENT:	Parks & Public Works	
STAFF:	Dylan Gamble, Associate Planner	
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022
MEMBERS:	Bryan Holloway Ethan Benson Jo Johnson	
EXHIBITS:	1. Draft Grant Agreement No. CD16-96503-033	

AMOUNT OF EXPENDITURE	$ N/A
AMOUNT BUDGETED	$ N/A
APPROPRIATION REQUESTED	$ N/A

SUMMARY

INTRODUCTION

The City of Snoqualmie received direct appropriation funding from the Washington State Legislature for the design and construction of the Snoqualmie Riverfront aka "Snoqualmie Riverwalk Phase 1" Project ("the Project"). Funding for the Project was originally appropriated by the State Legislature in 2015 and reappropriated in early 2022. This agenda bill provides for City Council acceptance of the Legislature's funding by approval of a grant agreement with the Washington Department of Commerce.

BACKGROUND

The Snoqualmie Riverwalk is a multi-phase project to remove flood-prone properties from the riverfront and develop a 3-mile loop trail while restoring riparian habitat. Phase I will develop one mile of trail on the East side of Railroad Ave/Hwy 202 from Kimball Creek to Riverview Park including restoration of the shoreline, and preparation for connection to future phases. Construction of Sandy Cove bank stabilization and/or other

Sandy Cove Park improvements are not included for construction as part of the Riverwalk Phase I Project, though a percentage of the boardwalk *design* adjacent to Sandy Cove Park is anticipated to be included in Riverwalk Phase I work. Additional riverfront property acquisitions (beyond those already completed) are not included within the Riverwalk Phase 1. Both Sandy Cove Park and the riverfront property acquisition program have separate funding and grant sources, both of which are independent of Riverwalk Phase 1.

ANALYSIS

The City was awarded $1.5 million in direct appropriations in 2015 to fund the design, cultural resource reporting, construction and other related permitting of the Project. (The state legislative appropriation mistakenly referred to the Project as the "Snoqualmie Riverfront Project," rather than the "Snoqualmie Riverwalk"). Although the funding was directly appropriated by the Legislature, its distribution to the City will be managed by a grant agreement with the Washington Department of Commerce (COM). This agreement is consistent with the typical COM "template" agreement, with the addition of certain additional special terms and conditions. These extra provisions describe a process for ongoing communication and consultation with the Snoqualmie Indian Tribe, including specifically prior to the finalization of project design and commencement of construction, as well as a process for providing documentation of archaeological resources to the Washington Department of Archeology and Historic Preservation ("DAHP"), and concurrence by DAHP.

The City has worked with COM, DAHP and the Snoqualmie Tribe on the wording of the grant agreement and the special terms and conditions. All communication requirements have been met for the City to proceed with contracting with the COM. Following Council approval of the COM agreement, Staff will proceed with project design and documentation, subject to the communication / consultation requirements outlined in the agreement. Staff will also seek reimbursement through the grant agreement of preliminary design and consultant costs previously incurred for the Project.

BUDGET IMPACTS

The Department of Commerce grant is contemplated by the funding sources identified for the Riverwalk Phase 1 project in the City's 2023-2028 Capital Improvement Plan. In addition, the Administration has included this grant as part of the proposed 2023-2024 Biennial Budget. According to the 'Riverwalk Project – NW of Sandy Cove Park' CIP worksheet (formerly Snoqualmie Riverwalk Phase 1), the City intends to complete the Project during the 2023-24 biennium. The City anticipated $1.479 million of grant funding within the CIP. This agenda bill does not itself authorize expenditure of grant funds.

NEXT STEPS

If approved, Staff will seek a new consultant contract to update the existing Project design to bring it within the modified Project scope of work, as well as to address the Agreement's historical / cultural resource requirements. In addition, the Project design will need to be modified to coordinate with nearby projects (e.g., Town Center Phase 3) that were not known at the time of the original, 2015 Legislative appropriation.

PROPOSED ACTION

Move to approve the Grant Agreement No. CD16-96503-033 between the Washington Department of Commerce and the City of Snoqualmie for the Snoqualmie Riverfront aka "Snoqualmie Riverwalk Phase 1" Project, and authorize the Mayor to sign.

Washington State Department of Commerce

Grant to

The City of Snoqualmie

through

The Local and Community Projects Program

For

Snoqualmie Riverfront Project
(a.k.a. Snoqualmie Riverwalk Project)

Start date: July 1, 2021

TABLE OF CONTENTS

FACE SHEET

Grant Number: **CD16-96503-033**
Project Name: **Snoqualmie Riverfront Project**

Washington State Department of Commerce
Local Government Division
Community Assistance and Research Unit

1. GRANTEE City of Snoqualmie PO Box 987 Snoqualmie, WA 98065-0987		**2. GRANTEE Doing Business As (optional)** N/A	
3. GRANTEE Representative Dylan Gamble, Associate Planner (425) 681-4110 DGamble@snoqualmiewa.gov		**4. COMMERCE Representative** Mara Isaacson, Grant Manager PO Box 42525, Olympia, WA 98504 (360) 742-7665 mara.isaacson@commerce.wa.gov	
5. Grant Amount $1,474,400.00	**6. Funding Source** **Federal:** **State:**X **Other:** **N/A:**	**7. Start Date** July 1, 2021	**8. End Date** June 30, 2025, contingent on reappropriation; June 30, 2023 if funds are not reappropriated.
9. Federal Funds (as applicable) **N/A**		**Federal Agency** **N/A**	**CFDA Number** **N/A**
10. Tax ID # N/A	**11. SWV #** SWV0007167-00	**12. UBI #** 179-000-205	**13. DUNS #** 098560121

14. Grant Purpose
The purpose of this performance-based Grant Agreement is to provide funding for a legislatively approved project that furthers the goals and objectives of The Local and Community Projects Program as described in Attachment A – Scope of Work (the "Project").

COMMERCE, defined as the Washington State Department of Commerce, and the GRANTEE, as defined above, acknowledge and accept the terms of this Grant and attachments and have executed this Grant on the date below to start as of the date and year referenced above. The rights and obligations of both parties to this Grant are governed by this Grant and the following other documents incorporated by reference: Grant Terms and Conditions including Attachment "A" – Scope of Work, Attachment "B" – Certification of Availability of Funds to Complete the Project, Attachment "C" – Certification of the Payment and Reporting of Prevailing Wages, Attachment "D" – Certification of Intent to Enter LEED Process.

FOR GRANTEE	**FOR COMMERCE**
_____ Signature	_____ Mark K. Barkley, Assistant Director Local Government Division
_____ Print Name	_____ Date
_____ Title	**APPROVED AS TO FORM**
_____ Date	Steve Scheele, Assistant Attorney General 9/2/2022 Date

DECLARATIONS

GRANTEE INFORMATION

GRANTEE Name:	**City of Snoqualmie**
Grant Number:	CD16-96503-033
State Wide Vendor Number:	SWV0007167-00

PROJECT INFORMATION

Project Name:	**Snoqualmie Riverfront Project**
Project City:	Snoqualmie
Project State:	Washington
Project Zip Code:	98065-0987

GRANT AGREEMENT INFORMATION

Grant Amount:	**$1,474,400.00**
Appropriation Number:	2EHB 1115 SL, Section 1040 (2015 Regular Session)
Re-appropriation Number (if applicable):	ESSB 5965 SL, Section 1044 (2017 Regular Session) SHB 1102 SL, Section 1062 (2019 Regular Session) SHB 1080 SL, Section 1053 (2021 Regular Session)
Grant End Date:	**June 30, 2025, contingent on reappropriation;** June 30, 2023, if funds are not reappropriated.
Biennium:	2021-2023
Biennium Close Date:	June 30, 2023

PROJECT PURPOSE

Phase I of the Riverwalk project to restore 8.5 acres of habitat, and design and construct approximately 1 mile of multi-use “riverwalk” trail between Kimball Creek and the Downtown Historic District.

ADDITIONAL SPECIAL TERMS AND CONDITIONS GOVERNING THIS AGREEMENT

Grant End Date: In the event funds for the project are reappropriated, the contract end date will be extended pursuant to the reappropriation and consistent with Special Term and Condition 19. Depending on the reappropriation, a contract amendment may be required.

Cultural Resource Review & Consultation: In addition to the requirements set forth in this Grant Agreement (for example, those set forth in Special Term 18), GRANTEE shall, in accordance with Governor’s Executive Order 21-02, coordinate with COMMERCE and the Washington State Department of Archaeology and Historic Preservation (“DAHP”), including any recommended consultation with any affected tribe(s), during Project design and prior to construction to determine the existence of any tribal cultural resources affected by the Project and potential impacts to cultural resources defined in EO 21-02. GRANTEE agrees to avoid, minimize, or mitigate impacts to the cultural resource as a continuing prerequisite to receipt of funds under this Grant Agreement.

GRANTEE agrees to engage in consultation with the Snoqualmie Indian Tribe concerning Project design and construction concerns identified by the Tribe throughout the scope of work for the Project and prior to GRANTEE finalizing engineering drawings or plans for construction, or commencing construction, under this grant. As part of such consultation, GRANTEE shall provide all Project-related information and documents it identifies or that the Tribe requests, and GRANTEE will provide

opportunities for Tribal representatives to meet with GRANTEEs representatives to facilitate such consultation.

Before any grant funding is disbursed by Commerce for activities associated with construction or demolition, the GRANTEE must demonstrate that an updated cultural resource report that reflects the scope of the funded project has been sent to all consulting parties, that the consulting parties have had an opportunity to review and comment on the updated report, that DAHP has issued a letter of concurrence, and that the scope of the funded project described in the updated report reflects what was agreed to by the consulting parties in order to avoid, minimize, or mitigate adverse effects to cultural resources, consistent with EO 21-02.

ADDITIONAL RECITALS

N/A

SPECIAL TERMS AND CONDITIONS
GENERAL GRANT
STATE FUNDS

THIS GRANT AGREEMENT, entered into by and between the GRANTEE and COMMERCE, as defined on the Face Sheet of this Grant Agreement, WITNESSES THAT:

WHEREAS, COMMERCE has the statutory authority under RCW 43.330.050 (5) to cooperate with and provide assistance to local governments, businesses, and community-based organizations; and

WHEREAS, COMMERCE is also given the responsibility to administer state funds and programs which are assigned to COMMERCE by the Governor or the Washington State Legislature; and

WHEREAS, the Washington State Legislature has made an appropriation to support the Local and Community Projects Program, and directed COMMERCE to administer those funds; and

WHEREAS, the enabling legislation also stipulates that the GRANTEE is eligible to receive funding for design, acquisition, construction, or rehabilitation.

NOW, THEREFORE, in consideration of covenants, conditions, performances, and promises hereinafter contained, the parties hereto agree as follows:

1. GRANT MANAGEMENT

The Representative for each of the parties shall be responsible for and shall be the contact person for all communications and billings regarding the performance of this Grant.

The Representative for COMMERCE and their contact information are identified on the Face Sheet of this Grant.

The Representative for the GRANTEE and their contact information are identified on the Face Sheet of this Grant.

2. COMPENSATION

COMMERCE shall pay an amount not to exceed the awarded Grant Amount as shown on the Face Sheet of this Grant Agreement, for the capital costs necessary for or incidental to the performance of work as set forth in the Scope of Work.

3. CERTIFICATION OF FUNDS PERFORMANCE MEASURES

A. The release of state funds under this Grant Agreement is contingent upon the GRANTEE certifying that it has expended or has access to funds from non-state sources as set forth in ATTACHMENT B (CERTIFICATION OF THE AVAILABILITY OF FUNDS TO COMPLETE THE PROJECT), hereof. Such non-state sources may consist of a combination of any of the following:

i) Eligible Project expenditures prior to the execution of this Grant Agreement.
ii) Cash dedicated to the Project.
iii) Funds available through a letter of credit or other binding loan commitment(s).
iv) Pledges from foundations or corporations.
v) Pledges from individual donors.
vi) The value of real property when acquired solely for the purposes of this Project, as established and evidenced by a current market value appraisal performed by a licensed, professional real estate appraiser, or a current property tax statement. COMMERCE will not consider appraisals for prospective values of such property for the purposes of calculating the amount of non-state matching fund credit.
vii) In-kind contributions, subject to COMMERCE'S approval.

B. The GRANTEE shall maintain records sufficient to evidence that it has access to or has expended funds from such non-state sources, and shall make such records available for COMMERCE's review upon reasonable request.

4. PREVAILING WAGE LAW

The Project funded under this Grant may be subject to state prevailing wage law (Chapter 39.12 RCW). The GRANTEE is advised to consult the Industrial Statistician at the Washington Department of Labor and Industries to determine whether prevailing wages must be paid. COMMERCE is not responsible for determining whether prevailing wage applies to this Project or for any prevailing wage payments that may be required by law.

5. DOCUMENTATION AND SECURITY

The provisions of this section shall apply to capital projects performed by nonprofit organizations and public benefit corporations that involve the expenditure of over $500,000 in state funds. Additionally, Commerce reserves the right to review all state-funded projects and to require that projects performed by other entity types comply with this section. Projects for which the grant award or legislative intent documents specify that the state funding is to be used for design only are exempt from this section.

A. Deed of Trust. This Grant shall be evidenced by a promissory note and secured by a deed of trust or other appropriate security instrument in favor of COMMERCE (the "Deed of Trust"). The Deed of Trust shall be recorded in the County where the Project is located, and the original returned to COMMERCE after recordation within ninety (90) days of Grant Agreement execution. The Deed of Trust must be recorded before COMMERCE will reimburse the GRANTEE for any Project costs. The amount secured by the Deed of Trust shall be the amount of the Grant as set forth on the Face Sheet, hereof.

B. Term of Deed of Trust. The Deed of Trust shall remain in full force and effect for a minimum period of ten (10) years following the later of: (1) final payment of state funds to the GRANTEE under this grant; or (2) the date when the facility improved or acquired with grant funds, or a distinct phase of the project, is made useable to the public for the purpose intended by the Legislature. Upon satisfaction of the ten-year term requirement and all other grant terms and conditions, COMMERCE shall, upon written request of the GRANTEE, take appropriate action to reconvey the Deed of Trust.

C. Title Insurance. The GRANTEE shall purchase an extended coverage lender's policy of title insurance insuring the lien position of the Deed of Trust in an amount not less than the amount of the grant.

D. Covenant. If the project will be partially funded by a loan and the term of said loan is less than the commitment period under this grant contract, COMMERCE may require that GRANTEE record or cause to be recorded a covenant in a superior lien position ahead of the lender's security instrument that restricts use of the facility or property for the purpose(s) stated elsewhere in this contract for at least the term of the commitment period

E. Subordination. COMMERCE may agree to subordinate its deed of trust upon request from a private or public lender. Any such request shall be submitted to COMMERCE in writing, and COMMERCE shall respond to the request in writing within thirty (30) days of receiving the request.

6. BASIS FOR ESTABLISHING REAL PROPERTY VALUES FOR ACQUISITIONS OF REAL PROPERTY PERFORMANCE MEASURES

When all or part of the grant is used to fund the acquisition of real property, before funds are disbursed, the GRANTEE shall procure and provide to COMMERCE evidence establishing the value of the real property eligible for reimbursement:

A. GRANTEE purchases of real property from an independent third-party seller shall be evidenced by a current appraisal prepared by a licensed Washington State commercial real estate appraiser, or a current property tax statement.

B. GRANTEE purchases of real property from a subsidiary organization, such as an affiliated LLC, shall be evidenced by a current appraisal prepared by a licensed Washington State

commercial real estate appraiser or the prior purchase price of the property plus holding costs, whichever is less.

7. EXPENDITURES ELIGIBLE FOR REIMBURSEMENT

Payments to the Grantee shall be made on a reimbursement basis only. The GRANTEE may be reimbursed for the following eligible costs related to the activities identified in the SCOPE OF WORK shown on Attachment A.

A. Real property, and costs directly associated with such purchase, when purchased or acquired solely for the purposes of the Project;
B. Design, engineering, architectural, and planning;
C. Construction management and observation (from external sources only);
D. Construction costs including, but not limited to, the following:
Site preparation and improvements;
Permits and fees;
Labor and materials;
Taxes on Project goods and services;
Capitalized equipment;
Information technology infrastructure; and
Landscaping.
F. Other costs authorized through the legislation.

8. BILLING PROCEDURES AND PAYMENT

COMMERCE shall reimburse the GRANTEE for eligible Project expenditures, up to the maximum payable under this Grant Agreement. When requesting reimbursement for expenditures made, the GRANTEE shall submit to COMMERCE a signed and completed Invoice Voucher (Form A-19), that documents capitalized Project activity performed for the billing period. The GRANTEE can submit all Invoice Vouchers and any required documentation electronically through COMMERCE's Contracts Management System (CMS), which is available through the Secure Access Washington (SAW) portal.

The GRANTEE shall evidence the costs claimed on each voucher by including copies of each invoice received from vendors providing Project goods or services covered by the Grant Agreement. The GRANTEE shall also provide COMMERCE with a copy of the cancelled check or electronic funds transfer, as applicable, that confirms that they have paid each expenditure being claimed. The cancelled checks or electronic funds transfers may be submitted to COMMERCE at the time the voucher is initially submitted, or within thirty (30) days thereafter.

The voucher must be certified (signed) by an official of the GRANTEE with authority to bind the GRANTEE. The final voucher shall be submitted to COMMERCE within sixty (60) days following the completion of work or other termination of this Grant Agreement, or within fifteen (15) days following the end of the state biennium unless Grant Agreement funds are reappropriated by the Legislature in accordance with Section 19, hereof.

If GRANTEE has or will be submitting any of the invoices attached to a request for payment for partial reimbursement under another grant contract, GRANTEE must clearly identify such grant contracts in the transmittal letter and request for payment.

Each request for payment must be accompanied by a Project Status Report, which describes, in narrative form, the progress made on the Project since the last invoice was submitted, as well as a report of Project status to date. COMMERCE will not release payment for any reimbursement request received unless and until the Project Status Report is received. After approving the Invoice Voucher and Project Status Report, COMMERCE shall promptly remit a warrant to the GRANTEE.

COMMERCE will pay GRANTEE upon acceptance of services provided and receipt of properly completed invoices, which shall be submitted to the Representative for COMMERCE **not more often than monthly**.

Payment shall be considered timely if made by COMMERCE within thirty (30) calendar days after receipt of properly completed invoices. Payment shall be sent to the address designated by the GRANTEE.

COMMERCE may, in its sole discretion, terminate the Grant or withhold payments claimed by the GRANTEE for services rendered if the GRANTEE fails to satisfactorily comply with any term or condition of this Grant.

No payments in advance or in anticipation of services or supplies to be provided under this Agreement shall be made by COMMERCE.

Duplication of Billed Costs
The GRANTEE shall not bill COMMERCE for services performed under this Grant Agreement, and COMMERCE shall not pay the GRANTEE, if the GRANTEE is entitled to payment or has been or will be paid by any other source, including grants, for that service.

Disallowed Costs
The GRANTEE is responsible for any audit exceptions or disallowed costs incurred by its own organization or that of its subgrantees.

9. SUBCONTRACTOR DATA COLLECTION

GRANTEE will submit reports, in a form and format to be provided by COMMERCE and at intervals as agreed by the parties, regarding work under this Grant performed by subcontractors and the portion of Grant funds expended for work performed by subcontractors, including but not necessarily limited to minority-owned, woman-owned, and veteran-owned business subcontractors. "Subcontractors" shall mean subcontractors of any tier.

10. CERTIFIED PROJECT COMPLETION REPORT AND FINAL PAYMENT

The GRANTEE shall complete a Certified Project Completion Report when activities identified in the SCOPE OF WORK shown on Attachment A are complete.

The GRANTEE shall provide the following information to COMMERCE:

A. A certified statement that the Project, as described in the SCOPE OF WORK shown on Attachment A, is complete and, if applicable, meets required standards.
B. A certified statement of the actual dollar amounts spent, from all funding sources, in completing the project as described in the SCOPE OF WORK shown on Attachment A.
C. Certification that all costs associated with the Project have been incurred and accounted for. Costs are incurred when goods and services are received and/or Grant work is performed.
D. A final voucher for the remaining eligible funds, including any required documentation.

The GRANTEE will submit the Certified Project Completion Report together with the last Invoice Voucher for a sum not to exceed the balance of the Grant Amount.

11. INSURANCE

A. Insurance Requirements for Reimbursable Activities

The GRANTEE will maintain appropriate insurance coverage throughout any period in which reimbursable activities are conducted. The intent of the required insurance is to protect the state of Washington should there be any claims, suits, actions, costs, damages or expenses arising from any loss, or negligent or intentional act or omission of the GRANTEE, or Subgrantee, or agents of either, while performing under the terms of this Grant.

B. Additional Insurance Requirements During the Term of the Grant

The GRANTEE shall provide proof to COMMERCE of the following insurance coverage as applicable:

Commercial General Liability Insurance Policy. Provide a Commercial General Liability Insurance Policy, including contractual liability, written on an occurrence basis, in adequate quantity to protect against legal liability related to this Grant but no less than $1,000,000 per occurrence. Additionally, the GRANTEE is responsible for ensuring that any Subgrantee/subcontractor provide adequate insurance coverage for the activities arising out of subgrants/subcontracts. Commercial General Liability Insurance coverage shall be maintained in full force and effect during the term of this Grant and throughout the commitment period described in Special Terms and Conditions Section 5, 15, and 16.

Property Insurance. The GRANTEE shall keep the property insured in an amount sufficient to permit such insurance to be written at all times on a replacement cost basis. Such insurance shall cover the following hazards, as applicable:

- Loss or damage by fire and such other risks;
- Loss or damage from leakage or sprinkler systems now or hereafter installed in any building on the premises;
- Loss or damage by explosion of steam boilers, pressure vessels, oil or gasoline storage tanks or similar apparatus now or hereafter installed in a building or building on the premises.

Property Insurance coverage shall be maintained in full force and effect during the term of this Grant and throughout the commitment period described in Special Terms and Conditions Section 5, 15, and 16.

Professional Liability, Errors and Omissions Insurance. If GRANTEE will be providing any professional services to be reimbursed under this Grant, the GRANTEE shall maintain Professional Liability or Errors and Omissions Insurance with minimum limits of no less than $1,000,000 per occurrence to cover all activities by the GRANTEE and licensed staff employed or under contract to the GRANTEE. The state of Washington, its agents, officers, and employees need *not* be named as additional insureds under this policy.

Fidelity Insurance. Every officer, director, employee, or agent who is authorized to act on behalf of the GRANTEE for the purpose of receiving or depositing funds into program accounts or issuing financial documents, checks, or other instruments of payment for program costs shall be insured to provide protection against loss:

A. The amount of fidelity coverage secured pursuant to this Grant shall be $2,000,000 or the highest of planned reimbursement for the Grant period, whichever is lowest. Fidelity insurance secured pursuant to this paragraph shall name COMMERCE as beneficiary.

B. Subgrantees/subcontractors that receive $10,000 or more per year in funding through this Grant shall secure fidelity insurance as noted above. Fidelity insurance secured by Subgrantees/subcontractors pursuant to this paragraph shall name the GRANTEE and the GRANTEE's fiscal agent as beneficiary.

C. Fidelity Insurance coverage shall be maintained in full force and effect during the term of this Grant.

The insurance required shall be issued by an insurance company authorized to do business within the state of Washington. The insurance shall name the state of Washington, its agents, officers, and employees as additional insureds under the insurance policy. All policies shall be primary to any other valid and collectable insurance. The GRANTEE shall instruct the insurers to give COMMERCE thirty (30) calendar days advance notice of any insurance cancellation or modification.

The GRANTEE shall provide to COMMERCE copies of insurance instruments or certifications from the insurance issuing agency. The copies or certifications shall show the insurance coverage, the designated beneficiary, who is covered, the amounts, the period of coverage, and that COMMERCE will be provided thirty (30) days advance written notice of cancellation.

During the term of the Grant, the GRANTEE shall submit renewal certificates not less than thirty (30) calendar days prior to expiration of each policy required under this section.

Professional Liability, Errors and Omissions Insurance. The GRANTEE shall require that any contractors providing professional services that are reimbursable under this Grant maintain Professional Liability or Errors and Omissions Insurance. The GRANTEE shall require such contractors to maintain minimum limits of no less than $1,000,000 per occurrence. The state of Washington, its agents, officers, and employees need *not* be named as additional insureds under these policies.

GRANTEES and Local Governments that Participate in a Self-Insurance Program.
Self-Insured/Liability Pool or Self-Insured Risk Management Program – With prior approval from COMMERCE, the GRANTEE may provide the coverage above under a self-insured/liability pool or self-insured risk management program. In order to obtain permission from COMMERCE, the GRANTEE shall provide: (1) a description of its self-insurance program, and (2) a certificate and/or letter of coverage that outlines coverage limits and deductibles. All self-insured risk management programs or self-insured/liability pool financial reports must comply with Generally Accepted Accounting Principles (GAAP) and adhere to accounting standards promulgated by: 1) Governmental Accounting Standards Board (GASB), 2) Financial Accounting Standards Board (FASB), and 3) the Washington State Auditor's annual instructions for financial reporting. GRANTEE's participating in joint risk pools shall maintain sufficient documentation to support the aggregate claim liability information reported on the balance sheet. The state of Washington, its agents, and employees need not be named as additional insured under a self-insured property/liability pool, if the pool is prohibited from naming third parties as additional insured.

GRANTEE shall provide annually to COMMERCE a summary of coverages and a letter of self insurance, evidencing continued coverage under GRANTEE's self-insured/liability pool or self-insured risk management program. Such annual summary of coverage and letter of self insurance will be provided on the anniversary of the start date of this Agreement.

12. ORDER OF PRECEDENCE

In the event of an inconsistency in this Grant, the inconsistency shall be resolved by giving precedence in the following order:

- Applicable federal and state of Washington statutes and regulations
- Declarations page of this Grant Agreement
- Special Terms and Conditions
- General Terms and Conditions
- Attachment A – Scope of Work
- Attachment B – Certification of the Availability of Funds to Complete the Project
- Attachment C – Certification of the Payment and Reporting of Prevailing Wages
- Attachment D – Certification of Intent to Enter the Leadership in Energy and Environmental Design (LEED) Certification Process

13. REDUCTION IN FUNDS

In the event state funds appropriated for the work contemplated under this Grant Agreement are withdrawn, reduced, or limited in any way by the Governor or the Washington State Legislature during the Grant Agreement period, the parties hereto shall be bound by any such revised funding limitations as implemented at the discretion of COMMERCE, and shall meet and renegotiate the Grant Agreement accordingly.

14. OWNERSHIP OF PROJECT/CAPITAL FACILITIES

COMMERCE makes no claim to any real property improved or constructed with funds awarded under this Grant Agreement and does not assert and will not acquire any ownership interest in or title to the capital facilities and/or equipment constructed or purchased with state funds under this Grant Agreement; provided, however, that COMMERCE may be granted a security interest in real property, to secure funds awarded under this Grant Agreement. This provision does not extend to claims that COMMERCE may bring against the GRANTEE in recapturing funds expended in violation of this Grant Agreement.

15. CHANGE OF OWNERSHIP OR USE FOR GRANTEE-OWNED PROPERTY

A. The GRANTEE understands and agrees that any and all real property or facilities owned by the GRANTEE that are acquired, constructed, or otherwise improved by the GRANTEE using state funds under this Grant Agreement, shall be held and used by the GRANTEE for the purpose or purposes stated elsewhere in this Grant Agreement for a period of at least ten (10) years from the later of: (1) the date the final payment is made hereunder; or (2) the date when the facility improved or acquired with grant funds, or a distinct phase of the project, is made useable to the public for the purpose intended by the Legislature.

B. This provision shall not be construed to prohibit the GRANTEE from selling any property or properties described in this section; Provided, that any such sale shall be subject to prior review and approval by COMMERCE, and that all proceeds from such sale shall be applied to the purchase price of a different facility or facilities of equal or greater value than the original facility and that any such new facility or facilities will be used for the purpose or purposes stated elsewhere in this Grant Agreement.

C. In the event the GRANTEE is found to be out of compliance with this section, the GRANTEE shall repay to the state general fund the principal amount of the grant as stated on the Face Sheet, hereof, plus interest calculated at the rate of interest on state of Washington general obligation bonds issued most closely to the effective date of the legislation in which the subject facility was authorized. Repayment shall be made pursuant to Section 50 (Recapture provision).

16. CHANGE OF USE FOR LEASED PROPERTY PERFORMANCE MEASURE

A. The GRANTEE understands and agrees that any facility leased by the GRANTEE that is constructed, renovated, or otherwise improved using state funds under this Grant Agreement shall be used by the GRANTEE for the purpose or purposes stated elsewhere in this Grant Agreement for a period of at least ten (10) years from the later of: (1) the date the final payment is made hereunder; or (2) the date when the facility improved or acquired with grant funds, or a distinct phase of the project, is made useable to the public for the purpose intended by the Legislature.

B. In the event the GRANTEE is found to be out of compliance with this section, the GRANTEE shall repay to the state general fund the principal amount of the grant as stated on the Face Sheet, hereof, plus interest calculated at the rate of interest on state of Washington general obligation bonds issued most closely to the effective date of the legislation in which the subject facility was authorized. Repayment shall be made pursuant to Section 50 (Recapture Provision).

17. SIGNAGE, MARKERS AND PUBLICATIONS

If, during the period covered by this Grant Agreement, the GRANTEE displays or circulates any communication, publication, or donor recognition identifying the financial participants in the Project, any such communication or publication must identify “The Taxpayers of Washington State” as a participant.

18. HISTORICAL AND CULTURAL ARTIFACTS

Prior to approval and disbursement of any funds awarded under this Contract, GRANTEE shall cooperate with COMMERCE to complete the requirements of Governor’s Executive Order 21-02 or GRANTEE shall complete a review under Section 106 of the National Historic Preservation Act, if applicable. GRANTEE agrees that the GRANTEE is legally and financially responsible for compliance

with all laws, regulations, and agreements related to the preservation of historical or cultural resources and agrees to hold harmless COMMERCE and the state of Washington in relation to any claim related to such historical or cultural resources discovered, disturbed, or damaged as a result of the project funded by this Contract.

The GRANTEE agrees that, unless the GRANTEE is proceeding under an approved historical and cultural monitoring plan or other memorandum of agreement, if historical or cultural artifacts are discovered during construction, the GRANTEE shall immediately stop construction and notify the local historical preservation officer and the state's historical preservation officer at DAHP, and the Commerce Representative identified on the Face Sheet. If human remains are uncovered, the GRANTEE shall report the presence and location of the remains to the coroner and local enforcement immediately, then contact DAHP and the concerned tribe's cultural staff or committee.

The GRANTEE shall require this provision to be contained in all subcontracts for work or services related to the Scope of Work attached hereto.

In addition to the requirements set forth in this Contract, GRANTEE agrees to comply with RCW 27.44 regarding Indian Graves and Records; RCW 27.53 regarding Archaeological Sites and Resources; RCW 68.60 regarding Abandoned and Historic Cemeteries and Historic Graves; and WAC 25-48 regarding Archaeological Excavation and Removal Permits.

Completion of the requirements of Section 106 of the National Historic Preservation Act shall substitute for completion of Governor's Executive Order 21-02.

In the event that the GRANTEE finds it necessary to amend the Scope of Work the GRANTEE may be required to re-comply with Governor's Executive Order 21-02, or Section 106 of the National Historic Preservation Act.

19. REAPPROPRIATION

A. The parties hereto understand and agree that any state funds not expended by the BIENNIUM CLOSE DATE listed on the Declarations page will lapse on that date unless specifically reappropriated by the Washington State Legislature. If funds are so reappropriated, the state's obligation under the terms of this Grant Agreement shall be contingent upon the terms of such reappropriation.

B. In the event any funds awarded under this Grant Agreement are reappropriated for use in a future biennium, COMMERCE reserves the right to assign a reasonable share of any such reappropriation for administrative costs.

20. TERMINATION FOR FRAUD OR MISREPRESENTATION

In the event the GRANTEE commits fraud or makes any misrepresentation in connection with the Grant application or during the performance of this Grant Agreement, COMMERCE reserves the right to terminate or amend this Grant Agreement accordingly, including the right to recapture all funds disbursed to the GRANTEE under the Grant.

21. APPLICABILITY OF COPYRIGHT PROVISIONS TO ARCHITECTURAL/ENGINEERING DESIGN WORK

The "Copyright Provisions", Section 36 of the General Terms and Conditions, are not intended to apply to any architectural and engineering design work funded by this grant.

22. FRAUD AND OTHER LOSS REPORTING

Contractor/Grantee shall report in writing all known or suspected fraud or other loss of any funds or other property furnished under this Contract immediately or as soon as practicable to the Commerce Representative identified on the Face Sheet.

23. PUBLIC RECORDS ACT

Notwithstanding General Terms and Conditions Section 34, COMMERCE is a public agency subject to the Public Records Act, Chapter 42.56 RCW (the "PRA"). Under the PRA, all materials relating to the conduct of government or the performance of any governmental or proprietary function prepared, owned, used, or retained by COMMERCE or its functional equivalents are considered public records. The PRA requires that public records responsive to a public records request be promptly produced unless the PRA or an "other statute" exempts such records from production. This Agreement is not intended to alter COMMERCE's obligations under the PRA. The parties agree that if COMMERCE receives a public records request for files that may include confidential information under General Terms and Conditions Section 34, COMMERCE will notify the other party of the request and of the date that the records will be released to the requester unless GRANTEE obtains a court order enjoining disclosure. If the GRANTEE fails to obtain the court order enjoining disclosure, COMMERCE may release the requested information on the date specified. If the GRANTEE obtains a court order from a court of competent jurisdiction enjoining disclosure pursuant to the PRA, COMMERCE shall maintain the confidentiality of the information per the court order.

GENERAL TERMS AND CONDITIONS
GENERAL GRANT
STATE FUNDS

24. DEFINITIONS

As used throughout this Grant, the following terms shall have the meaning set forth below:

A. "Authorized Representative" shall mean the Director and/or the designee authorized in writing to act on the Director's behalf.

B. "COMMERCE" shall mean the Department of Commerce.

C. "GRANTEE" shall mean the entity identified on the Face Sheet performing service(s) under this Grant, and shall include all employees and agents of the GRANTEE.

D. "Personal Information" shall mean information identifiable to any person, including, but not limited to, information that relates to a person's name, health, finances, education, business, use or receipt of governmental services or other activities, addresses, telephone numbers, social security numbers, driver license numbers, other identifying numbers, and any financial identifiers.

E. "State" shall mean the state of Washington.

F. "Subgrantee/subcontractor" shall mean one not in the employment of the GRANTEE, who is performing all or part of those services under this Grant under a separate Grant with the GRANTEE. The terms "subgrantee/subcontractor" refers to any tier.

G. "Subrecipient" shall mean a non-federal entity that expends federal awards received from a pass-through entity to carry out a federal program, but does not include an individual that is a beneficiary of such a program. It also excludes vendors that receive federal funds in exchange for goods and/or services in the course of normal trade or commerce.

H. "Vendor" is an entity that agrees to provide the amount and kind of services requested by COMMERCE; provides services under the grant only to those beneficiaries individually determined to be eligible by COMMERCE and, provides services on a fee-for-service or per-unit basis with contractual penalties if the entity fails to meet program performance standards.

I. "Grant" and "Agreement" and "Contract" shall mean the entire written agreement between COMMERCE and the GRANTEE, including any attachments, exhibits, documents, or materials incorporated by reference, and any amendments executed by the parties.

25. ACCESS TO DATA

In compliance with RCW 39.26.180, the GRANTEE shall provide access to data generated under this Grant to COMMERCE, the Joint Legislative Audit and Review Committee, and the Office of the State Auditor at no additional cost. This includes access to all information that supports the findings, conclusions, and recommendations of the GRANTEE's reports, including computer models and the methodology for those models.

26. ADVANCE PAYMENTS PROHIBITED

No payments in advance of or in anticipation of goods or services to be provided under this Grant shall be made by COMMERCE.

27. ALL WRITINGS CONTAINED HEREIN

This Grant contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Grant shall be deemed to exist or to bind any of the parties hereto.

28. AMENDMENTS

This Grant may be amended by mutual agreement of the parties. Such amendments shall not be binding unless they are in writing and signed by personnel authorized to bind each of the parties.

29. AMERICANS WITH DISABILITIES ACT (ADA) OF 1990, PUBLIC LAW 101-336, ALSO REFERRED TO AS THE "ADA" 28 CFR PART 35

The GRANTEE must comply with the ADA, which provides comprehensive civil rights protection to individuals with disabilities in the areas of employment, public accommodations, state and local government services, and telecommunications.

30. ASSIGNMENT

Neither this Grant, nor any claim arising under this Grant, shall be transferred or assigned by the GRANTEE without prior written consent of COMMERCE.

31. ATTORNEYS' FEES

Unless expressly permitted under another provision of the Grant, in the event of litigation or other action brought to enforce Grant terms, each party agrees to bear its own attorney's fees and costs.

32. AUDIT

A. **General Requirements**

COMMERCE reserves the right to require an audit. If required, GRANTEEs are to procure audit services based on the following guidelines.

The GRANTEE shall maintain its records and accounts so as to facilitate audits and shall ensure that subgrantees also maintain auditable records.

The GRANTEE is responsible for any audit exceptions incurred by its own organization or that of its subgrantees.

COMMERCE reserves the right to recover from the GRANTEE all disallowed costs resulting from the audit.

Responses to any unresolved management findings and disallowed or questioned costs shall be included with the audit report. The GRANTEE must respond to COMMERCE requests for information or corrective action concerning audit issues within thirty (30) days of the date of request.

B. State Funds Requirements

In the event an audit is required, if the GRANTEE is a state or local government entity, the Office of the State Auditor shall conduct the audit. Audits of non-profit organizations are to be conducted by a certified public accountant selected by the GRANTEE.

The GRANTEE shall include the above audit requirements in any subcontracts.

In any case, the GRANTEE's records must be available for review by COMMERCE.

C. Documentation Requirements

The GRANTEE must send a copy of the audit report described above no later than nine (9) months after the end of the GRANTEE's fiscal year(s) by sending a scanned copy to comacctoffice@commerce.wa.gov or a hard copy to:

Department of Commerce
ATTN: Audit Review and Resolution Office
1011 Plum Street SE
PO Box 42525
Olympia WA 98504-2525

In addition to sending a copy of the audit, when applicable, the GRANTEE must include:

- Corrective action plan for audit findings within three (3) months of the audit being received by COMMERCE.
- Copy of the Management Letter.

If the GRANTEE is required to obtain a Single Audit consistent with Circular A-133 requirements, a copy must be provided to COMMERCE; no other report is required.

33. BREACHES OF OTHER STATE CONTRACTS

GRANTEE is expected to comply with all other contracts executed between GRANTEE and the State of Washington. A breach of any other agreement entered into between GRANTEE and the State of Washington may, in COMMERCE's discretion, be deemed a breach of this Agreement.

34. CONFIDENTIALITY/SAFEGUARDING OF INFORMATION

A. "Confidential Information" as used in this section includes:

1. All material provided to the GRANTEE by COMMERCE that is designated as "confidential" by COMMERCE;

2. All material produced by the GRANTEE that is designated as "confidential" by COMMERCE; and

3. All personal information in the possession of the GRANTEE that may not be disclosed under state or federal law. "Personal information" includes but is not limited to information related to a person's name, health, finances, education, business, use of government services, addresses, telephone numbers, social security number, driver's license number and other identifying numbers, and "Protected Health Information" under the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

B. The GRANTEE shall comply with all state and federal laws related to the use, sharing, transfer, sale, or disclosure of Confidential Information. The GRANTEE shall use Confidential Information solely for the purposes of this Grant and shall not use, share, transfer, sell or disclose any Confidential Information to any third party except with the prior written consent of COMMERCE or as may be required by law. The GRANTEE shall take all necessary steps to assure that Confidential Information is safeguarded to prevent unauthorized use, sharing, transfer, sale or disclosure of Confidential Information or violation of any state or federal laws related thereto. Upon request, the GRANTEE shall provide COMMERCE with its policies and procedures on confidentiality. COMMERCE may require changes to such policies and procedures as they apply to this Grant whenever COMMERCE reasonably determines that changes are necessary to prevent unauthorized disclosures. The GRANTEE shall make the changes within the time period specified by COMMERCE. Upon request, the GRANTEE shall immediately return to COMMERCE any Confidential Information that COMMERCE reasonably determines has not been adequately protected by the GRANTEE against unauthorized disclosure.

C. Unauthorized Use or Disclosure. The GRANTEE shall notify COMMERCE within five (5) working days of any unauthorized use or disclosure of any confidential information, and shall take necessary steps to mitigate the harmful effects of such use or disclosure.

35. CONFLICT OF INTEREST

Notwithstanding any determination by the Executive Ethics Board or other tribunal, COMMERCE may, in its sole discretion, by written notice to the GRANTEE terminate this Grant Agreement if it is found after due notice and examination by COMMERCE that there is a violation of the Ethics in Public Service Act, Chapters 42.52 RCW and 42.23 RCW; or any similar statute involving the GRANTEE in the procurement of, or performance under this Grant Agreement.

Specific restrictions apply to contracting with current or former state employees pursuant to chapter 42.52 of the Revised Code of Washington. The GRANTEE and their subcontractor(s) must identify any person employed in any capacity by the state of Washington that worked on this Grant, or any matter related to the project funded under this Grant or any other state funded project, including but not limited to formulating or drafting legislation, participating in grant procurement, planning and

execution, awarding grants, or monitoring grants, during the 24 month period preceding the start date of this Grant. Any person identified by the GRANTEE and their subcontractors(s) must be identified individually by name, the agency previously or currently employed by, job title or position held, and separation date. If it is determined by COMMERCE that a conflict of interest exists, the GRANTEE may be disqualified from further consideration for the award of a Grant.

In the event this Grant Agreement is terminated as provided above, COMMERCE shall be entitled to pursue the same remedies against the GRANTEE as it could pursue in the event of a breach of the Grant Agreement by the GRANTEE. The rights and remedies of COMMERCE provided for in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law. The existence of facts upon which COMMERCE makes any determination under this clause shall be an issue and may be reviewed as provided in the "Disputes" clause of this Grant Agreement.

36. COPYRIGHT PROVISIONS

Unless otherwise provided, all Materials produced under this Grant shall be considered "works for hire" as defined by the U.S. Copyright Act and shall be owned by COMMERCE. COMMERCE shall be considered the author of such Materials. In the event the Materials are not considered "works for hire" under the U.S. Copyright laws, the GRANTEE hereby irrevocably assigns all right, title, and interest in all Materials, including all intellectual property rights, moral rights, and rights of publicity to COMMERCE effective from the moment of creation of such Materials.

"Materials" means all items in any format and includes, but is not limited to, data, reports, documents, pamphlets, advertisements, books, magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. "Ownership" includes the right to copyright, patent, register and the ability to transfer these rights.

For Materials that are delivered under the Grant, but that incorporate pre-existing materials not produced under the Grant, the GRANTEE hereby grants to COMMERCE a nonexclusive, royalty-free, irrevocable license (with rights to sublicense to others) in such Materials to translate, reproduce, distribute, prepare derivative works, publicly perform, and publicly display. The GRANTEE warrants and represents that the GRANTEE has all rights and permissions, including intellectual property rights, moral rights and rights of publicity, necessary to grant such a license to COMMERCE.

The GRANTEE shall exert all reasonable effort to advise COMMERCE, at the time of delivery of Materials furnished under this Grant, of all known or potential invasions of privacy contained therein and of any portion of such document which was not produced in the performance of this Grant. The GRANTEE shall provide COMMERCE with prompt written notice of each notice or claim of infringement received by the GRANTEE with respect to any Materials delivered under this Grant. COMMERCE shall have the right to modify or remove any restrictive markings placed upon the Materials by the GRANTEE.

37. DISPUTES

Except as otherwise provided in this Grant, when a dispute arises between the parties and it cannot be resolved by direct negotiation, either party may request a dispute hearing with the Director of COMMERCE, who may designate a neutral person to decide the dispute.

The request for a dispute hearing must:

- be in writing;
- state the disputed issues;
- state the relative positions of the parties;
- state the GRANTEE's name, address, and Grant number; and
- be mailed to the Director and the other party's (respondent's) Grant Representative within three (3) working days after the parties agree that they cannot resolve the dispute.

The respondent shall send a written answer to the requestor's statement to both the Director or the Director's designee and the requestor within five (5) working days.

The Director or designee shall review the written statements and reply in writing to both parties within ten (10) working days. The Director or designee may extend this period if necessary by notifying the parties.

The decision shall not be admissible in any succeeding judicial or quasi-judicial proceeding.

The parties agree that this dispute process shall precede any action in a judicial or quasi-judicial tribunal.

Nothing in this Grant shall be construed to limit the parties' choice of a mutually acceptable alternate dispute resolution (ADR) method in addition to the dispute hearing procedure outlined above.

38. DUPLICATE PAYMENT

COMMERCE shall not pay the GRANTEE, if the GRANTEE has charged or will charge the State of Washington or any other party under any other Grant, subgrant/subcontract, or agreement, for the same services or expenses. The GRANTEE certifies that work to be performed under this contract does not duplicate any work to be charged against any other grant, subgrant/subcontract, or agreement.

39. GOVERNING LAW AND VENUE

This Grant shall be construed and interpreted in accordance with the laws of the state of Washington, and the venue of any action brought hereunder shall be in the Superior Court for Thurston County.

40. INDEMNIFICATION

To the fullest extent permitted by law, the GRANTEE shall indemnify, defend, and hold harmless the state of Washington, COMMERCE, agencies of the state and all officials, agents and employees of the state, from and against all claims for injuries or death arising out of or resulting from the performance of the contract. "Claim" as used in this contract, means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorneys fees, attributable for bodily injury, sickness, disease, or death, or injury to or the destruction of tangible property including loss of use resulting therefrom.

The GRANTEE's obligation to indemnify, defend, and hold harmless includes any claim by GRANTEE's agents, employees, representatives, or any subgrantee/subcontractor or its employees.

GRANTEE expressly agrees to indemnify, defend, and hold harmless the State for any claim arising out of or incident to GRANTEE'S or any subgrantee's/subcontractor's performance or failure to perform the Grant. GRANTEE'S obligation to indemnify, defend, and hold harmless the State shall not be eliminated or reduced by any actual or alleged concurrent negligence of State or its agents, agencies, employees and officials.

The GRANTEE waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless the state and its agencies, officers, agents or employees.

41. INDEPENDENT CAPACITY OF THE GRANTEE

The parties intend that an independent contractor relationship will be created by this Grant. The GRANTEE and its employees or agents performing under this Grant Agreement are not employees or agents of the state of Washington or COMMERCE. The GRANTEE will not hold itself out as or claim to be an officer or employee of COMMERCE or of the state of Washington by reason hereof, nor will the GRANTEE make any claim of right, privilege or benefit which would accrue to such officer or employee under law. Conduct and control of the work will be solely with the GRANTEE.

42. INDUSTRIAL INSURANCE COVERAGE

The GRANTEE shall comply with all applicable provisions of Title 51 RCW, Industrial Insurance. If the GRANTEE fails to provide industrial insurance coverage or fails to pay premiums or penalties on behalf of its employees as may be required by law, COMMERCE may collect from the GRANTEE the full amount payable to the Industrial Insurance Accident Fund. COMMERCE may deduct the amount owed by the GRANTEE to the accident fund from the amount payable to the GRANTEE by COMMERCE under this Grant Agreement, and transmit the deducted amount to the Department of Labor and Industries, (L&I) Division of Insurance Services. This provision does not waive any of L&I's rights to collect from the GRANTEE.

43. LAWS

The GRANTEE shall comply with all applicable laws, ordinances, codes, regulations and policies of local and state and federal governments, as now or hereafter amended.

44. LICENSING, ACCREDITATION AND REGISTRATION

The GRANTEE shall comply with all applicable local, state, and federal licensing, accreditation and registration requirements or standards necessary for the performance of this Grant Agreement.

45. LIMITATION OF AUTHORITY

Only the Authorized Representative or Authorized Representative's delegate by writing (delegation to be made prior to action) shall have the express, implied, or apparent authority to alter, amend, modify, or waive any clause or condition of this Grant Agreement. Furthermore, any alteration, amendment, modification, or waiver or any clause or condition of this Grant Agreement is not effective or binding unless made in writing and signed by the Authorized Representative.

46. NONCOMPLIANCE WITH NONDISCRIMINATION LAWS

During the performance of this Grant, the GRANTEE shall comply with all federal, state, and local nondiscrimination laws, regulations and policies. In the event of the GRANTEE's non-compliance or refusal to comply with any nondiscrimination law, regulation or policy, this Grant may be rescinded, canceled or terminated in whole or in part, and the GRANTEE may be declared ineligible for further Grants with COMMERCE. The GRANTEE shall, however, be given a reasonable time in which to cure this noncompliance. Any dispute may be resolved in accordance with the "Disputes" procedure set forth herein. The funds provided under this contract may not be used to fund religious worship, exercise, or instruction. No person shall be required to participate in any religious worship, exercise, or instruction in order to have access to the facilities funded by this grant.

47. PAY EQUITY

The GRANTEE agrees to ensure that "similarly employed" individuals in its workforce are compensated as equals, consistent with the following:

a. Employees are "similarly employed" if the individuals work for the same employer, the performance of the job requires comparable skill, effort, and responsibility, and the jobs are performed under similar working conditions. Job titles alone are not determinative of whether employees are similarly employed;
b. GRANTEE may allow differentials in compensation for its workers if the differentials are based in good faith and on any of the following:
    (i) A seniority system; a merit system; a system that measures earnings by quantity or quality of production; a bona fide job-related factor or factors; or a bona fide regional difference in compensation levels.
    (ii) A bona fide job-related factor or factors may include, but not be limited to, education, training, or experience that is: Consistent with business necessity; not based on or derived from a gender-based differential; and accounts for the entire differential.
    (iii) A bona fide regional difference in compensation level must be: Consistent with business necessity; not based on or derived from a gender-based differential; and account for the entire differential.

This Grant Agreement may be terminated by COMMERCE, if COMMERCE or the Department of Enterprise services determines that the GRANTEE is not in compliance with this provision.

48. POLITICAL ACTIVITIES

Political activity of GRANTEE employees and officers are limited by the State Campaign Finances and Lobbying provisions of Chapter 42.17a RCW and the Federal Hatch Act, 5 USC 1501 - 1508.

No funds may be used for working for or against ballot measures or for or against the candidacy of any person for public office.

49. PUBLICITY

The GRANTEE agrees not to publish or use any advertising or publicity materials in which the state of Washington or COMMERCE's name is mentioned, or language used from which the connection with the state of Washington's or COMMERCE's name may reasonably be inferred or implied, without the prior written consent of COMMERCE.

50. RECAPTURE

In the event that the GRANTEE fails to perform this Grant in accordance with state laws, federal laws, and/or the provisions of this Grant, COMMERCE reserves the right to recapture funds in an amount to compensate COMMERCE for the noncompliance in addition to any other remedies available at law or in equity.

Repayment by the GRANTEE of funds under this recapture provision shall occur within the time period specified by COMMERCE. In the alternative, COMMERCE may recapture such funds from payments due under this Grant.

51. RECORDS MAINTENANCE

The GRANTEE shall maintain books, records, documents, data and other evidence relating to this Grant and performance of the services described herein, including but not limited to accounting procedures and practices that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Grant.

GRANTEE shall retain such records for a period of six years following the date of final payment. At no additional cost, these records, including materials generated under the Grant, shall be subject at all reasonable times to inspection, review or audit by COMMERCE, personnel duly authorized by COMMERCE, the Office of the State Auditor, and federal and state officials so authorized by law, regulation or agreement.

If any litigation, claim or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

52. REGISTRATION WITH DEPARTMENT OF REVENUE

If required by law, the GRANTEE shall complete registration with the Washington State Department of Revenue.

53. RIGHT OF INSPECTION

At no additional cost, the GRANTEE shall provide right of access to its facilities to COMMERCE, or any of its officers, or to any other authorized agent or official of the state of Washington or the federal government, at all reasonable times, in order to monitor and evaluate performance, compliance, and/or quality assurance under this Grant.

54. SAVINGS

In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date of this Grant and prior to normal completion, COMMERCE may terminate the Grant under the "Termination for Convenience" clause, without the ten calendar day notice

requirement. In lieu of termination, the Grant may be amended to reflect the new funding limitations and conditions.

55. SEVERABILITY

The provisions of this Grant are intended to be severable. If any term or provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of the Grant.

56. SITE SECURITY

While on COMMERCE premises, GRANTEE, its agents, employees, or subcontractors shall conform in all respects with physical, fire or other security policies or regulations.

57. SUBGRANTING/SUBCONTRACTING

Neither the GRANTEE nor any subgrantee/subcontractor shall enter into subgrants/subcontracts for any of the work contemplated under this Grant Agreement without obtaining prior written approval of COMMERCE. In no event shall the existence of the subgrant/subcontract operate to release or reduce the liability of the GRANTEE to COMMERCE for any breach in the performance of the GRANTEE's duties. This clause does not include Grants of employment between the GRANTEE and personnel assigned to work under this Grant.

Additionally, the GRANTEE is responsible for ensuring that all terms, conditions, assurances and certifications set forth in this agreement are carried forward to any subgrants/subcontracts. Every subgrant/subcontract shall include a term that COMMERCE and the State of Washington are not liable for claims or damages arising from a subgrantee's/subcontractor's performance of the subgrant/subcontract. GRANTEE and its subgrantees/subcontractors agree not to release, divulge, publish, transfer, sell or otherwise make known to unauthorized persons personal information without the express written consent of COMMERCE or as provided by law.

58. SURVIVAL

The terms, conditions, and warranties contained in this Grant that by their sense and context are intended to survive the completion of the performance, cancellation or termination of this Grant shall so survive.

59. TAXES

All payments accrued on account of payroll taxes, unemployment contributions, the GRANTEE's income or gross receipts, any other taxes, insurance or expenses for the GRANTEE or its staff shall be the sole responsibility of the GRANTEE.

60. TERMINATION FOR CAUSE

In the event COMMERCE determines the GRANTEE has failed to comply with the conditions of this Grant in a timely manner, COMMERCE has the right to suspend or terminate this Grant. Before suspending or terminating the Grant, COMMERCE shall notify the GRANTEE in writing of the need to take corrective action. If corrective action is not taken within 30 calendar days, the Grant may be terminated or suspended.

In the event of termination or suspension, the GRANTEE shall be liable for damages as authorized by law including, but not limited to, any cost difference between the original Grant and the replacement or cover Grant and all administrative costs directly related to the replacement Grant, e.g., cost of the competitive bidding, mailing, advertising and staff time.

COMMERCE reserves the right to suspend all or part of the Grant, withhold further payments, or prohibit the GRANTEE from incurring additional obligations of funds during investigation of the alleged compliance breach and pending corrective action by the GRANTEE or a decision by COMMERCE to terminate the Grant. A termination shall be deemed a "Termination for Convenience"

if it is determined that the GRANTEE: (1) was not in default; or (2) failure to perform was outside of his or her control, fault or negligence.
The rights and remedies of COMMERCE provided in this Grant are not exclusive and are, in addition to any other rights and remedies, provided by law.

61. TERMINATION FOR CONVENIENCE

Except as otherwise provided in this Grant, COMMERCE may, by ten (10) business days written notice, beginning on the second day after the mailing, terminate this Grant, in whole or in part. If this Grant is so terminated, COMMERCE shall be liable only for payment required under the terms of this Grant for services rendered or goods delivered prior to the effective date of termination.

62. TERMINATION PROCEDURES

Upon termination of this Grant, COMMERCE, in addition to any other rights provided in this Grant, may require the GRANTEE to deliver to COMMERCE any property specifically produced or acquired for the performance of such part of this Grant as has been terminated. The provisions of the "Treatment of Assets" clause shall apply in such property transfer.

COMMERCE shall pay to the GRANTEE the agreed upon price, if separately stated, for completed work and services accepted by COMMERCE, and the amount agreed upon by the GRANTEE and COMMERCE for (i) completed work and services for which no separate price is stated, (ii) partially completed work and services, (iii) other property or services that are accepted by COMMERCE, and (iv) the protection and preservation of property, unless the termination is for default, in which case the AUTHORIZED REPRESENTATIVE shall determine the extent of the liability of COMMERCE. Failure to agree with such determination shall be a dispute within the meaning of the "Disputes" clause of this Grant. COMMERCE may withhold from any amounts due the GRANTEE such sum as the AUTHORIZED REPRESENTATIVE determines to be necessary to protect COMMERCE against potential loss or liability.

The rights and remedies of COMMERCE provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Grant Agreement.

After receipt of a notice of termination, and except as otherwise directed by the AUTHORIZED REPRESENTATIVE, the GRANTEE shall:

1. Stop work under the Grant on the date, and to the extent specified, in the notice;
2. Place no further orders or subgrants/subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the work under the Grant that is not terminated;
3. Assign to COMMERCE, in the manner, at the times, and to the extent directed by the AUTHORIZED REPRESENTATIVE, all of the rights, title, and interest of the GRANTEE under the orders and subgrants/subcontracts so terminated, in which case COMMERCE has the right, at its discretion, to settle or pay any or all claims arising out of the termination of such orders and subgrants/subcontracts;
4. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the AUTHORIZED REPRESENTATIVE to the extent AUTHORIZED REPRESENTATIVE may require, which approval or ratification shall be final for all the purposes of this clause;
5. Transfer title to COMMERCE and deliver in the manner, at the times, and to the extent directed by the AUTHORIZED REPRESENTATIVE any property which, if the Grant had been completed, would have been required to be furnished to COMMERCE;
6. Complete performance of such part of the work as shall not have been terminated by the AUTHORIZED REPRESENTATIVE; and
7. Take such action as may be necessary, or as the AUTHORIZED REPRESENTATIVE may direct, for the protection and preservation of the property related to this Grant, which is in the possession of the GRANTEE and in which COMMERCE has or may acquire an interest.

63. TREATMENT OF ASSETS

Title to all property furnished by COMMERCE shall remain in COMMERCE. Title to all property furnished by the GRANTEE, for the cost of which the GRANTEE is entitled to be reimbursed as a direct item of cost under this Grant, shall pass to and vest in COMMERCE upon delivery of such property by the GRANTEE. Title to other property, the cost of which is reimbursable to the GRANTEE under this Grant, shall pass to and vest in COMMERCE upon (i) issuance for use of such property in the performance of this Grant, or (ii) commencement of use of such property in the performance of this Grant, or (iii) reimbursement of the cost thereof by COMMERCE in whole or in part, whichever first occurs.

A. Any property of COMMERCE furnished to the GRANTEE shall, unless otherwise provided herein or approved by COMMERCE, be used only for the performance of this Grant.
B. The GRANTEE shall be responsible for any loss or damage to property of COMMERCE that results from the negligence of the GRANTEE or which results from the failure on the part of the GRANTEE to maintain and administer that property in accordance with sound management practices.
C. If any COMMERCE property is lost, destroyed or damaged, the GRANTEE shall immediately notify COMMERCE and shall take all reasonable steps to protect the property from further damage.
D. The GRANTEE shall surrender to COMMERCE all property of COMMERCE prior to settlement upon completion, termination or cancellation of this Grant

All reference to the GRANTEE under this clause shall also include GRANTEE'S employees, agents or subgrantees/subcontractors.

64. WAIVER

Waiver of any default or breach shall not be deemed to be a waiver of any subsequent default or breach. Any waiver shall not be construed to be a modification of the terms of this Grant unless stated to be such in writing and signed by Authorized Representative of COMMERCE.

ATTACHMENT A - SCOPE OF WORK

Funds awarded under this grant will be used for capital expenditures to complete Phase I of the City of Snoqualmie Riverwalk project to restore 8.5 acres of habitat, and design and construct approximately 1 mile of multi-use “riverwalk” trail.

The location of the project is along the Snoqualmie River between Kimball Creek and the City of Snoqualmie Downtown Historic District.

Project activities will include those necessary for design and construction activities and include all reasonable and necessary outside consultant/contractor expenditures incurred by the City in preliminary design, design and construction of a complete Phase I Riverwalk project, including and not limited to:

- cultural resources survey and report preparation
- consultation with potentially affected Native American tribes
- engineering feasibility and basis of design report preparation
- surveying/mapping
- schematic alignment planning
- cost estimating
- river hydrology and flood impact assessment
- geotechnical analysis
- preparation of plans, specifications and cost estimates (“PSEs”)
- environmental review and permitting, including SEPA environmental review
- hydraulic project approval
- shoreline substantial development
- clear & grade and building permits
- project management
- construction contracting services

This project began in 2015 and is expected to be complete by 2026.

Costs related to the work will only be reimbursed to the extent the work is determined by Commerce to be within the scope of the legislative appropriation.

CERTIFICATION PERFORMANCE MEASURE

The GRANTEE, by its signature, certifies that the declaration set forth above has been reviewed and approved by the GRANTEE’s governing body as of the date and year written below.

_____
GRANTEE

_____
TITLE

_____
DATE

ATTACHMENT B - CERTIFICATION OF THE AVAILABILITY OF FUNDS TO COMPLETE THE PROJECT

Type of Funding	Source Description	Amount
Grant	Washington State Department of Commerce	$1,474,400.00
Other Grants		
Grant #1		$
Total Other Grants		**$0.00**
Other Loans		
Loan #1		$
Total Loans		**$0.00**
Other Local Revenue		
Source #1	City Fund	$1,955,299.00
Total Local Revenue		**$1,955,299.00**
Other Funds		
Source #1		$
Source #2		$
Total Other Funds		**$0.00**
Total Project Funding		**$3,429,699.00**

CERTIFICATION PERFORMANCE MEASURE

The GRANTEE, by its signature, certifies that project funding from sources other than those provided by this Grant Agreement and identified above has been reviewed and approved by the GRANTEE's governing body or board of directors, as applicable, and has either been expended for eligible Project expenses, or is committed in writing and available and will remain committed and available solely and specifically for carrying out the purposes of this Project as described in elsewhere in this Grant Agreement, as of the date and year written below. The GRANTEE shall maintain records sufficient to evidence that it has expended or has access to the funds needed to complete the Project, and shall make such records available for COMMERCE's review upon reasonable request.

_____
GRANTEE

_____
TITLE

_____
DATE

ATTACHMENT C- CERTIFICATION OF THE PAYMENT AND REPORTING OF PREVAILING WAGES

CERTIFICATION PERFORMANCE MEASURE

The GRANTEE, by its signature, certifies that all contractors and subcontractors performing work on the Project shall comply with prevailing wage laws set forth in Chapter 39.12 RCW, as applicable on the date the appropriation becomes effective, including but not limited to the filing of the "Statement of Intent to Pay Prevailing Wages" and "Affidavit of Wages Paid" as required by RCW 39.12.040. The GRANTEE shall maintain records sufficient to evidence compliance with Chapter 39.12 RCW, and shall make such records available for COMMERCE's review upon request.

If any state funds are used by the GRANTEE for the purpose of construction, applicable State Prevailing Wages must be paid.

The GRANTEE, by its signature, certifies that the declaration set forth above has been reviewed and approved by the GRANTEE's governing body as of the date and year written below.

_____
GRANTEE

_____
TITLE

_____
DATE

ATTACHMENT D - CERTIFICATION OF INTENT TO ENTER THE LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) CERTIFICATION PROCESS

CERTIFICATION PERFORMANCE MEASURE

The GRANTEE, by its signature, certifies that it will enter into the Leadership in Energy and Environmental Design certification process, as stipulated in RCW 39.35D, as applicable to the Project funded by this Grant Agreement. The GRANTEE shall, upon receipt of LEED certification by the United States Green Building Council, provide documentation of such certification to COMMERCE.

The GRANTEE, by its signature, certifies that the declaration set forth above has been reviewed and approved by the GRANTEE's governing body or board of directors, as applicable, as of the date and year written below.

IF EXEMPT: DO NOT SIGN

_____
GRANTEE

_____
TITLE

_____
DATE

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-127
September 26, 2022
Committee Report

AGENDA BILL INFORMATION

TITLE:	AB22-127 Consultant Services Agreement with Otak for Design of Kimball Creek Bridges Restoration	☐ Discussion Only ☒ Action Needed:
PROPOSED ACTION:	Approve Consultant Services Agreement with Otak, Inc (Otak) for design and permitting of Kimball Creek Bridges Repair project	☒ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	8/31/2022
	Finance	Drew Bouta	9/13/2022
	Legal	Anna Astrakhan	8/31/2022
	City Administrator	Mike Sauerwein	8/31/2022

DEPARTMENT:	Parks & Public Works	
STAFF:	Jeff Hamlin, PE – City Engineer	
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022
MEMBERS:	Ethan Benson Bryan Holloway Jo Johnson	
EXHIBITS:	1. Agreement with Otak for Kimball Creek Bridge Restoration Project 2. Kimball Creek Bridge Assessment Memorandum 3. Kimball Cr Bridge Restoration – Otak Scope Fee Proposal	

AMOUNT OF EXPENDITURE	$ 206,454
AMOUNT BUDGETED	$ 0 (2021-22 Biennium), $1,318,000 (Proposed 2023-24 Biennium)
APPROPRIATION REQUESTED	$ 206,454

SUMMARY

INTRODUCTION

The City requires design services to prepare bridge repair documents for two bridges carrying Meadowbrook Way SE: South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C. Repairs will be based on previously prepared concept-level recommendations by Otak and will include utility coordination; cultural and historical analysis; permitting and environmental documentation; hydraulic design; civil roadway design, bridge repair design; and development of plans, specifications, and construction cost estimate.

LEGISLATIVE HISTORY

AB22-034 – Dated April 13, 2022; Kimball Creek Bridges Assessment

BACKGROUND

Initial efforts to replace the Kimball Creek Bridges began in 2016 with a Puget Sound Regional Council (PSRC) grant for $195,000 to develop permitting and design documents to replace the bridge structures. Permit documents, plans, specifications and cost estimates were prepared for the work, but WSDOT and the permitting agencies would not accept them until funding had been secured for construction. Because of the small sizes of the two bridges, they are not included on the National Bridge Inventory list, thus not eligible for federal funding and construction funds were never obtained. Recent bridge inspections completed by King County in 2021 indicate that the bridge structures have continued to deteriorate and are now at a level of structural deficiency that repairs are necessary to avoid imminent failure within the next few years.

Public Works contracted with Otak to perform an assessment on the bridges to review alternatives for replacement or repair (see attached report). Otak evaluated several alternatives, including replacement in kind, replacement with culverts, repair of the structures, and associated permitting and funding assistance scenarios. Lacking viable alternatives for federal assistance, it was determined that repair of the existing bridge structures provided the greatest value to the City.

ANALYSIS

Otak completed an assessment of the bridge structures to evaluate alternatives for repair and/or replacement of the bridges (see attached *Memorandum – Kimball Creek Bridges Assessment*, dated May 26, 2022). The memorandum evaluated three potential avenues to address the decaying bridges, including:

1. Bridge Replacement Option included complete permitting and design to procure shovel ready designs and subsequent construction of the two bridge structures,
2. Culvert Replacement Option included possible replacement of the bridges with large culverts to take advantage of potential funding opportunities for fish passage improvements,
3. Bridge Repair Option evaluated repair concepts for comparison against the two replacement options,
4. The memo evaluates permitting levels of effort for each option, including cost and schedule impacts
5. The memo includes a review of funding options and cost estimates for the various scenarios.

Public Works conducted further study of funding options though review of guidance literature and discussions with State and Federal Highway authorities. Due to the lack of funding available to replace the bridges, staff recommend that the City proceed with bridge repairs in accordance with the recommendations provided in the Memo. Typically, repairs are warranted when the repair costs are less than about 50% - 70% of the bridge replacement cost. Repair costs for the Kimball Creek bridges are approximately 20% of the replacement cost, thus provide a good value option for the City.

BUDGET IMPACTS

The Administration recommends approving a contract with Otak in the amount of $206,454 to design two bridge repairs on Meadowbrook Way SE (Kimball Creek Bridges Restoration Project). The amended CIP did not include the Kimball Creek Bridges Restoration Project and therefore the project was not included in the 2021-2022 Biennial Budget. However, the project was included within the recently adopted 2023-2028 CIP and the Administration proposes incorporating the project into the 2023-2024 Biennial Budget for $1,318,000. To meet the accelerated timeline of this project, the Administration recommends increasing the appropriation available in the current 2021-2022 Biennial Budget (Transportation Capital Fund #310) through a budget amendment to match the anticipated burn rate (~$15,880) per month. To offset this increase, the Administration also recommends reducing the appropriation proposed in the 2023-2024 Biennial Budget by an equal amount. The total estimated spend on the contract for the remainder of 2022 is $63,520. A budget amendment will be forthcoming before the end of the year. A total of $18,662 has been spent previously under this contract to conduct the bridges assessment memorandum, bringing the new contractual value

total to $225,116. The Memorandum assessment estimates approximately $653,000 for construction of the bridge repairs.

NEXT STEPS

Proceed with design and permitting efforts to restore Kimball Creek Bridges in accordance with the Consultant Services Agreement Scope, Schedule and Budget.

PROPOSED ACTION

Move to approve Agreement for Consultant Services with Otak, Inc (Otak) for design and permitting of Kimball Creek Bridges Repair project

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES
Contract Title: Kimball Creek Bridges Restoration

THIS AGREEMENT made and entered into by and between the CITY OF SNOQUALMIE, a Washington municipal corporation (the "City"), and Otak, Inc., a Washington corporation ("Consultant") is dated this ____ day of _____ 2022.

Consultant Business: Otak, Inc.
Consultant Address: 11241 Willows Road NE, Suite 200,
Redmond, WA 98052

Consultant Phone: (425) 822-4446

Consultant Fax: (425) 827-9577

Contact Name: Bob Doherty

Contact e-mail: Bob.Doherty@Otak.com

Federal Employee ID No.: 91-1324129

Authorized City Representative for this contract: Michael Chambless, Director of Parks and Public Works

WHEREAS, the City desires to make repairs to the two bridges carrying Meadowbrook Way SE: South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C; and

WHEREAS, public convenience and necessity require the City to obtain the services of a consultant with expertise in the area of bridge design, permitting and repair; and

WHEREAS, the City finds that Consultant is qualified to perform and is experienced in performing the required services; and

WHEREAS, the city desires to engage the Consultant to prepare necessary permitting and bridge repair design documents for bidding and construction of such repairs.

NOW, THEREFORE, the parties herein do mutually agree as follows:

1. Employment of Consultant.

A. The City retains the Consultant to provide the services described in "Exhibit A" (the "Work"). Any inconsistency between this Agreement and the Scope of Work shall be resolved in favor of this Agreement. The Consultant shall perform the Work according to the terms and conditions of this Agreement.

B. The City may revise the Work and the compensation only by a written Change Order signed by the authorized City representative that shall become a part of this Agreement.

C. The project manager(s) of the Work shall be Bob Doherty. The project manager(s) shall not be replaced without the prior written consent of the City.

D. Work shall commence when the City issues a notice to proceed, and it shall be completed

no later than October 31, 2024, unless the completion date is extended in writing by the City.

2. Compensation.

A. The total compensation to be paid to Consultant, including all services and expenses, shall not exceed $ 206,454 as shown on Exhibit B, which shall be full compensation for the Work. Consultant shall notify the City when its requests for payment reach eighty-five percent of the total compensation.

B. The Consultant shall be paid in such amounts and in such manner as described in Exhibit B.

C. Consultant shall be reimbursed for Eligible Expenses actually incurred. "Eligible Expenses" means those types and amounts of expenses that are approved for reimbursement by the City in writing before the expense is incurred. If travel and/or overnight lodging is authorized, Consultant shall lodge within the corporate limits of City.

3. Request for Payment.

A. Not more than once every thirty days the Consultant shall file its request for payment, accompanied by evidence satisfactory to the City justifying the request for payment, including a report of Work accomplished and tasks completed, and an itemization of Eligible Expenses with copies of receipts and invoices.

B. All requests for payment should be sent to

City of Snoqualmie
Attn: Jeff Hamlin, City Engineer
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

4. Work Product.

A. The Consultant shall submit all reports and other documents specified in Exhibit A according to the schedule established in Exhibit A. If, after review by the City, the information is found to be unacceptable, Consultant, at its expense, shall expeditiously correct such unacceptable work. If Consultant fails to correct unacceptable work, the City may withhold from any payment due an amount that the City reasonably believes will equal the cost of correcting the work.

B. All reports, drawings, plans, specifications, and intangible property created in furtherance of the Work, and any intellectual property in such documents, are property of the City and may be used by the City for any purpose; provided that re-use without Consultant's permission shall be at the City's sole risk.

5. Termination of Contract. City may terminate this Agreement by sending a written notice of termination to Consultant ("Notice") that specifies a termination date ("Termination Date") at least fourteen (14) days after the date of the Notice; provided, however, that in the event of a material breach of this Agreement, termination may be effective immediately or upon such date as determined by the City in its sole discretion. For purposes of this Agreement, "material breach" is defined as misfeasance, malfeasance or violation of any criminal law, ordinance or regulation. Upon receipt of the Notice, the Consultant shall acknowledge receipt to the City in writing and immediately commence to end the Work in a reasonable and orderly manner. Unless terminated for Consultant's material breach, the Consultant shall be paid or reimbursed for all hours worked and Eligible Expenses incurred up to the Termination date, less all payments previously made; provided that work performed after date of the

Notice is reasonably necessary to terminate the Work in an orderly manner. The Notice may be sent by any method reasonably believed to provide Consultant actual notice in a timely manner

6. Assignment of Contract – Subcontractors. Consultant shall not assign this contract or sub-contract or assign any of the Work without the prior written consent of the City.

7. Indemnification.

A. To the extent provided by law and irrespective of any insurance required of the Consultant, the Consultant shall defend and indemnify the City from any and all Claims arising out of or in any way relating to this Agreement; provided, however, the requirements of this paragraph shall not apply to that portion of such Claim that reflects the percentage of negligence of the City compared to the total negligence of all persons, firms or corporations that resulted in the Claim.

B. Consultant agrees that the provisions of this paragraph 7 apply to any claim of injury or damage to the persons or property of consultant's employees. As to such claims and with respect to the City only, consultant waives any right of immunity, which it may have under industrial insurance (Title 51 RCW and any amendment thereof or substitution therefore). THIS WAIVER IS SPECIFICALLY NEGOTIATED BY THE PARTIES AND IS SOLELY FOR THE BENEFIT OF THE CITY AND CONSULTANT.

C. As used in this paragraph: (1) "City" includes the City's officers, employees, agents, and representatives; (2) "Consultant" includes employees, agents, representatives sub-consultants; and (3) "Claims" include, but is not limited to, any and all losses, claims, causes of action, demands, expenses, attorney's fees and litigation expenses, suits, judgments, or damage arising from injury to persons or property.

D. Consultant shall ensure that each sub-consultant shall agree to defend and indemnify the City to the extent and on the same terms and conditions as the Consultant pursuant to this paragraph.

8. Insurance.

A. Consultant shall comply with the following conditions and procure and keep in force at all times during the term of this Agreement, at Consultant's expense, the following policies of insurance with companies authorized to do business in the State of Washington. The Consultant's insurance shall be rated by A. M. Best Company at least "A" or better with a numerical rating of no less than seven (7) and otherwise acceptable to the City.

1. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance with limits not less than $1,000,000 per occurrence. If the City authorizes sublet work, the Consultant shall require each sub-consultant to provide Workers' Compensation Insurance for its employees, unless the Consultant covers such employees.
2. Commercial General Liability Insurance on an occurrence basis in an amount not less than $1,000,000 per occurrence and at least $2,000,000 in the annual aggregate, including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.
3. Business Automobile Liability Insurance in an amount not less than $1,000,000 per occurrence, extending to any automobile used by Consultant in the course of the Work. A statement by Consultant and approved by the City Administrator,

certifying that no vehicle will be used in accomplishing this Agreement, may be substituted for this insurance requirement.

4. Professional Errors and Omissions Insurance in an amount not less than $1,000,000 per occurrence and $1,000,000 in the annual aggregate. Coverage may be written on a claims made basis; provided that the retroactive date on the policy or any renewal policy shall be the effective date of this Agreement or prior, and that the extended reporting or discovery period shall not be less than 36 months following expiration of the policy. The City may waive the requirement for Professional Errors and Omissions Insurance whenever the Work does not warrant such coverage or the coverage is not available.

5. Each policy shall contain a provision that the policy shall not be canceled or materially changed without 30 days prior written notice to the City.

Upon written request to the City, the insurer will furnish, before or during performance of any Work, a copy of any policy cited above, certified to be a true and complete copy of the original.

B. Before the Consultant performs any Work, Consultant shall provide the City with a Certificate of Insurance acceptable to the City Attorney evidencing the above-required insurance and naming the City of Snoqualmie, its officers, employees and agents as Additional Insured on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on behalf of such Additional Insured. Receipt by the City of any certificate showing less coverage than required is not a waiver of the Consultant's obligations to fulfill the requirements.

C. Consultant shall comply with the provisions of Title 51 of the Revised Code of Washington before commencing the performance of the Work. Consultant shall provide the City with evidence of Workers' Compensation Insurance (or evidence of qualified self-insurance) before any Work is commenced.

D. In case of the breach of any provision of this section, the City may provide and maintain at the expense of Consultant insurance in the name of the Consultant and deduct the cost of providing and maintaining such insurance from any sums due to Consultant under this Agreement, or the City may demand Consultant to promptly reimburse the City for such cost.

9. Independent Contractor. The Consultant is an independent Contractor responsible for complying with all obligations of an employer imposed under federal or state law. Personnel employed by Consultant shall not acquire any rights or status regarding the City.

10. Employment. The Consultant warrants that it did not employ or retain any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement or pay or agree to pay any such company or person any consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right either to terminate this Agreement without liability or to deduct from the Agreement price or consideration or to otherwise recover, the full amount of such consideration.

11. Audits and Inspections. The Consultant shall make available to the City during normal business hours and as the City deems necessary for audit and copying all of the Consultant's records and documents with respect to all matters covered by this Agreement.

12. City of Snoqualmie Business License. Consultant shall obtain a City of Snoqualmie business license before performing any Work.

13. Compliance with Federal, State and Local Laws. Consultant shall comply with and obey all federal, state and local laws, regulations, and ordinances applicable to the operation of its business and to its performance of the Work.

14. Waiver. Any waiver by the Consultant or the City of the breach of any provision of this Agreement by the other party will not operate, or be construed, as a waiver of any subsequent breach by either party or prevent either party from thereafter enforcing any such provisions.

15. Complete Agreement. This Agreement contains the complete and integrated understanding and agreement between the parties and supersedes any understanding, agreement or negotiation whether oral or written not set forth herein.

16. Modification of Agreement. This Agreement may be modified by a Change Order as provided in Paragraph 1, or by a writing that is signed by authorized representatives of the City and the Consultant.

17. Severability. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void, insofar as it is in conflict with said laws, the remainder of the Agreement shall remain in full force and effect.

18. Notices.

A. Notices to the City of Snoqualmie shall be sent to the following address:

City of Snoqualmie
Attn: Michael Chambless, Director of Parks and Public Works
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

B. Notices to the Consultant shall be sent to the following address:
Otak, Inc.
Attn: Bob Doherty, PE
11241 Willows Road NE, Suite 200,
Redmond, WA 98052

19. Venue. This Agreement shall be governed by the law of the State of Washington and venue for any lawsuit arising out of this Agreement shall be in King County.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date first above written.

	CONSULTANT: Please fill in the spaces and sign in the box appropriate for your business entity.
CITY OF SNOQUALMIE, WASHINGTON By:_____ Its: Mayor Date:_____	Corporation [Consultant's Complete Legal Name] By:_____ Typed/Printed Name:_____ Its:_____ Date:_____
ATTEST: Deborah Estrada, City Clerk Date:	
APPROVED AS TO FORM:	

Bob C. Sterbank, City Attorney
Date:_____

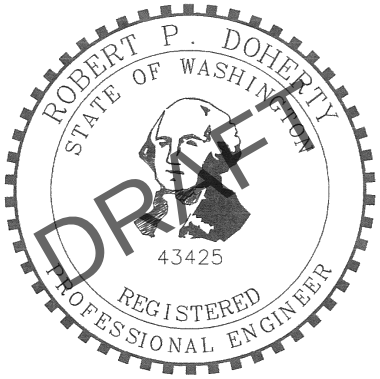
Exhibit A

Scope of Work

EXHIBIT B

COMPENSATION

Memorandum



To: Steve Clark, Jeff Hamlin

From: Bob Doherty

Copies: Lori McFarland, Jeff Gray

Date: May 26, 2022

Subject: Kimball Creek Bridges Assessment

Project No.: 20700

The City of Snoqualmie (City) requested Otak to assess the status of previously prepared design, permitting and funding documents for two Kimball Creek bridges and determine requirements for updating the project to be ready for construction. In addition to this assessment, options for repair of the existing bridges and for replacement with culvert structures are evaluated.

The following sections are included in this memo:

1. **Bridge Replacement Option** – Evaluate existing replacement documents against requirements to be "shovel ready".
   a. General Design
   b. Plans
   c. Specifications
   d. Construction Cost Estimate
   e. Schedule
   f. National Bridge Inventory (NBI)
   g. Funding Options
2. **Culvert Replacement Option** – Evaluate options for replacing existing bridges with large culverts for comparison against bridge replacement and bridge repair options.
   a. Culvert Options
   b. Culvert Cost Estimate
3. **Bridge Repair Option** – Evaluate bridge repair concepts for comparison against bridge and culvert replacement options
   a. Existing Conditions
   b. Repair Costs
4. **Permitting** – Evaluate existing bridge replacement permitting documents and compare to options for bridge repair and culvert replacement options.
5. **Recommendations** – Based on the above assessment, recommend project options.

1. Bridge Replacement Option

Otak has evaluated the documents previously developed by others between 2012 and 2016 with the intent of summarizing the work needed to finalize the project for construction. In general, it appears that there is a significant amount of effort needed to update the documents to be ready for construction. We have summarized our findings in the following sections:

- General Design
- Plans
- Specifications
- Construction Cost Estimate
- Schedule
- National Bridge Inventor
- Funding Options

Permitting issues are discussed separately in Section 4.

General Design

In general, the design should be checked to determine if it complies with current design requirements. This will be required to obtain permits and federal funding.

- **WDFW Guidelines.** Due to the timing of the work by Perteet (2012 to 2014), the project design was mostly performed under a version of the Washington State Department of Fish and Wildlife (WDFW) design guidelines that is now outdated. To be permitted today, the design must comply with the WDFW 2013 Water Crossing Design Guidelines (2013 WCDG).
- **Basis of Design.** The design memoranda from 2012 and 2014 does not provide backup data for key information typically needed to prepare a Basis of Design Memorandum used to obtain permits. These items should be obtained from Perteet and/or produced under a new engineering contract.
  - Bankfull measurements. Bankfull widths appear to have been previously verified with WDFW, however, backup calculations and support information for bankfull widths is not available. It is anticipated that this information will be needed to obtain approval today.
  - Pebble counts
  - Hydrology and hydraulic modeling
  - Scour calculations
  - Structure characteristics relative to the stream characteristics. A channel section should be proposed to handle the bankfull flow within a low flow section and to contain a 100-year storm event such that the stream does not come into contact with the crossing structure. The structure also should provide adequate freeboard above the 100-year storm event. The guidance for freeboard is typically three feet but can be reduced under certain circumstances. However, from a brief review of this project, it may be difficult to justify a reduction.
  - Streambed geomorphology. Assess whether imported streambed sediments or gravels are needed and make recommendations on scour protection.
- **Bridge Design.** Verify bridge design against more-recent standards and update as needed. Bridge design codes have changed in the years since the design was performed. Showing that the design meets current standards is anticipated to be required to receive federal funding. Design code requirements are listed in the Code of Federal Regulations, CFR 625.4(d)

(https://www.ecfr.gov/current/title-23/chapter-I/subchapter-G/part-625/section-625.4). Per this code, AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 are required. However FHWA also allows the most-recent bridge design code, AASHTO LRFD Bridge Design Specifications, 9th Edition, 2020 (https://www.fhwa.dot.gov/bridge/structures/04112022.pdf).

It is possible that the existing structure design meets the 2013 WCDG but if it does not, and variances cannot be justified with the permit agencies, the structures will need to be re-designed in their entirety. Based on our assessment, the standard that seems most likely to trigger a complete re-design is the freeboard requirement. If sufficient freeboard cannot be provided, the roadway may need to be raised which may trigger a number of other follow-on issues, such as wetland impacts and/or increased costs for bridge, wing walls and retaining walls. In this case, we anticipate the following steps to update the design:

1. Update the Basis of Design Memorandum using current standards. Collect bankfull width measurements in the field and summarize in a memorandum to support the stream crossing design. Additional environmental documentation will need to be updated to support permitting as described in Section 4 Permitting of this memorandum.
2. Confirm that the design meets the City's goals. The 2014 design report stated that the project intended to provide sidewalks and bike lanes on both sides of the roadway, but the design only provided for the sidewalks. Having a clearly defined project scope is essential if the project obtains outside funding.
3. Re-engagement of the community or other forms of stakeholder review may be needed. One topic to address will be suitable detour route(s). The 2014 plans contained a detour route using 384th Avenue SE/River Street/Railroad Avenue while the preliminary design report showed a detour route had been approved along W North Bend Way/394th Avenue SE.

During our assessment, we identified a few design elements that should be reviewed and updated, even if the existing design complies with current standards for permitting and funding purposes:

- **Basemap.** Conduct a site visit to verify that basemap features are unchanged.
- **Roadway design.** Check design against current roadway design standards.
- **Clear zone.** Identify and document correct clear zone distance.
- **Guardrail design.** Guardrail layout appears to be nonstandard and should be reviewed. If this requires substantial design changes, check grading, wetland impacts versus retaining walls, and Area of Potential Effects.
- **Stormwater management.** Check thresholds in current stormwater manual (2016) to determine if any stormwater management is required for the project.
- **Paving limits.** Check current pavement condition.
- **Dewatering.** Review proposed dewatering methods. This may need to be reviewed by a geotechnical consultant.
- **Scour protection.** Review the scour protection design. The existing bridges are experiencing scour issues and the current design includes reclamation of existing rocks for scour protection. The rock size and adequacy of these rocks for scour protection is not clear.
- **Channel Section.** Review the proposed typical channel section and identify streambed sediments or gravels, if needed.
- **Utilities.** Utility coordination should be re-activated. The existing plans identify underground facilities belonging to Century Link (now Lumen), that require relocation. More detail regarding the relocation is needed in the contract provisions to place an appropriate amount of responsibility on

the contractor, thus reducing risk for the City. Other utilities should also be contacted to verify their absence in the project vicinity and/or lack of project impacts, as well as updating contact information.

Plans

The condition of the plans appear to be fairly complete structurally and appear to be around 90% complete for the civil drawings. A thorough quality review should be conducted with additional details filled in. Small corrections and detailed design alterations are not noted herein. Based on the status of design noted in the General Design section above, we recommend reviewing the following plan sheets and updating as needed:

- **Cover Sheet.** Update cover sheet for project numbers and funding information.
- **DT1, Sheet 4.** Check the detour route as noted in the previous section.
- **SP1-SP2, Sheets 5-6.** Verify the dewatering method and revise if needed.
- **TS1, Sheet 7.** Revise stream bypass method if needed.
- **PP1-PP2, Sheets 9-10.** Provide hydraulic analysis, show 100-year water surface elevation and revise profile as needed to achieve freeboard requirements.
- **PV1-PV2, Sheets 11-12.**
  - Revise guardrail design. Angles and taper rates appear to be non-standard and should be reviewed and revised as needed. This may affect grading for stream channel, embankment slopes and retaining walls.
  - Verify retaining wall layout. Walls appear to be at odd angles to the bridge and may be too close to the bridge wing walls. Check for conflict with wall reinforcement and bridge abutments.
  - Verify wall type. Wall type shown in the plans is different than the wall types described in the special provisions.
- **RP1-RP2, Sheets 15-16.**
  - Both of the existing bridges exhibit scour issues. Add scour protection details if needed. Scour protection at the South Bridge appear to be particularly minimal and should be verified.
  - Add details to restoration drawings. Add seeding, planting, and/or large woody debris if needed.
- **Bridge Plans.** Update plans as needed to be consistent with current WSDOT Standard Specifications for Road, Bridge, and Municipal Construction; AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017, or 9th Edition, 2020; and current WSDOT Bridge Design Manual. Update Construction and Design notes on sheet B1 for both the South Bridge and the North Bridge.

AutoCAD version should be updated for all files. Complications are not anticipated, but this may take some time depending on how the files were put together. CAD files in older formats may be accepted by the City, but may be more difficult to update for as-built plans and future repairs. Licensing may also be an issue for older versions of CAD.

Specifications

Specifications were reviewed and should be updated to be consistent with design and plan updates noted above. Below are specific items note in our assessment:

- **General:**
  - If federally funded (anticipated), obtain current PS&E checklist from Local Programs and use it to review project manual and plans

- If not federally funded (not anticipated), the Special Provisions should be de-federalized, e.g. delete DBE, federal wage rate General Special Provisions (GSPs), etc.
- Update to current version of WSDOT Standard Specifications
- Update Table of Contents
- Remove amendments (no longer applicable to current WSDOT Standard Specifications)
- Review advertisement for compliance with Title VI language if federally funded.
- Instructions to Bidders should list which forms are to be included in the bid package
- Update front end forms to comply with current laws, e.g. RCW 39.04
- Subcontractor list must be included to identify structural steel and/or reinforcing steel subcontractor
- Update Special Provisions Table of Contents
- Update GSPs to current versions
- Update description of work in Special Provisions and Advertisement to include all types of work so that subcontractors and suppliers are alerted to review this project for bid.
- Include permits in Appendices and Table of Contents.
- Further development/updating of special provisions is required for stream work to address streambed sediment/gravel, streambed restoration/grading, and temporary stream bypass requirements. Verify that bid items are well-defined and quantifiable to a Bidder.
- Complete Appendices

- **Division 1:**
  - Further development of Division 1 Special Provisions is required to address permits, utility coordination/relocation, working days, detour time limits, temporary pedestrian access route (check requirement if federally funded), and long lead items.
- **Division 3:**
  - Special provisions are not necessary.
- **Division 5:**
  - Update special provisions.
- **Division 6:**
  - Further development of special provisions is required for retaining wall to include acceptable material types and verify pay limits are clearly defined.
  - Verify wall type. Wall type shown in the plans is different than the wall types described in the special provisions.

Construction Cost Estimate

The reviewed construction cost estimate is dated 3/11/2016. Unit costs should be updated for current bid climate. Below shows the cost estimate total updated to include:

- Increase for inflation. Assumes 6% per year for six years (2016 to 2022 dollars).
- 10% contingency
- 5% design engineering to update the design documents
- 10% construction management
- 10% City administration

		South Bridge	North Bridge	Total
Construction Cost (2016)		$ 817,525.00	$ 881,444.00	$ 1,698,969.00
Utility Relocation (Est)		$ 25,000.00	$ 25,000.00	$ 50,000.00
Subtotal		$ 842,525.00	$ 906,444.00	$ 1,748,969.00
Inflation (2022)	42%	$ 352,612.82	$ 379,364.14	$ 731,976.95
Subtotal Construction		$ 1,195,137.82	$ 1,285,808.14	$ 2,480,945.95
Contingency	10%	$ 119,513.78	$ 128,580.81	$ 248,094.60
Total Construction		**$ 1,314,651.60**	**$ 1,414,388.95**	**$ 2,729,040.55**
Design Engineering	5%	$ 65,732.58	$ 70,719.45	$ 136,452.03
Construction Management	10%	$ 131,465.16	$ 141,438.90	$ 272,904.05
City Administration	10%	$ 131,465.16	$ 141,438.90	$ 272,904.05
Total Project		**$ 1,643,314.50**	**$ 1,767,986.19**	**$ 3,411,300.69**
Rounded	$ 1,000.00	**$ 1,644,000.00**	**$ 1,768,000.00**	**$ 3,412,000.00**

These costs are used to compare to the Culvert Option and Repair Option in Section 2 and Section 3 of this memo, respectively.

Schedule

Based on the design and permitting assessment, we anticipate the following schedule to prepare the project for construction. The durations shown below assume that the original design engineers are available to complete the design.

- If basis of design is good, approximately 15-18 months. This assumes about 2-3 months for design and 13 months for permits.
- If basis of design needs to be updated, approximately 17-19 months. This assumes about 4-6 months for design and 13 months for permits.

Applications for permits can be submitted within about one month after completing the design. Updating critical areas and bankfull measurements, and coordination with WDFW and the Tulalip and Snoqualmie Tribes can occur during design completion. Once submitted, the critical path for permit approval is through the Army Corp of Engineers, which is expected to take about one year.

National Bridge Inventory (NBI) and National Highway System (NHS)

The City currently inspecting bridges and reporting bridges as small-span (less than 20 feet) to WSDOT. For reporting purposes structures greater than 20 feet span are considered a bridge. For the City's purposes there is no difference between the proposed girder-type bridge and a culvert with a span greater than 20' (see Section 2 below). Because the City is currently inspecting and reporting the existing bridges, there should be no change in effort for the new larger bridges (greater than 20 feet), whether the new structure is a bridge or culvert. Bridges on a public road reported to the WSDOT inventory will be tracked on the NBI. As such, these bridges are subject to the NBIS which requires regular inspection.

These bridges should be eligible for off-system funding since they are not located on the National Highway System (NHS). NHS routes can be found at:
https://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/washington/index.cfm

Funding options

Based on conversations with the City, it is anticipated that federal funds will be needed for construction of these bridges. Federal bridge bunding programs are summarized at the link: https://www.fhwa.dot.gov/bridge/bripro.cfm. A guidebook is available for cities that has information about new funding available from the Bipartisan Infrastructure Law and can be downloaded from the link https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA_FINAL.pdf

Based on our review, it appears that Bridge Formula Program (BFP) funding is the most likely avenue for the City. Information for BFP funding can be found by clicking on the Bridge Formula Program link in address above or at the link https://www.fhwa.dot.gov/bridge/bfp/20220114.cfm. Under this program, funding is available for new bridges, bridge replacement, and bridge rehabilitation; and FHWA encourages states to distribute about 50% of funds to off-system bridges.

2. Culvert Option

As requested by the City, Otak has prepared a concept-level culvert option for comparison to bridge replacement and bridge repair options. Figures 1-3 show several options for culverts with the span capability needed for this project. We assumed that the clear span of the culvert should match the clear span of the bridge option. Spans over 20 feet long are considered bridges, whether they are 4-sided (box culvert) or 3-sided. From a permitting perspective, three-sided culverts and bridges are preferred, so 4-sided options were not considered. In short, we found that the cost of the culvert option is slightly higher than the cost of the bridge option and may not be change worth pursuing.

Key details for the culvert option and a summary of costs are provided below.

Culvert Design Details

Key design details for determining culvert layout and type:

- Span: 23’-4” clear span to match bridge layout
- Options: Aluminum, Steel Plate, Concrete Box/Arch
- Foundations: All options can accommodate recommended pile foundations. Due to span and weight, it is assumed that the same foundation type will be needed.
- Design: Large culverts are typically “contractor-designed”. There are several fabricators to choose from and it is often preferred for the contractor to choose the lowest cost option that fits the project criteria. The City’s consultant engineer typically designs the foundation. It is typically required to specify three approved fabricators for Fed Aid projects. Preferred fabricators can be specified directly if only local funds are used.
- 2’ min. bury
- 3’ min. freeboard
- Top can be near surface and carry truck loads if needed

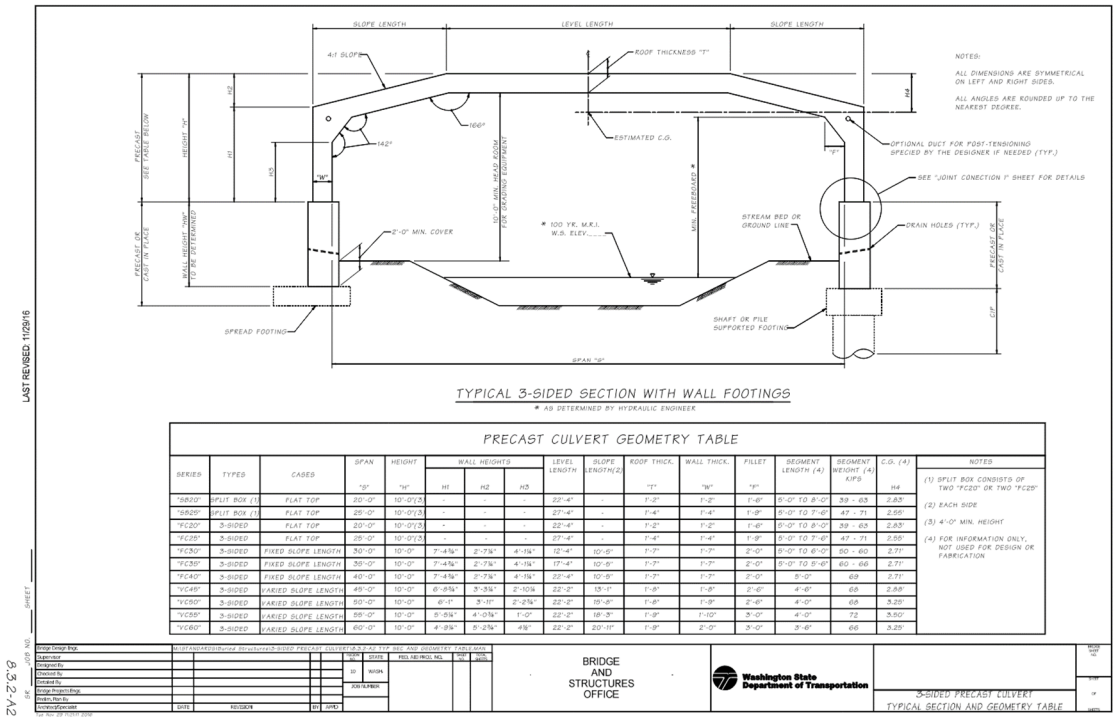


Figure 1 – WSDOT "Standard" Culverts

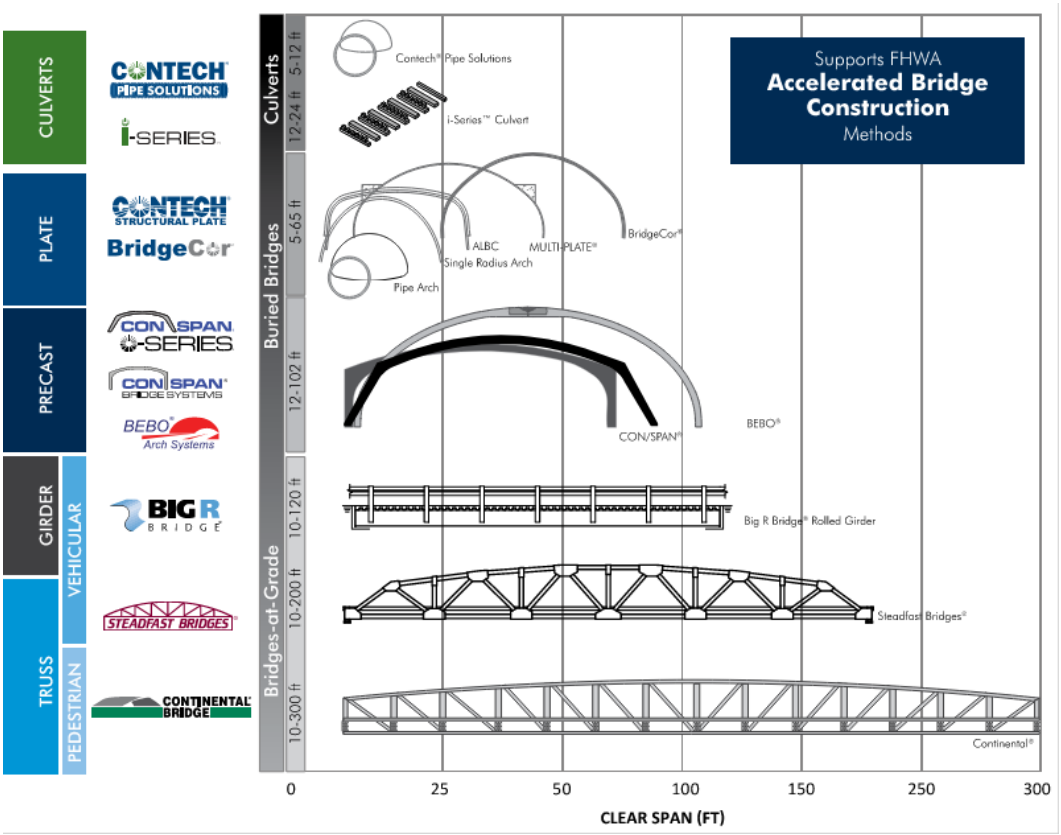
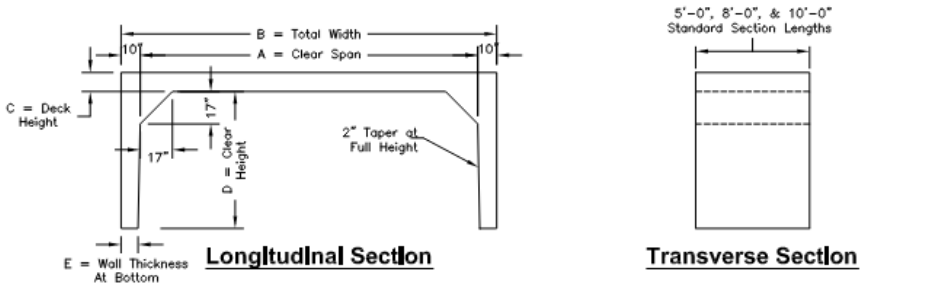


Figure 2 – Contech Culvert and Bridge Options



Sizing & Weights (Tons) for 5'-0" Section Length with 0° Skew

A	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
B	13.67	14.67	15.67	16.67	17.67	18.67	19.67	20.67	21.67	22.67	23.67	24.67	25.67	26.67	27.67	28.67	29.67	30.67	31.67	32.67	33.67	34.67	35.67	36.67
C	10	10	10	10	10	10	10	10	12	12	12	12	12	12	12	12	14	14	14	14	14	16	16	16
D=3'	6.9	7.2	7.5	7.8	8.1	8.4	8.8	9.1	10.7	11.1	11.5	11.9	12.2	12.6	13.0	13.4	15.6	16.0	16.5	16.9	17.3	19.9	20.4	20.9
D=4'	7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.7	11.3	11.7	12.1	12.5	12.8	13.2	13.6	14.0	16.2	16.6	17.1	17.5	17.9	20.5	21.0	21.5
D=5'	8.1	8.4	8.7	9.0	9.3	9.6	9.9	10.2	11.9	12.3	12.7	13.0	13.4	13.8	14.2	14.5	16.8	17.2	17.6	18.1	18.5	21.1	21.6	22.1
D=6'	8.6	8.9	9.2	9.6	9.9	10.2	10.5	10.8	12.5	12.8	13.2	13.6	14.0	14.3	14.7	15.1	17.3	17.8	18.2	18.6	19.1	21.7	22.2	22.7
D=7'	9.2	9.5	9.8	10.1	10.4	10.7	11.0	11.4	13.0	13.4	13.8	14.2	14.5	14.9	15.3	15.7	17.9	18.3	18.8	19.2	19.6	22.2	22.7	23.2
D=8'	9.7	10.0	10.3	10.6	11.0	11.3	11.6	11.9	13.6	13.9	14.3	14.7	15.1	15.4	15.8	16.2	18.4	18.9	19.3	19.7	20.2	22.8	23.3	23.8
D=9'	10.2	10.5	10.9	11.2	11.5	11.8	12.1	12.4	14.1	14.5	14.8	15.2	15.6	16.0	16.3	16.7	18.9	19.4	19.8	20.3	20.7	23.3	23.8	24.3
D=10'	10.7	11.0	11.4	11.7	12.0	12.3	12.6	12.9	14.6	15.0	15.3	15.7	16.1	16.5	16.8	17.2	19.4	19.9	20.3	20.8	21.2	23.8	24.3	24.8

Figure 1 – Oldcastle Culvert Options

Culvert Cost Estimate

The following costs were developed for the culvert option:

		South Bridge	North Bridge	Total
Culvert Items (Items different than for bridge option)		$ 607,022.00	$ 635,508.00	$ 1,242,530.00
Other Items (Items similar to bridge option)		$ 466,452.00	$ 516,199.00	$ 982,651.00
Subtotal Construction		$ 1,073,474.00	$ 1,151,707.00	$ 2,225,181.00
Contingency	25%	$ 268,368.50	$ 287,926.75	$ 556,295.25
Total Construction		$ 1,341,842.50	$ 1,439,633.75	$ 2,781,476.25
Design Engineering	18%	$ 241,531.65	$ 259,134.08	$ 500,665.73
Construction Management	10%	$ 134,184.25	$ 143,963.38	$ 278,147.63
City Administration	10%	$ 134,184.25	$ 143,963.38	$ 278,147.63
Total Culvert Project		$ 1,851,742.65	$ 1,986,694.58	$ 3,838,437.23
Rounded		**$ 1,852,000.00**	**$ 1,987,000.00**	**$ 3,839,000.00**

Culvert costs exceed bridge replacement and bridge repair options. As such, proceeding with the culvert option is not recommended.

3. Repair Option

As requested by the City, Otak has prepared a concept-level repair option for comparison to bridge replacement and culvert options. The intent of these repairs is to extend the existing bridge life by

approximately 10-15 years while additional funding for replacement can be found. This options is summarized in the following sections:

- Existing Conditions
- Repair Costs

Existing Conditions

Inspection reports for inspections on 8/3/2021 were provided by the City and were reviewed and used to determine members that need to be repaired. Inspection reports note element-level conditions in the BMS Elements section. Condition states are summarized below.

- State 1 – Good condition, no repairs needed.
- State 2 – Previously repaired elements, no repairs needed.
- State 3 – Fair condition, repairs not needed, but may be warranted in the context of repairing the bridge before it degrades further.
- State 4 – Poor condition, repairs recommended

Portions of elements can be listed in different condition states. We are recommending repairs for portions of elements that are in Condition State 3 or 4. In some cases, we also recommend repairing portions of elements in Condition State 1 when a significant portion of that element is in Condition State 3 or 4. Notes about the repair of elements are listed in the line items for each element in the cost summary the Repair Costs section below.

Repair Costs

Summary of the repair costs are below. Following that is a more-detailed breakdown of the costs for each bridge. Repair costs are generally much less than the bridge replacement costs. Typically, repairs are warranted when the repair costs are less than about 50%-70% of the bridge replacement costs. If bridge replacement funding is not obtained in the near term, repairing the bridges is recommended.

Cost Summary

		South Bridge	North Bridge	Total
Subtotal Construction		$ 162,840.00	$ 196,440.00	$ 359,280.00
Contingency	25%	$ 40,710.00	$ 49,110.00	$ 89,820.00
Total Construction		**$ 203,550.00**	**$ 245,550.00**	**$ 449,100.00**
Design Engineering	25%	$ 50,887.50	$ 61,387.50	$ 112,275.00
Construction Management	10%	$ 20,355.00	$ 24,555.00	$ 44,910.00
City Administration	10%	$ 20,355.00	$ 24,555.00	$ 44,910.00
Total Repair Project		**$ 295,147.50**	**$ 356,047.50**	**$ 651,195.00**
Rounded		**$ 296,000.00**	**$ 357,000.00**	**$ 653,000.00**

Bridge No. 1413B South Fork Kimball Creek (South Bridge)

	Element	Unit	Qty	Unit Cost	Total	Notes
1	Bridge Deck	SF	0	$ -	$ -	Good condition (whole deck in Condition State 1)
2	Bridge Girders	LF	0	$ -	$ -	Good condition (all girders in Condition State 1)
3	Timber Abutment	LF	52	$ 1,000.00	$ 52,000.00	Fair condition, repair recommended (20 lf of 52 lf in Condition State 3). Assume full replacement of timber abutment and wingwall planks.
4	Timber Submerged Pile/Column	EA	2	$ 5,000.00	$ 10,000.00	Poor condition, repair recommended (1 pile in Condition State 3, 1 pile in Condition State 4)
5	Timber Pier Cap	LS	1	$ 2,000.00	$ 2,000.00	Good condition (entire length of each cap in Condition State 1). Assume minimal amount for cleaning to remove algae growth.
6	Metal Bridge Railing	LF	32	$ 500.00	$ 16,000.00	Fair condition, repair recommended (10 lf of 32 lf in Condition State 3). Recommend replacing full length, both sides. Unit cost includes removal and disposal of existing rail and installation of new.
7	Scour	EA	2	$ 25,000.00	$ 50,000.00	Fair condition, repair recommended (both abutments in Condition State 3)
8	Asphalt Concrete (AC) Overlay	TON	5	$ 300.00	$ 1,500.00	Fair condition, repair recommended (4 sf of 371 sf in Condition state 3). Pothohles forming in northbound lane. 8" AC depth is excessive. Recommend 6" grind with 2" overlay to remove excess dead load and repair AC surface. High unit cost for small quantity.
9	Remove Existing Asphalt Concrete (AC) Overlay	SY	42	$ 100.00	$ 4,200.00	See AC Overlay above.
	Subtotal				$ 135,700.00	
10	Mobilization, Site Prep, TESC, Survey and Traffic Control	LS	1	$ 27,140.00	$ 27,140.00	Estimate 20% Ffor additional items not covered in structural repair of members
	Subtotal Construction				**$ 162,840.00**	
	Contingency			25%	$ 40,710.00	Typically about 25% for concept-level estimate.
	Total Construction				**$ 203,550.00**	
	Design Engineering			25%	$ 50,887.50	Typically 15%-18% for design. Increased to 25% to include inspection and load rating.
	Construction Management			10%	$ 20,355.00	Typically about 10% for CM.
	City Administration			10%	$ 20,355.00	Adjust as needed to cover City costs.
	Total Repair Project				**$ 295,147.50**	
	Rounded				**$ 296,000.00**	

Bridge No. 1413C East Fork Kimball Creek (North Bridge)

	Element	Unit	Qty	Unit Cost	Total	Notes
1	Bridge Deck	SF	0	$ -	$ -	Good condition (whole deck in Condition State 1)
2	Bridge Girders	EA	5	$ 10,000.00	$ 50,000.00	Fair condition, repair recommended (12 lf of 86 lf in Condition State 3). Cracking noted in 5 of 6 girders, all near abutment 1.
3	Timber Abutment	LF	51	$ 1,000.00	$ 51,000.00	Fair condition, repair recommended (all of timber abutment in Condition State 3). Full replacement of timber abutment.
4	Timber Submerged Pile/Column	EA	1	$ 5,000.00	$ 5,000.00	Fair condition, repair recommended (1 pile in Condition State 3)
5	Timber Pier Cap	LS	1	$ 2,000.00	$ 2,000.00	Good condition (entire length of each cap in Condition State 1). Assume minimal amount for shimming to distribute girder bearing evenly on cap.
6	Metal Bridge Railing	LF	0	$ 500.00	$ 0.00	Good condition (entire length of rail in Condition State 1). Repair or replacement not needed unless condition changes.
7	Scour	EA	2	$ 25,000.00	$ 50,000.00	Fair condition, repair recommended (both abutments in Condition State 3)
8	Asphalt Concrete (AC) Overlay	TON	5	$ 300.00	$ 1,500.00	Good condition, repair not needed (entire surface in Condition state 3). However, 7.5" AC depth is excessive. Recommend 6" grind with 2" overlay to remove excess dead load. High unit cost for small quantity.
9	Remove Existing Asphalt Concrete (AC) Overlay	SY	42	$ 100.00	$ 4,200.00	See AC Overlay above.
	Subtotal				$ 163,700.00	
10	Mobilization, Site Prep, TESC, Survey and Traffic Control	LS	1	$ 32,740.00	$ 32,740.00	Estimate 20% for additional items not covered in structural repair of members
	Subtotal Construction				**$ 196,440.00**	
	Contingency			25%	$ 49,110.00	Typically about 25% for concept-level estimate.
	Total Construction				**$ 245,550.00**	
	Design Engineering			25%	$ 61,387.50	Typically 15%-18% for design. Increased to 25% to include inspection and load rating.
	Construction Management			10%	$ 24,555.00	Typically about 10% for CM.
	City Administration			10%	$ 24,555.00	Adjust as needed to cover City costs.
	Total Repair Project				**$ 356,047.50**	
	Rounded				**$ 357,000.00**	

4. Permitting

The previous project design and permitting package assumed a federal nexus through funding from the Federal Highway Administration (FHWA) and Washington Department of Transportation (WSDOT) Local Programs (LP). Distribution of the federal dollars required compliance with the National Environmental Policy Act (NEPA) and associated federal laws (e.g., Endangered Species Act, National Historic Preservation Act). A NEPA compliance documentation package was prepared but did not appear to have been approved by WSDOT. A Joint Aquatic Resource Project Application (JARPA) was also prepared for acquiring Section 404/401 permits from the United States Army Corps of Engineers (USACE), and a Hydraulic Project Approval (HPA) from WDFW.

Some of the previously completed documentation can be re-used during permitting for either the bridge repair or replacement, and other materials will need to be updated. New items for permitting have also been identified, including compliance documentation for floodplain hazard regulations [Snoqualmie Municipal Code (SMC) Chapters 15.12 and 19.12], and shoreline management regulations (SMC Chapter 19.08). It is assumed that the repair option would be funded by the City, and the bridge replacement option would require federal aid.

In general, all permit applications and environmental compliance documentation need to be updated to reflect the most current project design.

Items that need to be updated are listed below. The rationale is included in parentheses, and items listed by italics are required only for replacing the bridges using federal funds:

- Critical Areas Study (more than five years old, complete wetland ratings per new Ecology 2014 Rating System, and update classifications and buffer widths per current SMC 19.12)
- JARPA Form and Plan Sheets (application should be revised to reflect the preferred and updated design)
- *Categorical Exclusion Document and supporting studies, formerly called Environmental Classification Summary [ECS] (WSDOT utilizes new form based on 2022 guidance, and information in existing form needs to be verified for accuracy and updated if necessary)*

New items that need to be prepared for permitting with federal, state, and local agencies:

- Endangered Species Act compliance documentation (*Biological Assessment expected to be required by WSDOT for bridge replacements;* Biological Evaluation and FPRP III Notification Form for USACE for bridge repairs)
- Shoreline Permit Application (no application prepared previously, including No Net Loss statement for mitigating project impacts to the shoreline environment)
- Flood Hazard Regulations compliance documentation (not prepared previously, project is within mapped floodplain)

Items that likely do not need to be updated include:

- Cultural resources documentation provided that no changes are made to the Area of Potential Effects (No Effect Letter issued by DAHP dated June 12, 2014)

5. Recommendations

Based on Otak's assessment of the Kimball Creek bridges documents, and development of culvert and bridge repair options, we recommend one of the two options below, depending on availability of federal funding to bridge replacement:

- If federal funding for bridge replacement is not available in the near term, proceed with bridge repairs. The costs for this option appear to be significantly less than the bridge replacement and culvert options. Permitting applications for this option have not been developed and will need to be developed in conjunction with the repair details.
- If federal funding for bridge replacement is available, the following is recommended:
  - Update design documents as detailed in Section 1.
  - Coordinate with WDFW regarding potential sponsorship of a Fish Habitat Enhancement Project (FHEP) designation, which would eliminate the need for local permits except for Flood Hazard.
  - Prepare bankfull width memorandum and review for concurrence with WDFW and Tribes to prevent delays during USACE permitting.

Exhibit A

August 31, 2022

Michael Chambless, Public Works Director
City of Snoqualmie
PO Box 987
Snoqualmie, WA 98065

Re: Kimball Creek Bridges Restoration Project
Otak Project No. 20964

Dear Mr. Chambless:

The City is requesting services to prepare bridge restoration documents for two bridges carrying Meadowbrook Way SE: South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C. Repairs will be based on previously prepared concept-level recommendations prepared by Otak under a separate contract and will include utility coordination; cultural and historical analysis; permitting and environmental documentation; hydraulic design; civil roadway design, bridge repair design; and development of plans, specifications, and construction cost estimate. The following scope of work details these efforts.

SCOPE OF WORK

Task 1 – Project Management
Otak's project manager will provide direction and coordinate preparation of deliverables. The project manager will monitor the project planned budget and schedule versus actual progress and take corrective actions if necessary. Otak will prepare and submit monthly invoices and a brief progress report to reflect progress over the last billing period. Otak's project manager will maintain regular communication with the City's project manager.

Assumptions:
- Level of effort assumes 26 months of work.

Deliverables:
- Monthly invoices and progress reports will be prepared and submitted to the City.

Task 2 — Utility Coordination
This Task is added and includes work to coordinate project impacts to utilities along Meadowbrook Way SE.

2.1 Utility Coordination
This subtask involves the following:
- Preliminary Utility Coordination Meeting – Meet with utility company and City staff at 30% design stage to review plans, identify conflicts, and develop action plans. Prepare and distribute meeting notes.
- Individual Coordination – Resolve conflicts individually with the utility company and City staff that cannot be resolved at the meeting. Provide potential conflict information to utility and coordinate for utility removal, relocation, or reconnection.

- Final Coordination Meeting – Meet with utility company and the City at 90% Design stage to review plans, confirm resolution of conflicts, and verify relocation schedule. Prepare and distribute meeting notes.

Assumptions:
- Telephone is the only utility present at the site and is located on both bridges.
- Utility locations will be as shown in the survey base map provided by the City or supplemental information provided by the utility.
- The City will provide utility name and contact information
- Utility coordination items will be included in plans and specifications in other tasks.
- Utility coordination meetings will be remote using MS Teams or similar remote meeting application.

Deliverables:
Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.
- Preliminary Meeting Notes (PDF)
- Final Meeting Notes (PDF)

Task 3 – Cultural and Historical Analysis (CRC)
This task is to provide a cultural resource survey to meet federal, state, and local compliance. The study will be designed to meet the requirements of Section 106 of the National Historic Preservation. The survey will also be done to meet the standards and guidelines of the Washington Department of Archaeology and Historic Preservation (DAHP).

If the Area of Potential Effects (APE) includes areas not covered by the 2014 cultural resources assessment, archaeological field work will be conducted. The archaeological field work will include a pedestrian survey of the APE walking transects spaced 10 to 20 meters apart. Shovel testing will be done where the surface visibility is inadequate to determine if an archaeological site is present. Historic resources (i.e., buildings, structures, sites, objects, and districts constructed at least 45 years before the date of survey) within the APE have not been recorded by prior studies; these will be documented.

The tasks will include the following.
- Background review of the previous studies conducted in the vicinity.
- A systematic pedestrian archaeological survey of the APE walking transects spaced no more than 20 meters apart.
- Excavation of up to 5 shovel tests that will be 20 inches (in) (50 centimeters [cm]) in diameter and excavated to a minimum depth of 20 in (50 cm). Sediments will be screened using ⅛-in hardware cloth. All shovel tests will be backfilled upon completion. No artifacts will be collected. Archaeological resources, if found, will need to be recorded.
- Documentation of historic resources that are within the APE. Inventory forms will be prepared for each documented historic resource using the DAHP WISAARD database; the forms will be included in the report appendix.
- Evaluate documented historic resources to determine their eligibility to be listed on the National Register of Historic Places (NRHP). An assessment of project effects under Section 106 will be done for those historic resources that are recommended as eligible for listing in the NRHP.
- Prepare a draft cultural resource survey report and submit to the City. It is assumed the City will submit to the U.S. Army Corps of Engineers (Corps). This report will be an update to the 2014 cultural resources assessment to satisfy Section 106 of NHPA for the project as it is now proposed. It will include a recommendation of whether the proposed project will have an adverse effect on historic properties, including archaeological sites. Archaeological and historic resource forms will be appended to the report.

- Address comments on the draft cultural resource survey report and finalize. A DAHP cover sheet will be included with the finalized version of the cultural resources report for agency submittal and distribution.
- Contact the cultural resources staff of tribes that may have an interest in or information regarding the project location. This communication is intended to inform the cultural resources assessment and does not constitute government-to-government consultation. Copies of this correspondence and received responses will be included as an attachment in the cultural resources assessment.

Assumptions:
- Up to 5 shovel tests will be excavated.
- Documentation of up to one archaeological resource using the DAHP WISAARD database; the form will be included in the report appendix.
- Two historic resources, South Fork Kimball Creek Bridge No. 1413B and East Fork Kimball Creek Bridge No. 1413C, both constructed in 1954, will be identified and documented for the project. It is unlikely that the bridges will meet minimum eligibility requirements for listing in the NRHP.
- The Corps, as lead agency for Section 106, will consult with DAHP and Tribes regarding the cultural resources assessment and potential effects to historic properties.

Deliverables:
Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.
- A cultural resource survey report will be submitted for the review of the Corps. This report will satisfy Section 106 of NHPA. It will include a recommendation of whether the proposed project will have an adverse effect on historic properties, including archaeological sites. Archaeological and historic resource forms will be appended to the report. A DAHP cover sheet will be included with the finalized version of the cultural resources report for agency submittal and distribution. The draft and final report and resources forms will be provided electronically.

Task 4 — Environmental Documentation and Permitting
Permit applications and supporting environmental and regulatory compliance documentation will be prepared under this Task. Federal, state and local regulatory compliance requirements are included, as well as underlying deliverables and assumptions for the work.

4.1 Environmental Data Collection and Wetland/Habitat Delineation and Stream Characterization Report
Otak will conduct field work necessary to collect the environmental data for the preparation of the technical documents and permit applications for the project. Wetland boundary and stream ordinary high water (OHW) delineations will be conducted at both bridge locations to meet the requirements of Snoqualmie's Critical Areas Code (Snoqualmie Municipal Code [SMC] 19.12), the Corps of Engineers (the Corps), and Washington State Department of Ecology (Ecology). Wetland and stream boundaries will be flagged in the field, sketched and subsequently added to the project base map. Riparian and priority wildlife habitats will also be assessed.

The Consultant will prepare a Wetland/Habitat Delineation and Stream Characterization Report for each crossing to support the required federal, state, and county approvals required to construct the projects.
Stream and riparian habitats will be qualitatively assessed within and adjacent to the project area to sufficiently establish baseline conditions for instream and riparian habitat. Data forms documenting the wetland boundaries and instream habitat will be completed. Wetlands will be rated according to the 2014 Ecology Washington State Wetland Rating System for Western Washington methodology and classified per SMC 19.12.170. Streams will be rated per Washington Department of Natural Resources criteria for compliance with SMC 19.12.160. Buffer widths for wetlands and streams will be identified.

4.2 ESA Compliance Documentation

Documentation necessary for compliance with the provisions of the Endangered Species Act (ESA) will be prepared for the project. A No Effects Letter (NEL) will be prepared for each project for wildlife species regulated by the ESA and administered by the US Fish and Wildlife Service (USFWS) and NOAA Fisheries. A Biological Assessment/Evaluation report is not expected to be required due to the absence of ESA-listed species in the project vicinity. ESA compliance documentation will be submitted to the Corps of Engineers with the JARPA (Task 4.3) as supporting environmental compliance documentation for issuance of the Section 404 permit under the Clean Water Act.

4.3 Prepare 404/401, HPA, and Local Environmental Permit Applications

A Joint Aquatic Resources Permit Application (JARPA) will be completed when each project reaches a 60 percent design stage. The JARPA will be used to apply for the Ecology Section 401 Water Quality Certification (WQC); Washington State Department of Fish and Wildlife (WDFW) Hydraulic Project Approval (HPA); and a Section 404 permit from the Corps of Engineers. The projects are expected to qualify for a Nationwide Permit (NWP) #14 for Linear Transportation projects or an NWP #3 for Maintenance from the Corps of Engineers. A JARPA application will be prepared for each bridge project. JARPA submittals will consist of the application form, public notice formatted drawing set (sized 11”x17”), and construction plans for submittal to relevant regulatory agencies.

A 401 WQC Pre-Filing request will be submitted to Ecology after the 404 application package is submitted to the USACE. A Water Quality Monitoring Plan is not anticipated to be required by Ecology for the 401 WQC. If it is required, then it will be prepared under a separate contract amendment or similar.

The project will require compliance with SMC 19.12.150 (Frequently Flooded Areas) and SMC 15.12 (Flood Hazard Regulations) for activities within a regulated floodplain. The project will also require compliance with SMC 19.12.160 (Streams), 19.12.170 (Wetlands), and 19.12.190 (Fish and wildlife habitat conservation areas). A floodplain permit and clearing and grading permit application(s) will be prepared under this task and submitted online. It is assumed that Public Works will coordinate with the Community Development Department regarding the pre-application meeting requirement listed at SMC 19.12.070 prior to the permit application submittals.

4.4 Prepare Critical Areas Report and Buffer Mitigation Plan

The project will require a mitigation and monitoring plan that addresses no net loss of ecological functions in critical areas as required by the City, Ecology, and WDFW. The project is anticipated to temporarily impact wetland and stream buffers adjacent to the bridges to access the abutments. The plan will include performance standards and monitoring methods to meet City code requirements.

If the no net loss standard cannot be achieved on site within the City right of way and the project is determined to require compensatory mitigation for unavoidable adverse impacts to wetlands or streams, then off-site compensatory mitigation will be assessed in the immediate vicinity of the crossings within the limits of the baseline documentation. The baseline Wetland/Habitat and Stream Characterization Report will be amended to include the project impacts to critical areas, restoration of temporary impacts on site, and a monitoring and maintenance plan.

If onsite mitigation cannot be identified, then a Bank Use Plan will be prepared for purchase of mitigation credits. The Bank Use Plan would be prepared under a separate scope of work.

4.5 Agency Meetings, Permit Facilitation, and City Coordination

Prior to permit submittals, Otak will support City staff to arrange up to one (1) meeting, preferably on-site, with all applicable City and WDFW staff to assure that they have a solid understanding of the existing and proposed conditions for the project prior to receiving the JARPA package. After permits are submitted, Otak will coordinate with City staff to respond to comments, provide additional clarification, and assist with shepherding the permits through the process efficiently.

4.6 SEPA Compliance

The project will require compliance with the State Environmental Policy Act (SEPA). Otak will prepare a SEPA checklist for each project, with vicinity map and simple plan view appropriate for the general public, and will submit the checklists to the City for environmental review as the lead agency in the SEPA process. The SEPA Checklists will be submitted along with the local permit applications prepared under Task 4.3

Assumptions:

- Wetland and stream boundaries will be verified within the City-owned right of way and adjacent private parcels immediately adjacent to the right of way as needed for site access. The study area will be confirmed with the City prior to completing field work (e.g., staging areas).
- City will acquire rights of entry to areas from adjacent property owners prior to field work.
- Otak will survey the flagged wetland and stream boundaries.
- The project will result in a Determination of Non-Significance for SEPA compliance. Preparation of an EIS is not included in this scope.
- The project will meet the definition of maintenance under the 4(d) Program.
- The project will result in a No Effects determination for ESA-listed species regulated by the USFWS and NOAA Fisheries. A Biological Assessment (BA) or Biological Evaluation (BE), if required, would be completed under a separate scope of work
- Application fees will be paid by the City.
- The project will adhere to appropriate mitigation sequencing and will avoid and minimize adverse impacts to the extent possible prior to proposing compensatory mitigation within or outside of the City-owned right of way.
- If complete mitigation cannot be provided on-site within the vicinity of each crossing, then offsite compensatory mitigation (e.g., Bank Use Plan) that meets the federal, state, and local requirements would be completed under a separate scope of work.
- Two (2) Otak staff members will attend one (1) onsite meeting not to exceed four (4) hours.
- Two (2) Otak members will attend a total of two (2) internal coordination meetings not to exceed three (3) hours each.

Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Wetland/Habitat Delineation and Stream Characterization Report (2) (MS Word and PDF)
- Final Wetland/Habitat Delineation and Stream Characterization Report (2) (PDF)
- Draft NEL (2) (PDF)
- Final NEL (2) (PDF)
- Draft JARPA (2) (PDF)
- Final JARPA (2) (PDF)
- 401 Pre-Filing Request (2)
- Floodplain and Grading/Clearing Permit Application contents (2) (PDF)
- Draft Critical Areas Report and Buffer Mitigation Plan (2) (PDF)
- Final Critical Areas Report and Buffer Mitigation Plan (2) (PDF)
- Project plans or exhibits appropriate for the field visit (PDF).
- Draft SEPA checklist with vicinity map and site plan (2) (PDF)
- Final SEPA checklist with vicinity map and site plan (2) (PDF)

Task 5 – Hydraulic Design

5.1 Data Collection

Collect and review available information on Kimball Creek and East Fork Kimball Creek; and the existing bridge crossing, including previous study reports, as-built plans, bridge inspection reports, available survey data, historic air photos, and available geotechnical information, and bridge replacement plans and design reports prepared previously by others. Some of this information has already been provided by the City.

5.2 Site Investigation and Channel Stability Assessment

- Conduct a site investigation to record observations, gather field measurements, and take digital photographs.
- Record observations of the following:
  - Stream characteristics and the adjacent floodplain in the vicinity of the bridges
  - Lateral and vertical stability of the stream channel
  - General and local scour at the bridges
  - Lateral and vertical controls
  - Stream channel and floodplain roughness
  - Stream bed material characteristics
- Field-analyze stream bed material using the Wolman pebble count method.
- Identify and stake or flag in the field any additional survey work needed to support the hydraulic modeling.
- Review available historic air photos to evaluate instances of past channel migration.
- Evaluate the vertical and lateral stability of the channel, based on the field investigation.

5.3 Hydrologic Analysis

- Otak will review the hydrologic models, documentation, and critical design flows developed by others that will be provided by the City for each crossing. It is assumed that the land cover parameters used in the previous models are suitable to represent current conditions. Otak will update the precipitation input for the models, if necessary.
- After updating the precipitation in the hydrologic model, the results will be summarized in the Hydraulics Report under Task 5.8.

5.4 Hydraulic Analysis

- Otak will review the hydraulic model (HEC-RAS) for existing conditions developed by others that will be provided by the City. Otak will add up to two cross-sections to the model for scour analysis.
- The hydraulic models will be updated with additional cross sections in the vicinity of each bridge using survey data provided by the City and supplemented with available LiDAR data in the overbank areas.
- Perform a hydraulic analysis of Kimball Creek and East Fork Kimball Creek in the vicinity of the bridges using the U.S. Army Corps of Engineers HEC-RAS computer software to evaluate existing conditions and up to three (3) project conditions for a range of flows up through the 500-year event.

5.5 Scour Analysis

- Conduct a scour analysis at each bridge following the guidelines as outlined in HEC-18, Evaluating Scour at Bridges (Fifth Edition) to support the design of scour countermeasures.
- Evaluate the long-term degradation potential based on field evaluation, bridge inspection reports, and any other historical information on the channel in the vicinity of the bridge.
- Calculate general (contraction) scour and bend scour as necessary. It is assumed that the proposed scour countermeasures will protect against local scour at the abutments so that local abutment scour calculations will not be necessary.

5.6 Design of Scour Countermeasures

- Coordinate with other design disciplines to develop one or more design alternatives for the scour countermeasures.
- As needed, perform riprap design calculations to determine the gradation and thickness of any riprap revetment.
- Based on the scour analysis and any riprap design calculations, develop the basic layout for each design alternative.

5.7 Temporary Water Management

- Determine limits of work area isolation.
- Develop temporary water management approach to isolate in-stream work areas.

5.8 Hydraulics Report

- Prepare a Draft Hydraulics Report that documents the hydraulics analysis, scour analysis, design of scour countermeasures, and in-stream isolation plan and submit for review. The report will address any impacts to Base (100-year) Flood Elevations to support a No-Rise Certification.
- Prepare a response to review comments and incorporate changes into a Final Hydraulics Report.

Assumptions:

- Peak flow design discharges will be based on hydrologic models provided by the City, with only precipitation to be updated by Otak.
- All survey data to be provided by the City
- The scour repair can be designed to meet a “no-rise” condition and therefore a CLOMR/LOMR will not be required.
- The roadway restoration related to the bridge repair will not require the project to include any stormwater flow control, runoff treatment, or any permanent on-site stormwater management BMPs.
- If cover under the Ecology Construction Stormwater General Permit is required, the Stormwater Pollution Prevention Plan (SWPP) will be prepared by the Contractor that is awarded to construct the project.

Deliverables:

Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Hydraulics Report (Hard copy and PDF)
- Final Hydraulics Report (Hard copy and PDF)
- Electronic copy of the HEC-RAS model used for the hydraulic analysis

Task 6 – Civil Design

This task includes the following civil engineering design services. Incorporation of these designs into the project documents is included in a separate task.

6.1 Site Investigation

Visit each bridge to:

- Verify guardrail type and layout
- Take site photos to document guardrail layout and condition

6.2 Guardrail Design

Review and implement WSDOT design standards and standard plans for replacing guardrail approaches to the bridge.

6.3 Pavement Design
Design asphalt pavement section to replace pavement removed during repairs.

6.4 Detour Design
Determine signing requirements and coordinate with the City and other agencies affected by the detour.

Assumptions:
- Guardrail replacement will be similar to the existing layout and shoulder improvements will not be needed.
- Future ADT and percent truck traffic listed in the WSBIS Local Agency Inventory Report provided for each bridge by the City will be adequate for pavement design.
- Detour route will be similar to that used in the previous bridge replacement design by others and will require coordination with and approval by the City of North Bend, King County and WSDOT.

Deliverables:
None. Efforts in this task will be incorporated into the construction documents covered in a separate task.

Task 7 – Structural Design
This task includes the structural analysis and design services.

7.1 Site Investigation
Visit each bridge to:
- Verify bridge member conditions noted in the bridge inspection reports dated 8/3/2021.
- Take site photos to document site and member conditions.
- Field measure members to determine member size and limits to supplement bridge plans.

7.2 Bridge Load Rating
Perform bridge load rating calculations in accordance with the AASHTO Manual for Bridge Evaluation (MBE) and the Washington State Department of Transportation (WSDOT) Bridge Design Manual (BDM). Two draft and final bridge load ratings will be performed for each bridge and submitted to the City:
- Existing bridges to determine member live load carrying capacity and repairs needed.
- As-repaired bridge condition after completion of construction to capture as-built conditions and verify desired live load capacity.

Final bridge load ratings will be stamped and signed by a professional engineer licensed in the State of Washington.

7.3 Bridge Repair Design
Bridge repairs will be based on recommendations provided in our draft Kimball Creek Bridges Assessment Memorandum, dated 5/26/2022 which are based on bridge inspection reports dated 8/3/2021 prepared by the King County bridge group and provided by the City. The Consultant will review the results of the bridge load rating efforts above to identify extent of repairs and determine additional repairs if needed.
- Perform calculations for repairs and new members.
- Coordinate with hydraulic discipline to incorporate scour countermeasures with bridge repairs.

Bridge repair calculations will be stamped and signed by a professional engineer licensed in the State of Washington.

Assumptions:
- Full bridge inspection, material testing, ground penetrating radar (GPR) will not be needed to assess the existing condition of the bridge.

- Bridge repairs will be limited to those identified in the identified in the draft Kimball Creek Bridges Assessment Memorandum, dated 5/26/2022, prepared by Otak.
- Roadway excavation will be needed to repair bridge timber abutment walls requiring the need for bridge approach pavement and guardrail restoration.
- Roadway will be closed with a detour during bridge repairs.

Deliverables:
Deliverables will be provided to the City via email. If file sizes prevent sending via email, files will be provided on an Otak SharePoint site and a link to access the files will be emailed to the City.

- Draft Bridge Load Rating of existing bridge condition for Bridge 1413B (PDF)
- Draft Bridge Load Rating of existing bridge condition for Bridge 1413C (PDF)
- Final Bridge Load Rating of existing bridge condition for Bridge 1413B (PDF)
- Final Bridge Load Rating of existing bridge condition for Bridge 1413C (PDF)
- Draft Bridge Load Rating of as-repaired bridge condition for Bridge 1413B (PDF)
- Draft Bridge Load Rating of as-repaired bridge condition for Bridge 1413C (PDF)
- Final Bridge Load Rating of as-repaired bridge condition for Bridge 1413B (PDF)
- Final Bridge Load Rating of as-repaired bridge condition for Bridge 1413C (PDF)
- Final Bridge Repair Structural Calculations (PDF)

Task 8 – Construction Documents

8.1 30% Design Documents
This task will develop the design to an approximate 30% level. The primary use of this submittal is for project team review, intra- and inter-disciplinary coordination, confirming the location of environmental boundaries, determining preliminary environmental impacts, evaluating scour repair features, providing information to utility providers for conflict review, and to communicate project assumptions and challenges.

This work will include the following:

- Project kickoff meeting – schedule and attend meeting with City staff to initiate design tasks
- Plans – plan sheets as assumed below
- Construction Cost Estimate

8.2 60% Design Documents
30% level documents will be updated to address comments from the City and will be developed to the 60% design level of completion, appropriate for Environmental Permitting. This work will include the following:

- 30% design review meeting with the City.
- Plans – plan sheets as assumed below
- Project Technical Special Provisions Outline. The outline will identify work and specification sections to be developed during 90% design.
- Construction Cost Estimate

8.3 90% Design Documents
60% level documents will be updated to address comments from the City, coordination with utilities, and permitting agencies; and will be developed to the 90% design level of completion, appropriate for establishing final decisions. This work will include the following:

- 60% design review meeting with the City
- Plans – plan sheets as assumed below
- Project Technical Special Provisions

- Construction Cost Estimate

8.4 Final Design Documents

90% level documents will be updated to address comments from the City and coordination with utilities and will be finalized. This work will include the following:

- 90% design review meeting with the City.
- Final Plans, stamped and signed by a professional engineer licensed in the State of Washington
- Final Project Technical Special Provisions
- Final Construction Cost Estimate

Assumptions:

- Meetings will be held remotely via MS Teams or similar remote meeting application
- The design will not change substantially after the completion of the 60% design
- The City will compile consultant provided special provisions into the final bid documents
- The following sheets are assumed at each design stage:

Sheet Name	30% Design	60% Design	90% and Final Design
Cover Sheet	1	1	1
General Notes, Index, and Legend	-	1	1
Roadway Typical Section	1	1	1
Guardrail and Striping Plan	1	1	1
Bridge No. 1413B			
Existing Conditions Plans	1	1	1
Erosion Control and Work Area Isolation Plans	-	1	1
Bridge Repair Layout	1	1	1
Bridge Repair Notes	-	1	1
Bridge Repair Details	-	1	2
Scour Repair Details	-	1	2
Restoration/Landscaping/Mitigation Plans	1	1	1
Bridge No. 1413C			
Existing Conditions Plans	1	1	1
Erosion Control and Work Area Isolation Plans	-	1	1
Bridge Repair Layout	1	1	1
Bridge Repair Notes	-	1	1
Bridge Repair Details	-	1	2
Scour Repair Details	-	1	2
Restoration/Landscaping/Mitigation Plans	1	1	1
Detour Plan	1	1	1
Total Sheets	**10**	**19**	**23**

Deliverables:

- 30% Plans (PDF)
- 30% Construction Cost Estimate (PDF)
- 60% Plans (PDF)

- 60% Construction Cost Estimate (PDF)
- 60% Special Provisions Outline (MS Word)
- 90% Plans (PDF)
- 90% Construction Cost Estimate (PDF)
- 90% Special Provisions (MS Word)
- Final Plans (PDF)
- Final Construction Cost Estimate (PDF)
- Final Special Provisions (MS Word)

Task 9 – Construction Phase Services
The City will lead the Construction Phase of the project. The Consultant will provide the following support services:

9.1 Bid Assistance
Consultant will provide responses to bidders' questions and assistance to the City, including:
- Assist City in responding to engineering questions from Bidders.
- Assist City preparing addenda.

9.2 Construction Support
- Review construction submittals:
  - Stream isolation plan
  - Excavation dewatering plan
  - Traffic control / detour plan
  - Bridge repair plan
- Respond to field questions and requests for information (RFIs). The number of RFIs may vary within the maximum level of effort assumed in the fee estimate.
- Attend on-site project meetings:
  - Pre-construction meeting
  - One (1) project meeting
- Site observations during critical times, including site observation report within five (5) working days of observation date:
  - Stream isolation (2)
  - Scour repair installation (2)
  - Bridge member repairs (2)
- Punchlist walkthrough prior to project completion, including list of items to be completed or corrected within five (5) working days of walkthrough date.

Assumptions:
- The City will take the lead in fielding and responding to Bidder inquiries during the bid period.
- Addenda will be compiled by the City and issued to the Bidders.
- Consultant will respond directly to the City, unless requested otherwise by the City.
- The City will prepare the preconstruction meeting agenda and notes.
- Consultant will be on site as select times only. The City will perform regular project inspections as needed.

Deliverables:
- Submittal responses
- RFI responses
- Site observation reports
- Punchlist walkthrough list

FEE ESTIMATE

The following summarizes the fee breakdown for this scope of work:

Task	Total
Task 1 – Project Management	$ 26,674
Task 2 – Utility Coordination	$ 4,084
Task 3 – Cultural and Historical Analysis (CRC)	$ 4,200
Task 4 – Environmental Documentation and Permitting	$ 51,212
Task 5 – Hydraulic Design	$ 45,408
Task 6 – Civil Design	$ 4,978
Task 7 – Structural Design	$ 22,302
Task 8 – Construction Documents	$ 36,422
Task 9 – Construction Phase Services	$ 10,094
Direct Expenses	$ 1,080
Total	**$ 206,454**

We estimate that we can complete the above scope of work on a time and materials basis for a budget not to exceed the total above. If unexpected situations arise for which additional work is required, Otak will notify the City immediately and discuss any impacts to the scope of work and budget.

SCHEDULE

Otak will commence work after receiving signed notice to proceed (NTP) on this scope of work. The following project timeline is assumed:

- NTP issued: September 7, 2022
- Design and permitting phase completion: September 29, 2023
- Bidding completion: March 1, 2024
- Construction completion: September 30, 2024
- Contract end date of October 31, 2024

Exhibit B

Kimball Creek Bridges Restoration Project

Fee Estimate
Otak, Inc.
Otak Project #20964
Date: 8/31/2022

		Structural		Civil		Hydraulics					Environmental / Permitting			Drafting	Admin.		
		PM / Lead Bridge Engr.	Bridge Engr.	Civil Lead/QC	Civil EIT	Hyd. QC	Hydrologist	Hyd. Lead	Hyd. Engr.	Civil EIT	Env. Lead	Env. Staff	L.A.	Drafter	Coordinator		
Task	***Description***	Civil Engineer X	Civil Engineer V	Civil Engineer X	Engineering Designer IV	Civil Engineer X	Scientist VI	Civil Engineer IX	Civil Engineer IV	Engineering Designer IV	Scientist V	Scientist II	Landscape Architect VI	Engineering Tech IV	Project Coordinator	***Total Hours***	***Total Budget by Task***
1	**Project Management**	**108**													**26**	**134**	**$26,674**
	General Project Management	82														82	$17,548
	Monthly Invoices and Progress Reports	26													26	52	$9,126
2	**Utility Coordination**	**12**						**6**			**2**					**20**	**$4,084**
2.1	Utility Coordination	12						6			2					20	$4,084
3	**Cultural and Historical Analysis**	**Subconsultant: Cultural Resources Consultants (CRC) - See Below**															
4	**Environmental Documentation and Permitting**	**2**	**8**								**136**	**248**	**8**			**402**	**$51,212**
4.1	Environmental Data Collection and Wetland/Habitat Delineation and Stream Characterization Report										36	96				132	$15,984
4.2	ESA Compliance Documentation										20	40				60	$7,480
4.3	Prepare 404/401, HPA, and Local Environmental Permit Applications		8								32	48	8			96	$12,728
4.4	Prepare Critical Areas Report and Buffer Mitigation Plan										24	40				64	$8,136
4.5	Agency Meetings, Permit, Facilitation, and City Coordination	2									12					14	$2,396
4.6	SEPA Compliance										12	24				36	$4,488
5	**Hydraulic Design**					**17**	**12**	**42**	**102**	**152**						**325**	**$45,408**
5.1	Data Collection							4	8	16						28	$3,696
5.2	Site Investigation and Channel Stability Assessment							8	10	12						30	$4,286
5.3	Hydrologic Analysis					1	12	2	8	8						31	$5,046
5.4	Hydraulic Analysis					6		8	16	24						54	$7,748
5.5	Scour Analysis					6		4	12	24						46	$6,432
5.6	Design of Scour Counterneasures					4		2	12	12						30	$4,216
5.7	Temporary Water Management							6	12	24						42	$5,544
5.8	Hydraulics Report							8	24	32						64	$8,440
6	**Civil Design**	**4**		**3**	**30**											**37**	**$4,978**
6.1	Site Investigation				6											6	$696
6.2	Guardrail Design			2	4											6	$892
6.3	Pavement Design			1	4											5	$678
6.4	Detour Design	4			16											20	$2,712
7	**Structural Design**	**12**	**138**													**150**	**$22,302**
7.1	Site Investigation	6	6													12	$2,142
7.2	Bridge Load Rating	4	72													76	$11,152
7.3	Bridge Repair Design	2	60													62	$9,008
8	**Construction Documents**	**24**	**100**	**4**	**25**			**14**	**10**	**8**	**8**	**5**	**12**	**38**	**3**	**251**	**$36,422**
8.1	30% Design Documents	6	34	1	10			2	2	2	2		6	12		77	$10,982
8.2	60% Design Documents	8	40	1	8			4	2	2	2	2	2	16	1	88	$12,555
8.3	90% Design Documents	8	20	1	4			6	4	2	2	2	2	8	1	60	$9,041
8.4	Final Design Documents	2	6	1	3			2	2	2	2	1	2	2	1	26	$3,844
9	**Construction Phase Services**	**10**	**26**	**2**	**2**			**8**	**6**	**2**	**2**	**2**	**1**			**61**	**$10,094**
9.1	Bid Assistance	4	4	1	1			1	1	1	1	1			1	16	$2,609
9.2	Construction Support	6	22	1	1			7	5	1	1	1	1		1	47	$7,485
	Total Hours	172	272	9	57	17	12	70	118	162	148	255	21	38	31	1382	
	Billing Rate	$214.00	$143.00	$214.00	$116.00	$214.00	$205.00	$198.00	$131.00	$116.00	$164.00	$105.00	$162.00	$106.00	$137.00		
	Total Labor Cost	$36,808	$38,896	$1,926	$6,612	$3,638	$2,460	$13,860	$15,458	$18,792	$24,272	$26,775	$3,402	$4,028	$4,247		$201,174
	Direct Expenses																$1,080
	Subconsultant Administration																
	Otak Total																**$202,254**

Subconsultants		Fee
	Cultural Resources Consultants (CRC)	**$ 4,200.00**
	Subconsultants Total	**$4,200**

	Total	**$206,454**

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-129
September 26, 2022
Committee Report

AGENDA BILL INFORMATION

TITLE:	AB22-129: Meadowbrook Bridge Load Rating Update	☐ Discussion Only ☒ Action Needed:
PROPOSED ACTION:	Approve Task Order No. 3 with Tetra Tech, Inc (Tetra Tech) to complete a Load Rating update for the Meadowbrook Bridge	☒ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	8/31/2022
	Finance	Drew Bouta	9/13/2022
	Legal	Anna Astrakhan	8/30/2022
	City Administrator	Mike Sauerwein	8/29/2022

DEPARTMENT:	Parks & Public Works	
STAFF:	Jeff Hamlin, PE – City Engineer	
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022
MEMBERS:	Ethan Benson Bryan Holloway Jo Johnson	
EXHIBITS:	• Task Order No. 3 – Tetra Tech – Meadowbrook Load Rating • Task Order No. 3 Meadowbrook Bridge Load Rating Scope • Task Order No. 3 Meadowbrook Bridge Load Rating Fee • Tetra Tech Prime Agreement • Tetra Tech Bridge Qualifications • Meadowbrook Bridge Inspection Report (2021)	

AMOUNT OF EXPENDITURE	$ 153,863
AMOUNT BUDGETED	$0 (2021-22 Biennium), $1,744,000 (2023-24 Biennium)
APPROPRIATION REQUESTED	$ 153,863

SUMMARY

INTRODUCTION

The 2021 bridge inspection report prepared by King County Bridge Department for the Meadowbrook Bridge (1726A) identifies deterioration of several elements of the bridge structure. A load rating update is required by WSDOT by the end of 2022 and is the first step to determine future maintenance needs for the long term care of the bridge structure.

LEGISLATIVE HISTORY

NA

BACKGROUND

The most recent load rating for Meadowbrook Bridge was performed in 2006 after a major rehabilitation of the bridge and assumed all the bridge superstructure elements were in new condition. The 2006 load rating did not load rate the gusset plates and connections because at that time gusset plates were not considered part of the load rating and connections were not rated unless there was evidence of deterioration.

ANALYSIS

The 2021 bridge inspection report for Meadowbrook Bridge (1726A) identifies deterioration at the lower chords and gusset plates that require reevaluation of the load rating to ensure the current condition of the bridge has sufficient structural load carrying capacity. Also, since the previous load rating, the FHWA has added requirements for load rating the gusset plates and additional load rating vehicles that include Specialized Hauling Vehicles (SHV) and Emergency Vehicles (EV) must be evaluated by December 31, 2022.

A new load rating analysis will be performed that considers the current condition of the bridge and includes the gusset plates and the FHWA and WSDOT loading requirements for the National Rating Load (NRL), Specialized Hauling Vehicles (SHV) and Emergency Vehicles (EV). The load rating will also include rating factors for the City of Seattle's under bridge inspection truck (UBIT) (used in the 2021 inspection) (for approximately 16 vehicle configurations in total.) The bridge load rating will use the Load and Resistance Factor Rating (LRFR) as allowed per WSDOT and FHWA for bridges that were designed prior to October 1, 2010. The load rating analysis will follow the guidance of the most current WSDOT Bridge Design Manual (BDM), AASHTO Manual for Bridge Evaluation (MBE) 3rd Edition (2018) and all interims up to 2022, and the AASHTO LRFD Bridge Design Specification 9th Edition.

BUDGET IMPACTS

The Administration recommends approving a contract with Tetra Tech in the amount of $153,863 to prepare the Meadowbrook Bridge load rating update. The amended CIP did not include the Meadowbrook Bridge Restoration Project and therefore the project was not included in the 2021-2022 Biennial Budget. However, the project was included within the recently adopted 2023-2028 CIP and the Administration proposes incorporating the project into the 2023-2024 Biennial Budget for $1,744,000. The load rating update will likely be used to identify the capital maintenance required to restore the Meadowbrook Bridge and elongate its useful life. To meet the accelerated timeline of this project, the Administration recommends increasing the appropriation available in the current 2021-2022 Biennial Budget (Transportation Capital Fund #310) through a budget amendment equal to the cost of the contract. To offset this increase, the Administration also recommends reducing the appropriation proposed in the 2023-2024 Biennial Budget by an equal amount. A budget amendment will be forthcoming before the end of the year.

NEXT STEPS

Proceed with the Load Rating update for the Meadowbrook Bridge

PROPOSED ACTION

Move to Approve Task Order 3 with Tetra Tech to complete a Load Rating update for the Meadowbrook Bridge

TASK ORDER NO. 3

Agreement for Professional Services

Meadowbrook Bridge Load Rating Update

This Agreement is made this ___ day of _____, by and between TetraTech, Inc. ("TetraTech") and the City of Snoqualmie ("City").

TetraTech has an Agreement dated February 14, 2020 with the City, which is herein referred to as the Prime Agreement, and which provides for TetraTech to perform unspecified professional engineering services on an on-call basis, with specific work items to be identified in subsequent Task Orders.

The professional services which the City has employed TetraTech to perform under this Agreement constitute Task Order No. 2 under the provisions of the Prime Agreement and are generally described as follows:

1. **Scope of Work.** TetraTech shall perform services as directed by the City Director of Public Works, to assist the City of Snoqualmie with performing a load rating analysis for the Meadowbrook Bridge. The scope of work to be completed is attached as Exhibit A.

2. **Period of Service.** The period of services provided under this Task Order shall begin upon the City issuing a notice to proceed, and expire on June 31, 2023.

3. **Compensation.** The City shall pay TetraTech on a time and materials basis as agreed to in the Prime Agreement, provided the total compensation payable under this Task Order shall not exceed $153,863 without the authorization of the City. The spreadsheet attached as Exhibit B shows a budget for the tasks described above.

4. **Additional Contract Requirements**. All other contract requirements are as specified in the Prime Agreement.

In Witness Whereof, the parties hereto have executed this Agreement effective as of the day and year first above written.

City of Snoqualmie		**TetraTech, Inc.**	
Signature:	_____	Signature:	_____
Name:	_____	Name:	_____
Title:	_____	Title:	_____
Date:	_____	Date:	_____

Attested: _____

by City Clerk Deborah A. Estrada

City of Snoqualmie Parks and Public Works
On-Call Professional Services
Task Order 3
Meadowbrook Bridge (1726A) Load Rating

SCOPE OF WORK

Project Objective and Goals

Tetra Tech (CONSULTANT) will perform a load rating the for the Meadowbrook Bridge (1726A) and its approach structures for the City of Snoqualmie Parks and Public Works (CITY). The most recent load rating for Meadowbrook Bridge was performed in 2006 after a major rehabilitation of the bridge and assumed all the bridge superstructure elements were in new condition. The 2006 load rating did not load rate the gusset plates and connections because at that time gusset plates were not considered part of the load rating and connections were not rated unless there was evidence of deterioration. The 2021 bridge inspection report for Meadowbrook Bridge (1726A) identifies deterioration at the lower chords and gusset plates that require reevaluation of the load rating to ensure the current condition of the bridge has sufficient structural load carrying capacity. Also, since the previous load rating, the FHWA has added requirements for load rating the gusset plates and additional load rating vehicles that include Specialized Hauling Vehicles (SHV) and Emergency Vehicles (EV) must be evaluated by December 31, 2022.

A new load rating analysis will be performed that considers the current condition of the bridge and includes the gusset plates and the FHWA and WSDOT loading requirements for the Notional Rating Load (NRL), Specialized Hauling Vehicles (SHV) and Emergency Vehicles (EV). The load rating will also include rating factors for the City of Seattle's under bridge inspection truck (UBIT) (used in the 2021 inspection) (for approximately 16 vehicle configurations in total.) The bridge load rating will use the Load and Resistance Factor Rating (LRFR) as allowed per WSDOT and FHWA for bridges that were designed prior to October 1, 2010. The load rating analysis will follow the guidance of the most current WSDOT Bridge Design Manual (BDM), AASHTO Manual for Bridge Evaluation (MBE) 3nd Edition (2018) and all interims up to 2022, and the AASHTO LRFD Bridge Design Specification 9th Edition.

The key elements for this project are anticipated to be:

- **Bridge Data Collection & Site Visit**
- **Draft Load Rating Results Report**
- **Final Load Rating Results Report**

The scope of services will be divided into the following work elements.

1.0 Project Management
2.0 Bridge Data Collection
3.0 Draft Load Rating Results Report
4.0 Final Load Rating Results Report

Task Order Assumptions:

Load ratings will be provided for the main span steel truss and the cast-in-place concrete approach structures. The work performed will be based on the following assumptions.

Main Span: Steel Riveted Pratt Through Truss (220 foot Span.)

- Per the BDM, steel trusses shall be rated on a per truss basis assuming all truss members have pinned connections. Rating factors will be provided for the chords, diagonals, verticals, gusset plates, stringers and floor beams. The steel truss will be modeled as a 2D truss with pinned connections using SAP2000 V23.
- Per the BDM, gusset plates of non-state bridges shall be evaluated per the latest version of the Manual for Bridge Evaluation. Assume gusset plate connections are symmetric about midspan therefor there are 11 gusset plate configurations.
- Per the BDM, structural pins (isolation bearings) shall be rated for shear and their side plates for bearing.
- Per the BDM, for members that show deterioration, the resistance factors will be reduced based on the BMS condition factors provided in the inspection report or the structural cross section will be reduced based on the deterioration documented in the inspection report.
- The 2021 Inspection Report and Fracture Critical documents 32 gusset plates, 22 lower cord members, 9 diagonals, 4 verticals that show signs of deterioration. The load carrying capacity of each of these members will be evaluated as part of the load rating.
- Geometry will be based on the 1921 bridge plans and the 2006 rehabilitation plans.
- The live load will be distributed to each truss and other members per the live load distribution factors in the AASHTO LRFD Bridge Design Specification 9th Edition.
- The steel truss will be rated for one lane.
- Per the BDM, the bridge deck will not be rated since the NBI condition is greater than 4.
- Per the BDM, fatigue is not part of the rating evaluation.
- Load rating the bridge substructure elements is not included in the scope of work but can be added if requested by the CITY. Current WSDOT guidance is to load rate only the superstructure elements which are all elements above the columns.
- All structural analysis will be performed using SAP2000 V23 and Excel spreadsheets will be used to determine the load rating factors.
- CITY to confirm existing and proposed utilities on bridge within 10 days of NTP for work order. Current understand is that there is no water or sewer attached to the bridge and no plans for such.

Approach Structures: Continuous cast-in-place (CIP) concrete flat slab with cap beams supported on piles and simple transition span at the truss. There are four approach structures: a 2-span South Approach Structure, a 4-span North Approach Structure, and one simple span transition span at each side of truss span.

- Load ratings for the simple span transition span, continuous concrete deck slab and cap beams will be performed using BRIDG software for load rating concrete structures.
- Load rating the bridge substructure elements is not included in the scope of work but can be added if requested by the CITY.
- The approach structure geometry will be based on the 2006 rehabilitation plans which constructed new approach structures including new piles. The 2021 inspection report shows that the approach structures are in good condition (Condition State 1).

General Assumptions:

- The load rating is dependent on the geometry shown on the existing bridge plans, provided by King County, and the most current Bridge Inspection Report, provided by the CITY. CONSULTANT shall reasonably rely on and shall not be responsible for the accuracy and completeness of the information furnished by the CITY and King County. The CONSULTANT shall provide prompt written notice to the CITY if the CONSULTANT becomes aware of any error, omission, or inconsistency in the furnished information.
- CITY will review CONSULTANT's draft report, and render, in writing, comments required in timely manner.
- Document review and resolution of conflicting comments from CITY staff or stakeholders will be managed by CITY
- Coordination of agency reviews will be handled by the CITY
- Document review and resolution of conflicting comments from CITY staff or stakeholders will be managed by CITY.
- Based on preliminary review of available information during scoping, no addition bridge inspection/survey is anticipated. If determined that additional bridge inspection is required then the CONSULTANT shall notify the CITY.

The CONSULTANT will retrieve from the King County and CITY records the following information, as available:

- Bridge as-built drawings
- Latest Bridge Inspection Report
- Past Bridge Load Rating Result Report(s)
- Under Bridge Inspection Truck (UBIT) axle load and spacing.

TASK 1.0 PROJECT MANAGEMENT

The CONSULTANT shall provide overall project management, administration and coordination of activities necessary for completion of the work

1.1 Schedule

The CONSULTANT will prepare and submit a baseline project schedule to the CITY that details activities and clearly defines the critical path work elements. The schedule shall be updated as needed by the CONSULTANT if agreed by the CITY.

1.2 Project Meetings

The CONSULTANT shall prepare for and lead project meetings, including preparation of an agenda and the meeting minutes. Four (4) two (2) hour virtual meetings are assumed.

1.3 Invoicing and Progress Reporting

The CONSULTANT shall prepare monthly invoices updates and progress reports for the duration of the project in accordance with the terms of the contract.

1.4 Project Coordination

The CONSULTANT will coordinate with the CITY and project team members to conduct necessary work and maintain project schedule. Budget for this task assumes a three (3) month project duration and approximately four (4) coordination hours a month.

Task 1.0 Deliverables:

- Schedule/ Schedule updates
- Meeting Agendas
- Meeting Minutes and Correspondence
- Invoices and Progress Reports (Monthly)
- QA/QC Documentation

TASK 2.0 BRIDGE DATA COLLECTION

2.1 Collection and Review of CITY and County Documents

The CONSULTANT will collect the as-built drawings, and past load rating reports from the King County and CITY files.

2.2 Site Visit

After review and familiarization of the available bridge information, the CONSULTANT will visit the bridge site to become familiar with the major bridge elements and deficiencies noted on the inspection report. This will not be a full periodic inspection and will only include items that can be observed by foot from the bridge deck and ground surface. The purpose of the site visit is to become familiar with the bridge site and its overall condition. A brief site visit report memo will be provided which confirms or suggests revised condition ratings for the accessible deficiencies noted in the inspection report.

Task 2.0 Deliverables:

- List of documents/information recovered from the King County files for the bridge
- Electronic copy of files retrieved from King County for the CITY Records
- Site Visit Report Memo

TASK 3.0 DRAFT LOAD RATING RESULTS REPORT

3.1 Draft Load Rating Results Report

The CONSULTANT will perform the load rating analyses and prepare a results report. The load rating results report will include a Load Rating Data and Assumption Memo that summarizes the key information required to perform the load rating (i.e. load rated members, structural condition codes, average daily traffic and condition and resistant factors), all data collected and used to perform the load rating (as-builts, inspection reports, photographs, etc.), structural analysis models input and output, sketches, spreadsheets, hand calculations, QC documentation and the WSDOT BDM LRFR Bridge Rating Summary form. If required, recommendations for load posting will also be provided. The Draft Load Rating Results Report shall be essentially complete and reviewed (QA/QC'ed) by a licensed Structural Engineer prior to submitting to the CITY for review and comment.

Task 3.0 Deliverables:

- Draft Load Rating Results Report (Electronic)

TASK 4.0 FINAL LOAD RATING RESULTS REPORT

4.1 Final Load Rating Results Report

The CONSULTANT will review and address comments from the CITY on the Draft Load Rating Results Report. After all comments are addressed a Final Load Rating Results Report will be submitted to the CITY. The Final Load Rating Results Report will include comment responses to the CITY comments and will be stamped and signed by a licensed Structural Engineer prior to submitting to the CITY.

Task 4.0 Deliverables:

- Final Load Rating Results Report with electronic input/output (SAP2000 files, Excel files, BRIDG files and any other software files used for the load rating) and the LRFR Bridge Rating Summary form. The report and analysis files will be provided to the CITY electronically.
- Responses to Draft Load Rating Result Report Review Comments

Price Proposal

Meadowbrook Bridge Load Rating

Load Rating for Steel Truss Bridge

Submitted to: City of Snoqualmie (Attn: Steve Clarke)

Contract Type: T&M

Labor Plan

7 Resource

Price Summary / Totals

Task Pricing Totals	153,863
Specify Add'l Fees on Setup	0
Technology Use Fee	
Total Price	**153,863**

Pricing by Resource

Project Phases / Tasks	Schedule From	Schedule Thru	Schedule Months	Work Days Off	Work Days	Total Labor Hrs	David Scott (David Scott)	Greg Katzenburger (Greg Katzenburger)	Daniel Stuard (Daniel Stuard)	Cheng Yang (Cheng Yang)	Kody Sanders (Kody Sanders)	Rob Kramer (Rob Kramer)	Tara Silverbatt (Tara Silverbatt)	Unit Rate Qty's: Items >	Fleet Vehicles	Labor Rate Esc.	Labor	Subs	Travel	Mat'ls & Equip	ODCs	Task Pricing Totals
Bill Rate >							228.97	291.33	172.93	227.86	108.50	123.40	137.49									
Proj Area >																						
Unit Rate >															$0.71							
Unit >															mile							
Charged to >															M&E							
Quantities >						950	26	20	131	255	214	272	32		200	0.00%	153,721	-	-	142	-	153,863
Task 1 - Project Management						**80**	**26**	**-**	**24**	**8**	**-**	**-**	**22**		**-**		**14,951**	**-**	**-**	**-**	**-**	**14,951**
Schedule						12	2		4				6				1,975					1,975
Project Meetings						20	4		8	8							4,122					4,122
Project Coordination, communications, status reports (3 months)						48	20		12				16				8,854					8,854
Task 2 Bridge Data Collection						**113**	**-**	**-**	**13**	**26**	**32**	**42**	**-**		**200**		**16,827**	**-**	**-**	**142**	**-**	**16,969**
Review Bridge Data (Steel Truss & Approach Structures)						94			12	18	32	32					13,597					13,597
Site Visit						12				6		6			200		2,108			142		2,250
Site Visit Report Memo						7			1	2		4					1,122					1,122
Task 3 - Load Rating Results Report (DRAFT)						**695**	**-**	**20**	**82**	**205**	**166**	**214**	**8**		**-**		**112,237**	**-**	**-**	**-**	**-**	**112,237**
Steel Riveted Pratt Through Truss (220 foot Span)						**390**	**-**	**-**	**48**	**144**	**-**	**198**	**-**		**-**		**65,546**	**-**	**-**	**-**	**-**	**65,546**
Load Rating Data Assumptions Memo						8			2	2		4					1,295					1,295
Member Properties 22 members and geometry						24				8		16					3,797					3,797
Determine Bridge Dead Loads (Deck, railings, etc.)						24				8		16					3,797					3,797
Assemble 2-D SAP 2000 Structural Analysis Model and Vehicle loads						32				12		20					5,202					5,202
Assemble Loading Results for members						32				8		24					4,784					4,784
Capacities for 22 Member Configurations / Check Deficiencies						36				12		24					5,696					5,696
Check 92 total Members / 35 with Deficiencies						24				8		16					3,797					3,797
Capacities for 11 Gusset Plate Configurations / Check Deficiencies						72			12	48		12					14,493					14,493
Check 44 Total Gusset Plates / 32 with Deficiencies						36			12	12		12					6,290					6,290
Capacities for structural pins (isolations bearings)						22			8	2		12					3,320					3,320
Rating Factor Summary Sheets						22			2	8		12					3,650					3,650
Check Calcs & Model						58			12	16		30					9,423					9,423
Truss Floor Beam and Stringer						**105**	**-**	**-**	**8**	**31**	**66**	**-**	**-**		**-**		**15,608**	**-**	**-**	**-**	**-**	**15,608**
Assume no need to rate slab						-																-
Assume no need to rate beam and stringer connections						-																-
AssembleSAP 2000 Structural Analysis Model and Vehicle loads						32				12	20						4,904					4,904
Assemble Loading Results for members						16				4	12						2,213					2,213
Capacities for Floor Beam and Stringer						16				4	12						2,213					2,213
Perform Load Rating						9				3	6						1,335					1,335
Rating Factor Summary Sheets						4					4						434					434
Check Calcs & Model						28			8	8	12						4,508					4,508
CIP Concrete Approach Structures						**102**	**-**	**-**	**20**	**14**	**68**	**-**	**-**		**-**		**14,027**	**-**	**-**	**-**	**-**	**14,027**
Load Rating Data Assumptions Memo						8			2	2	4						1,236					1,236
Member Properties / Reinforcement (4 Bridges)						4					4						434					434
Determine Dead Loads (Deck, railings, etc.)						4					4						434					434
Assemble (2) Continuous Bridge Models (BRIDG)						24			4		20						2,862					2,862
Assemble (2) Simple Span Bridge Models (BRIDG)						12			2		10						1,431					1,431
Assemble Cross Beam Model (BRIDG)						12			2		10						1,431					1,431
Rating Factor Summary Sheets						10			2		8						1,214					1,214
Check Calcs & Models						28			8	12	8						4,986					4,986
Posting Based on Governing Load Rating						**98**	**-**	**20**	**6**	**16**	**32**	**16**	**8**		**-**		**17,056**	**-**	**-**	**-**	**-**	**17,056**
Posting Based on Governing Load Rating						26			2	8	16						3,905					3,905
Senior Review and Assemble & Submit DRAFT Report (Electronic)						72		20	4	8	16	16	8				13,152					13,152
Task 4 - Load Rating Results Report						**62**	**-**	**-**	**12**	**16**	**16**	**16**	**2**		**-**		**9,706**	**-**	**-**	**-**	**-**	**9,706**
Respond to City DRAFT Report Comments						8			4	4							1,603					1,603
Address City DRAFT Report Comments / Update Calculations & Report						28			4	8	8	8					4,370					4,370
Senior Review, Stamp, and Submit FINAL Report (Electronic)						26			4	4	8	8	2				3,733					3,733
Totals						**950**	**26**	**20**	**131**	**255**	**214**	**272**	**32**	Quantities >	**200**	**0.00%**	**153,721**	**-**	**-**	**142**	**-**	**153,863**

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES
Contract Title: On-Call Professional Services
Contract #: _____

THIS AGREEMENT made and entered into by and between the CITY OF SNOQUALMIE, a Washington municipal corporation (the "City"), and TETRA TECH, INC., a Delaware corporation ("Consultant") is dated this _____ day of _____, 2019.

Consultant Business:	Tetra Tech, Inc.
Consultant Address:	1420 Fifth Avenue, Suite 600 Seattle, WA 98101-2375
Consultant Phone:	206-883-9300
Consultant Fax:	
Contact Name:	Neil Thibert, P.E., P.Eng., PMP
Contact e-mail:	neil.thibert@tetratech.com

Federal Employee ID No.: 95-4148514

Authorized City Representative for this contract: _____

WHEREAS, the City desires to have On-Call Engineering Services; and

WHEREAS, public convenience and necessity require the City to obtain the services of a consultant with expertise in Professional Engineering; and

WHEREAS, the City finds that Consultant is qualified to perform and is experienced in performing the required services; and

WHEREAS, the City desires to engage the Consultant to provide Professional Engineering services on an as-needed basis;

NOW, THEREFORE, the parties herein do mutually agree as follows:

1. Employment of Consultant.

A. The City retains the Consultant to provide engineering services as described in individual Task Orders that shall be issued for each engagement or Project. Any inconsistency between this Agreement and the Work Order shall be resolved in favor of this Agreement. The Consultant shall perform the Work according to the terms and conditions of this Agreement.

B. The City may revise the Work and the compensation only by a written Change Order signed by the authorized City representative that shall become a part of this Agreement.

C. Work shall commence when the City issues a notice to proceed.

2. Compensation.

A. Task Orders issued under this Agreement shall state the compensation (the Fee) to be paid to Consultant by City for the services.

B. Consultant shall be reimbursed for Eligible Expenses actually incurred. "Eligible Expenses" means those types and amounts of expenses that the City approves for reimbursement, in writing and in advance of Consultant's expenditure. If travel and/or overnight lodging is authorized, Consultant shall lodge within such reasonable distance of the City's corporate limits and at such accommodation as approved by the City.

3. Request for Payment.

A. Not more than once every thirty days the Consultant shall file its request for payment, accompanied by evidence satisfactory to the City justifying the request for payment, including a report of Work accomplished and tasks completed, and an itemization of Eligible Expenses with copies of receipts and invoices.

B. All requests for payment should be sent to

City of Snoqualmie
Attn: Jeff Hamlin, Project Engineer
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

4. Work Product.

A. The Consultant shall submit all reports and other documents specified in Exhibit A according to the schedule established in Exhibit A. If, after review by the City, the information is found to be unacceptable, Consultant, at its expense, shall expeditiously correct such unacceptable work. If Consultant fails to correct unacceptable work, the City may withhold from any payment due an amount that the City reasonably believes will equal the cost of correcting the work.

B. All reports, drawings, plans, specifications, and intangible property created in furtherance of the Work, and any intellectual property in such documents, are property of the City and may be used by the City for any purpose; provided that re-use without Consultant's permission shall be at the City's sole risk.

5. Termination of Contract.

A. City may terminate this Agreement by sending a written notice of termination to Consultant ("Notice") that specifies a termination date ("Termination Date") at least fourteen (14) days after the date of the Notice; provided, however, that in the event of a material breach of this Agreement, termination may be effective immediately or upon such date as determined by the City in its sole discretion. For purposes of this Agreement, "material breach" is defined as misfeasance, malfeasance, or violation of any criminal law, ordinance, or regulation. Upon receipt of the Notice, the Consultant shall acknowledge receipt to the City in writing and immediately commence to end the Work in a reasonable and orderly manner. Unless terminated

for Consultant's material breach, the Consultant shall be paid or reimbursed for all hours worked and Eligible Expenses incurred up to the Termination date, less all payments previously made; provided that work performed after date of the Notice is reasonably necessary to terminate the Work in an orderly manner. The Notice may be sent by any method reasonably believed to provide Consultant actual notice in a timely manner

6. Assignment of Contract – Subcontractors.

A. Consultant shall not assign this contract or sub-contract or assign any of the Work without the prior written consent of the City.

7. Indemnification.

A. To the extent provided by law and irrespective of any insurance required of the Consultant, the Consultant shall defend and indemnify the City from any and all Claims related to or arising out of Consultant's negligent acts, errors, or omissions; provided, however, the requirements of this paragraph shall not apply to that portion of such Claim that reflects the percentage of negligence of the City compared to the total negligence of all persons, firms, or corporations that resulted in the Claim.

B. Consultant agrees that the provisions of this paragraph 7 apply to any claim of injury or damage to the persons or property of consultant's employees. As to such claims and with respect to the City only, consultant waives any right of immunity, which it may have under industrial insurance (Title 51 RCW and any amendment thereof or substitution therefore). THIS WAIVER IS SPECIFICALLY NEGOTIATED BY THE PARTIES AND IS SOLELY FOR THE BENEFIT OF THE CITY AND CONSULTANT.

C. As used in this paragraph: (1) "City" includes the City's officers, employees, agents, and representatives; (2) "Consultant" includes employees, agents, representatives, and sub-consultants; and (3) "Claims" include, but are not limited to, any and all losses, claims, causes of action, demands, expenses, attorney's fees and litigation expenses, suits, judgments, or damage arising from injury to persons or property.

D. Consultant shall ensure that each sub-consultant shall agree to defend and indemnify the City to the extent and on the same terms and conditions as the Consultant pursuant to this paragraph.

8. Insurance.

A. Consultant shall comply with the following conditions and procure and keep in force at all times during the term of this Agreement, at Consultant's expense, the following policies of insurance with companies authorized to do business in the State of Washington. The Consultant's insurance shall be rated by A. M. Best Company at least "A" or better with a numerical rating of no less than seven (7) and otherwise acceptable to the City.

i. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance with limits not less than $1,000,000 per occurrence and no less than $2,000,000 in the annual aggregate. If the City authorizes sublet work, the Consultant shall require each sub-consultant to provide Workers' Compensation Insurance for its employees, unless the Consultant covers such employees.

ii. Commercial General Liability Insurance on an occurrence basis in an amount not less than $1,000,000 per occurrence and at least $2,000,000 in the annual aggregate, including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.

iii. Business Automobile Liability Insurance in an amount not less than $1,000,000 per occurrence and not less than $2,000,000 in the annual aggregate, extending to any automobile used by Consultant in the course of the Work. A statement by Consultant and approved by the City Administrator, certifying that no vehicle will be used in accomplishing this Agreement, may be substituted for this insurance requirement.

iv. Professional Errors and Omissions Insurance in an amount not less than $1,000,000 per occurrence and $2,000,000 in the annual aggregate. Coverage may be written on a claims made basis; provided that the retroactive date on the policy or any renewal policy shall be the effective date of this Agreement or prior, and that the extended reporting or discovery period shall not be less than thirty-six (36) months following expiration of the policy. The City may waive the requirement for Professional Errors and Omissions Insurance whenever the Work does not warrant such coverage or the coverage is not available.

v. Each policy shall contain a provision that the policy shall not be canceled or materially changed without 30 days prior written notice to the City.

Upon written request by the City, the insurer will furnish, before or during performance of any Work, a copy of any policy cited above, certified to be a true and complete copy of the original.

B. Before the Consultant performs any Work, Consultant shall provide the City with a Certificates of Insurance acceptable to the City Attorney evidencing the above-required insurance and naming the City of Snoqualmie, its officers, employees, and agents as Additional Insured on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on behalf of such Additional Insured. Receipt by the City of any certificate showing less coverage than required is not a waiver of the Consultant's obligations to fulfill the requirements.

C. In case of the breach of any provision of this section, the City may provide and maintain at the expense of Consultant insurance in the name of the Consultant and deduct the cost of providing and maintaining such insurance from any sums due to Consultant under this Agreement, or the City may demand Consultant to promptly reimburse the City for such cost.

9. Independent Contractor.

A. The Consultant is an independent Contractor responsible for complying with all obligations of an employer imposed under federal or state law. Personnel employed by Consultant shall not acquire any rights or status regarding the City.

10. Employment.

A. The Consultant warrants that it did not employ or retain any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement or pay or agree to pay any such company or person any consideration, contingent upon or resulting

from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right either to terminate this Agreement without liability or to deduct from the Agreement price or consideration or to otherwise recover, the full amount of such consideration.

11. Audits and Inspections.

A. The Consultant shall make available to the City during normal business hours and as the City deems necessary for audit and copying all of the Consultant's records and documents with respect to all matters covered by this Agreement.

12. City of Snoqualmie Business License.

A. Consultant shall obtain a City of Snoqualmie business license before performing any Work.

13. Compliance with Federal, State and Local Laws.

A. Consultant shall comply with and obey all federal, state and local laws, regulations, and ordinances applicable to the operation of its business and to its performance of the Work.

14. Waiver.

A. Any waiver by the Consultant or the City of the breach of any provision of this Agreement by the other party will not operate, or be construed, as a waiver of any subsequent breach by either party or prevent either party from thereafter enforcing any such provisions.

15. Complete Agreement.

A. This Agreement contains the complete and integrated understanding and agreement between the parties and supersedes any understanding, agreement, or negotiation whether oral or written not set forth herein.

16. Modification of Agreement.

A. This Agreement may be modified by a Change Order as provided in Paragraph 1, or by a writing that is signed by authorized representatives of the City and the Consultant.

17. Severability.

A. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void, insofar as it is in conflict with said laws, the remainder of the Agreement shall remain in full force and effect.

18. Notices.

A. Notices to the City of Snoqualmie shall be sent to the following address:
City of Snoqualmie
Attn: Jeff Hamlin, PE
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

B. Notices to the Consultant shall be sent to the following address:

Tetra Tech, Inc.
Attn: Neil Thibert
1420 Fifth Avenue, Suite 600
Seattle, WA 98101

19. Venue.

A. This Agreement shall be governed by the law of the State of Washington and venue for any lawsuit arising out of this Agreement shall be in King County.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date first above written.

CITY OF SNOQUALMIE, WASHINGTON By: _____ Its: Mayor Date: 2/14/2020	TETRA TECH, INC. By: _____ Kevin Dour, P.E., P.Eng., PMP Its: Vice President Date: FEB. 3, 2020
ATTEST: Jodi Warren, City Clerk Date: 2/14/2020	
APPROVED AS TO FORM: Bob C. Sterbank, City Attorney Date: 2/14/2020	

TETRA TECH

Daniel Stuard, PE

Structural Design Engineer

Mr. Stuard is a structural design engineer with experience designing steel and concrete structures for bridges, flood walls, retaining walls, navigation locks, fish passage facilities and dams. He has experience with IBC, ASCE 7, ACI 318, AISC 360, AWWA D103, AASHTO, WSDOT Bridge Design Manual, the USACE Manuals (including the Hurricane and Storm Damage Risk Reduction System Guidelines), guidelines from the Department of the Interior and Bureau of Reclamations, and The Engineering Guidelines for the Evaluation of Hydropower Projects (FERC). His expertise includes SAP 2000, Ansys, BridgeLink, PGSuper, XBRate, GTStrudl, LPILE, GROUP, spColumn, CWALSHT, Solid Works, AutoCAD, and MathCAD.

EDUCATION

MS Civil Engineering (Structural Engineering), University of Washington (2010)

BS Civil Engineering, University of Washington (2009)

REGISTRATION/CERTIFICATION

Professional Engineer, Civil: WA License No. 51620 (2014)

Professional Engineer, Civil: CA License No. C89213 (2015)

YEARS OF EXPERIENCE

11 years

YEARS WITH TETRA TECH

9 years

OFFICE LOCATION

Bellevue, WA

AREAS OF EXPERTISE

Bridge Design

Bridge Load Rating

Hydropower Plant Design

Structural Design and Analysis

Stability Analysis

Steel Design

Reinforced Concrete Design

Foundation Design

Retaining Wall Design

TETRA TECH PROJECT EXPERIENCE

Patton Bridge Load Rating, King County, Auburn, WA (2018)
Structural Engineer. The three-span bridge is 252 feet long. Spans one and three consists of two cell concrete reinforced box girders. Performed a load rating for Patton Bridge, evaluating both the steel and concrete members, using the WSDOT BDM, AASHTO LRFD Bridge Design Specification, the AASHTO Manual for Bridge Evaluation and the program SAP2000 for his analysis. Daniel also rated the repair that help support the steel box girders. Utilized the Hili PROFIS program, and ACI 318-14 to rate the post epoxy anchors of the steel brackets.

North Fork Load Rating, King County, North Bend, WA (2018)
Structural Engineer. The three-span bridge is 252 feet long. Spans one and three consists of two cell concrete reinforced box girders. The concrete box girder's geometry and reinforcement vary along the length of the bridge. Performed a load rating for North Fork Bridge, evaluating both the steel and concrete members, using the WSDOT BDM, AASHTO LRFD Bridge Design Specification, the AASHTO Manual for Bridge Evaluation and the program SAP2000 for his analysis.

Lower Coal Creek Flood Hazard Reduction Project, City of Bellevue, King County, WA (2016-2020)
Structural Engineer. Performed the seismic analysis, lateral spreading pushover analysis, design and detailing of the bridge superstructure, abutments, and shafts. Designed the bridge according to the WSDOT Bridge Design Manual and the AASHTO LRFD Bridge Design Specifications. Analyzed the bridge using BridgeLink, LPILE, and SAP2000. Also load rated the bridges according to the WSDOT Bridge Design Manual and the AASHTO Manual for Bridge Evaluation. The Lower Coal Creek Flood Hazard Reduction Project included replacing five existing culverts with bridges that meet current traffic and fish passage guidelines.

Bridge Load Rating Calculations, Port of Seattle, Seattle, WA (2015-2016)
Structural Engineer. The Port of Seattle requested load ratings to be performed on four their structures. Performed the load ratings for all the structures following the WSDOT BDM, AASHTO LRFD Bridge Design Specification and the AASHTO

2013 Interim Revisions to the Manual for Bridge Evaluation 2010. Utilized CONBOX results as well as the programs GTStrudl and PGSuper for his analysis.

Seabeck Creek Restoration Design, Kitsap County, WA (2019-2021)
Structural Engineer. Performed the seismic analysis, design, and detailing of the bridge superstructure, abutments, wing walls, and piles. Designed the bridge according to the WSDOT Bridge Design Manual and the AASHTO LRFD Bridge Design Specifications. Analyzed the bridge using BridgeLink, LPILE, GROUP, and SAP2000. Also load rated the bridge according to the WSDOT Bridge Design Manual and the AASHTO Manual for Bridge Evaluation. The Seabeck Creek Restoration Design Project included replacing an existing culvert with bridges that meet current traffic and fish passage guidelines.

Carpenter Creek Bridge on West Kingston Road, Kitsap County, Kingston, WA (2018)
Structural Engineer. This project replaced an existing 5-foot-diameter culvert conveying Carpenter Creek under West Kingston Road with a 150-foot two span bridge to provide salmon smolt access to the Carpenter Creek Estuary. Designed, detailed, and produced drawings for the precast concrete girders, bridge deck, intermediate pier and abutments following the WSDOT Bridge Design Manual, AASHTO Design Specifications, and AASHTO LRFD Seismic Bride Design Guide Specifications. Analyzed the bridge using PGSuper and SAP2000.

SE 272nd Street (SR 516) between Jenkins Creek and 185th Place SE, City of Covington, King County, WA (2012-2020)
Structural Engineer. This project widened SE 272nd Street (SR 516) from a two lane to a five lane roadway in the area of Jenkins Creek. Improvements included a new bridge at the crossing of Jenkins Creek SE, in Covington, Washington. The single span bridge is 88 feet wide by 64.5 feet long. Designed the drilled shafts, abutment bents, wing walls, and the precast prestressed superstructure. Designed the bridge according to the WSDOT Bridge Design Manual and the AASHTO LRFD Bridge Design Specifications. Analyzed the bridge using BridgeLink, LPILE, GROUP and SAP2000. Also created the bridge design drawings and performed reinforcing quantity takeoffs.

Lower Massey Creek Floodwall and Creek Enhancement, City of Des Moines, King County, WA (2013-2016)
Structural Engineer. The Lower Massey Creek project designed a new flood wall. Reviewed geotechnical information and assumptions in the design of the floodwall to minimize the sheet pile wall embedment using WSDOT Design Manuals and AASHTO LRFD Bridge Design Specifications.

DDR for Inner Harbor Navigation Canal Lake Borgne Surge Barrier Project, USACE New Orleans District, New Orleans, LA (2015-2018)
Structural Engineer. Responsible for retrieving and filtering all applicable final design submittals from the project document repository and providing the necessary documentation to subcontractors for the purpose of producing a Design Documentation Report (DDR). Additionally, responsible for writing the structural sections of the DDR for the Bayou Bienvenue vertical lift gate. These sections included the pile foundation, gate monoliths, lift gate towers, vehicular bridge, and control building sections.

Shiroro Hydroelectric Power Station Design Services for Phase 2, North South Power Company Limited, Kaduna River, Nigeria (2015-2018)
Structural Engineer. Performed a load rating analysis of the 62-foot, three-span bridge which consists of steel wide flange girders concrete deck using the AASHTO LRFD Bridge Design Specifications, 2012. Proposed to move heavy equipment across the intake access foot bridge as part of this project.

TETRA TECH

Cheng Yang, PhD, PE, SE
Senior Structural Engineer

Cheng has experience on a wide range of bridge engineering projects involving review, analysis, design, load rating and retrofit of reinforced concrete and steel bridge structures. He is knowledgable with all aspects of bridge design, including the design of both superstructure and substructure for steel tub girder, concrete box girder, and conventional beam bridges with shallow and deep foundations. He is experienced with three-dimensional computer modeling of complex bridges, including steel truss, precast segmental and cable-stay bridges, as well as rail/structure interaction for CWR He has Seismic design experience includes both LRFD displacement design guide and AASHTO force based specification.

PREVIOUS PROJECT EXPERIENCE

Burnside Street/Willamette River Bridge Rehabilitation Feasibility Study, Oregon Department of Transportation, Multnomah County, OR (2015-2016)
Structural Engineer. Load Rating for the bridge including stringer, girder, floor beam and crossbeam. Load rating according to the Oregon LRFR Manual and AASHTO LRFR. Lead feasibility study for the repair of Pier 1. Pier 1 has crack on the south column. Retrofit includes the bolster and cofferdam shoring development for under water construction.

Union Ave Viaduct and Schuster Parkway Bridge Load Rating, City of Tacoma, WA (2016)
Structural Engineer. Completed load rating analyses of two bridges for evaluating the effect of 1-inch overlay weight. Union Avenue Viaduct Bridge has prestressed concrete I girder with 15 main spans and 3 ramp spans. Schuster Parkway Bridge has 3 cells concrete box girder with 7 spans. PGSuper and CONBOX were used to load rate the bridges.

SE 272nd Street (SR 516) between Jenkins Creek and 185th Place SE, City of Covington, WA (2012-2021)
Senior Structural Engineer. Designed superstructure, bearing, abutment wall, wing wall, shaft cap and shaft, and prepare plans.

South Lander Street Grade Separation, Seattle Department of Transportation, Seattle, WA (2016-2017)
Structural Engineer. The grade separation bridge includes 320 feet west approach structure, 4-span prestressed girder bridge and 300-foot east approach structure between 1st and 4th Avenues. Designed the approach embankment with lightweight geofoam (EPS) to exert no additional net load on the soil or existing utilities. The bridge was designed according to AASHTO LRFD Specification and Seismic Design Guide.

EDUCATION

PhD, Civil Engineering, North Carolina State University (1995)

MCE, Civil Engineering, North Carolina State University (1990)

BS, Harbor and River Engineering, National Taiwan Ocean University, Taiwan (1984)

REGISTRATION/CERTIFICATION

Professional Engineer, Civil & Structural: WA License No. 48428 (2011)

Structural Engineer: CA License No. S6513 (2017)

Professional Engineer, Civil: CA License No. 74221 (2009)

Professional Engineer, Civil: CA License No. 74221 (2009)

Professional Engineer, Civil: TX License No. 103864 (2009)

Professional Engineer, Civil: IL License No. 062052362 (1998)

Professional Engineer, Civil: FL License No. 47688 (1994)

PROFESSIONAL AFFILIATION

American Institute of Steel Construction (AISC)

American Society of Civil Engineers (ASCE)

YEARS OF EXPERIENCE

18 years

YEARS WITH TETRA TECH

1 year

OFFICE LOCATION

Bellevue, WA

AREAS OF EXPERTISE

Steel & Concrete Bridge Structures Design & Analysis

Load Rating & Retrofitting

Illinois State Toll Highway Authority Segmental Box Girder Ramps Rating Project, Various Locations, IL
Project Engineer in charge of load rating of three curved single cell segmental box girder bridge ramps: Ramp EN (902 ft), Ramp SE(1997 ft) and Ramp SW(1958 ft). Performed three superstructures load ratings which included the longitudinal load ratings of shear, moment, stress and principal tensile stress, and transverse load rating of shear, moment and stress. Computed the substructure load ratings which included post-tensioned straddle bent cap load rating and post-tensioned column load rating. The load rating was accomplished by developing time-dependent SAP2000 3-dimentional finite element models and using MathCAD and EXCEL spreadsheets to calculate the inventory

I-595 To Turnpike North – Ramp R-7 (Bridge 32)
Structural Engineer. Structural design for a horizontally curved steel two trapezoidal box girders bridge. The bridge consists of seven spans for a total of 1,619 feet long and with integral post-tensioned pier caps. Led the design of the superstructure and load rating. Performed stress analysis (FEM) for the bottom flange opening at pier 5.

I-595 To Turnpike South – Ramp R-9 (Bridge 31)
Structural Engineer. Structural design for a horizontally curved steel two trapezoidal box girders bridge. The bridge consists of nine spans for a total of 2,090 feet long and with steel integral straddle bent caps. Checked the design of the superstructure and computed the load rating.

I-595 Over Turnpike (Bridge 23)
Structural Engineer. Structural design for a horizontally curved steel three trapezoidal box girders bridge. The bridge consists of three spans for a total of 600 feet long and with sharp skews at pier and abutment. Checked the design of the superstructure and computed the load rating.

Harry Hines/I-35/Trinity River Structure, Texas DOT, Irving, TX
Lead Structural Engineer, in charge of nonlinear finite element Rail/Structural interaction analysis (GTSTRUDL) of the 70 spans LRT bridge. Computed longitudinal and transverse design loads for substructure and bearing due to rail broken, thermal and train brake forces. Performed standard DART train live load distribution and designed prestressed concrete girder superstructure for Orange Line extension Section I-1 of Phase IIB design-build project.

US90 Bridge Over Biloxi Bay, Mississippi DOT, Biloxi, MS
Design Engineer for the design-build project. The bridge consists of 71-span for a total of 8,800 feet of precast prestressed and post-tensioned girders. Performed substructure design and superstructure load rating. Responsible for defining superstructure stiffness to redistribute ship impact loads to substructures and designing pile foundations for various column types. The redistribution of load is accomplished by integrating the applications of FB-PIER, LARSA and Excel.

Gateway Harbor, Chicago Public Building Commission, Chicago, IL
Lead Structural Engineer for the commercial boat landing piers. Performed the design and analysis of triangle shaped deck pier in the north and rectangular shaped deck pier in the south. North section is a nine span structure on various multiple rows of piles. South section includes six spans with two rows of piles. Both structures are supported by concrete filled steel pipe piles. The boat piers were designed as moment resisting reinforced concrete frame on two-foot diameter vertical and battered concrete pipe piles with conical tips. The structures are modeledusing the computer program SAP2000. The design vessel is Odyssey II. Design is according to Unified Facilities Criteria (UFC 4-159- 03) and Strength Design for Reinforced-Concrete Hydraulic Structures (EM1110-2-2104).

TETRA TECH

Lower Coal Creek Bridges

OWNER

City of Bellevue

LOCATION

Bellevue, WA

DURATION

2016 - 2018

COST

$1,257,126

REFERENCES

Jim Stockwell
(425) 452-4868

KEY FEATURES

- Bridge design and load rating
- Fish passage
- Traffic control
- Construction staging and administration
- Utility coordination
- Public involvement
- City/WSDOT standards

PROJECT DESCRIPTION

High flows in Coal Creek cause overbank flooding into the Newport Shores neighborhood and limit capacity for the storm drain system. The preliminary design phase recommended replacing the existing culverts on Lower Coal Creek in the Newport Shores neighborhood with 24-foot simple span bridges supported by drilled shafts to meet current fish passage, seismic, and traffic safety design standards. The superstructure consisted of precast concrete slab girders to minimize the deck thickness and shorten construction duration to ensure the over water work was completed within the fish window. Abutments constructed of cast-in-place concrete grade beams supported by two 42-inch drilled shafts were designed to keep all cast-in-place concrete work above the water table and avoid dewatering the site and the consequent settlement risk to neighboring homes. Drilled shaft foundations were selected because of the poor soils susceptibility to settlement, liquefaction and lateral spreading. The bridge replacement was accomplished in three parts. The Group 1 project included bridge replacement at one location and was constructed in 2017. Group 2 covered two additional bridges with a new storm drain outfall to the creek and will be constructed in 2018. Group 3 covered two additional bridges plus two new storm drain outfalls to Lake Washington.

Tetra Tech performed bridge load ratings and provided construction support for replacing existing culverts at five locations with single-span bridges that meet current traffic and fish passage guidelines. Tetra Tech performed the seismic analysis, lateral spreading pushover analysis, design and detailing of the bridge superstructure, abutments and shafts. The bridge was designed according to the WSDOT Bridge Design Manual and the AASHTO LRFD Bridge Design Specifications. The bridge was analyzed using BridgeLink, LPILE and SAP2000.

TETRA TECH

North Fork Bridge 1221 - Load Rating

OWNER

King County Department of Transportation

LOCATION

North Bend, WA

DURATION

2018

COST

$50,000

REFERENCES

Stephen Jiang
(206) 477-3541
stephen.jiang@kingcounty.gov

KEY FEATURES

- Bridge load rating analysis
- Structural analysis

PROJECT DESCRIPTION

This project was performed for King County and consists of developing a load rating results report for North Fork Bridge (1221) that includes the 2014 FHWA and WSDOT loading requirements for the Notional Rating Load (NRL) and Specialized Hauling Vehicles (SHV). The load rating analysis was performed using SAP 2000 version 19 and followed the guidance of the most current WSDOT Bridge Design Manual, AASHTO Manual for Bridge Evaluation (MBE) 2nd Edition (2011) and all interims up to 2015, and AASHTO LRFD Bridge Design Specification 7th Edition (2014) and all interims through 2016. The load rating used the LRFR method per King county requirements. The load rating results report include the Load Rating Data and Assumption Memo, all data collected and used to perform the load rating (as-builts, inspection reports, photographs, etc.), structural analysis models input and output, sketches, hand calculations, QC documentation and the WSDOT BDM LRFR Bridge Rating Summary form. Recommendations for load posting were provided. A Draft and Final Load Rating Results Report were submitted.

North Fork Bridge is a three-span bridge, totaling 252 feet in length. It was designed by Homer M. Hadley and constructed in 1951. The two end spans are two-cell reinforced concrete box girders that are continuous over an intermediate pier and the center span consists of two 60-ft long simple span steel wide flange girders with a cast-in-place concrete deck. Typical of Homer Hadley designs, the box girder geometry and steel reinforcement was optimized to save material and changed continually along the spans and the concrete has little reserve strength to accommodate larger modern vehicles. The shear capacity of the concrete box girders was determined using the AASHTO modified compression field theory to more accurately determine the full shear strength of the concrete. Because the longitudinal reinforcement steel was curtailed at many locations there is not sufficient longitudinal reinforcement to account the for the combined effect of shear and flexure when using the modified compression field theory. Shear controlled the load rating and posting recommendations were provided.

TETRA TECH

Patton Bridge 3015 - Load Rating

OWNER

King County Department of Transportation

LOCATION

Auburn, WA

DURATION

2018

COST

$92,860

REFERENCES

Stephen Jiang
(206) 477-3541
stephen.jiang@kingcounty.gov

KEY FEATURES

- Bridge load rating analysis
- Structural analysis

PROJECT DESCRIPTION

Patton Bridge is a three-span 430-foot-long bridge. It was designed by Homer M. Hadley and constructed in 1950. The two end spans are two-cell reinforced concrete box girders that are continuous over an intermediate pier and the center span consists of two 100-foot-long simple span steel box girders with a cast-in-place concrete deck. Typical of Homer Hadley designs, the box girder geometry and steel reinforcement was optimized to save material and changed continually along the spans and the concrete has little reserve strength to accommodate larger modern vehicles. The shear capacity of the concrete box girders was determined using the AASHTO modified compression field theory to more accurately determine the full shear strength of the concrete. Because the longitudinal reinforcement steel was curtailed at many locations, there is not sufficient longitudinal reinforcement to account the for the combined effect of shear and flexure when using the modified compression field theory. Shear controlled the load rating and posting recommendations were provided.

Tetra Tech worked with King County to develop a load rating results report for Patton Bridge (3015) that included the 2014 FHWA and WSDOT loading requirements for the Notional Rating Load and Specialized Hauling Vehicles. The load rating analysis was performed using SAP2000 version 19 and followed the guidance of the most current WSDOT Bridge Design Manual, AASHTO Manual for Bridge Evaluation (MBE) 2nd Edition (2011) and all interims up to 2015, and AASHTO LRFD Bridge Design Specification 7th Edition (2014) and all interims through 2016. The load rating used the LRFR method per King County requirements. The load rating results report included the Load Rating Data and Assumption Memo, all data collected and used to perform the load rating (as-builts, inspection reports, photographs, etc.), structural analysis models input and output, sketches, hand calculations, QC documentation and the WSDOT BDM LRFR Bridge Rating Summary form. Tetra Tech provided recommendations for load posting and submitted a Draft and Final Load Rating Results Report.

Patton Bridge has concrete corbels that extend from the end of the concrete box girder to support the ends of the steel box girders that make up the center span. One of these corbels has significant damage, and as a safety measure, the bridge was retrofitted with steel brackets in 2005 to support the steel box girders. The brackets are anchored to the concrete with epoxy anchors and bolted and welded to the steel box girders. Tetra Tech conducted a separate load rating analysis of this retrofit and the existing concrete corbels to show that the corbels did not control the bridge load rating. The additional analysis evaluated the dead load and live load distribution to each bracket and the capacity of the bracket elements. Tetra Tech also checked the load distribution from the brackets into the concrete box girder webs to ensure the load distribution used for the concrete girder load rating is valid. To perform this analysis, Tetra Tech developed a 3-D shell model of the concrete box girder in SAP2000 and analyzed the steel brackets per AASHTO and the epoxy anchors using AASHTO, ACI 318-14 Chapter 17 (Anchoring to Concrete) and the Hili PROFIS program.

BRIDGE INSPECTION REPORT

Status: Released | Printed On: 11/12/2021 | Agency: SNOQUALMIE

CD Guid: 739ff9da-db08-41d8-ac70-79f8e1c68981 | Release Date: 9/28/2021 | Program Mgr: Sonia L. Lowry

Br. No. 1726A **SID** 08435700 **Br. Name** MEADOWBROOK BR

Carrying MEADOWBROOK WAY SE **Route On** 87430 **Mile Post** 1.28

Intersecting SNOQUALMIE RIVER **Route Under** **Mile Post**

DocuSigned by: Margaret Germeaux — Inspector's Signature MAG Cert # G1103 Cert Exp Date 4/15/2026

DocuSigned by: Dustin Curan — Co-Inspector's Signature JJC

4		Structural Eval	(1657)	73		Operating Tons	(1552)	0		No Utilities	(2675)
2		Deck Geometry	(1658)			Op RF	(1553)	1		Bridge Rails	(1684)
9		Underclearance	(1659)	44		Inventory Tons	(1555)	1		Transition	(1685)
6		Alignment	(1661)			Inv RF	(1556)	1		Guardrails	(1686)
7		Deck Overall	(1663)	5		Operating Level	(1660)	0		Terminals	(1687)
4		Superstructure	(1671)	A		Open/Closed	(1293)	0.00		Asphalt Depth	(2610)
6		Substructure	(1676)	8		Waterway	(1662)	8.00		Design Curb Ht	(2611)
9		Culvert	(1678)	5		Scour	(1680)	33.0		Bridge Rail Ht	(2612)
8		Chan/Protection	(1677)			Soundings Flag	(2693)	1921		Year Built	(1332)
N		Pier/Abut/Prot	(1679)	Y		Revise Rating	(2688)	2005		Year Rebuilt	(1336)
9		Drain Cond	(7664)			Photos Flag	(2691)	Y		Subj to NBIS	(2614)
0		Drain Status	(7665)			Measure Clrnc	(2694)				
N		Deck Scaling	(7666)	8		Sdwk Cond	(7673)				
0		Scaling Pct	(7667)	7	6	Paint Cond	(7674)				
8		Deck Rutting	(7669)	8		Approach Cond	(7681)				
8		Exposed Rebar	(7670)	7		Retaining Wall	(7682)				
8	7	Curb Cond	(7672)	9		Pier Prot	(7683)				

Alpha Span Type:	STrus
Sufficiency Rating:	54.17
Status:	SD
Routine Risk Category:	High Risk
Underwater Risk Category:	No Risk Category

Inspections Performed:

Freq	Hrs	Date	Rep Type
24	2.0	6/24/2021	Routine
24	6.0	6/24/2021	Fract Crit
			UW
			Special
			Interim
			UWI
			Damage
			PRM Safety
			SEC Safety
			Condition
			Short Span
			In Depth
			Geometric

BMS Elements

Element	Element Description	Total	Units	State 1	State 2	State 3	State 4
26	Concrete Deck w/Coated Bars	4904	SF	4904	0	0	0
29	Steel Deck - Concrete Filled Grid	5326	SF	5326	0	0	0
35	Concrete Deck Soffit	5326	SF	5326	0	0	0
113	Steel Stringer	880	LF	880	0	0	0
126	Steel Thru Truss	440	LF	280	0	130	30
133	Truss Gusset Plates	44	EA	28	0	10	6
152	Steel Floor Beam	240	LF	240	0	0	0
207	Concrete Pile/Column w/Steel Jacket	24	EA	24	0	0	0
212	Concrete Submerged Pier Wall	42	LF	42	0	0	0
215	Concrete Abutment	80	LF	80	0	0	0
234	Concrete Pier Cap/Crossbeam	240	LF	240	0	0	0
264	Timber Sidewalk & Supports	880	SF	880	0	0	0
311	Moveable Bearing (roller, sliding, etc)	16	EA	16	0	0	0
316	Isolation Bearing	4	EA	4	0	0	0

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BMS Elements (Continued)

Element	Element Description	Total	Units	State 1	State 2	State 3	State 4
321	Concrete Roadway Approach Slab	1910	SF	1910	0	0	0
330	Metal Bridge Railing	889	LF	889	0	0	0
340	Metal Pedestrian Railing	321	LF	321	0	0	0
361	Scour	2	EA	2	0	0	0
404	Compression Seal / Concrete Header	80	LF	80	0	0	0
705	Bridge Luminaire Pole and Base	2	EA	2	0	0	0
802	Thin Polymer Overlay	10230	SF	10230	0	0	0
903	Inorganic Zinc/Urethane Paint System	20000	SF	18500	0	1000	500

Notes

0 ORIENTATION:
Bridge is oriented south to north. Abutment 1 is south. Abutment 10 is north.
Truss is Span 4 on Piers 4 and Piers 5.
Snoqualmie River flows east to west.

1 FRACTURE CRITICAL NOTE:
SEE FC SUMMARY SHEET FOR THE DETAILED FRACTURE CRITICAL CONDITION.
NOTES 126 STEEL THROUGH TRUSS AND 133 GUSSET PLATES CONTAIN GENERAL REMARKS.

3 GENERAL NOTE:
Single lane bridge with traffic signal traffic control.

UBIT:
A UB-60 is required to inspect under the truss and is able to deploy through the center lateral bracing.
Deploy from west side of truss, sidewalk on east side interferes with UBIT deployment.

2005 Rehab included:
New concrete approaches, ground stone column densification, installation of isolation bearings, truss repair, lead paint removal and painting with moisture cure paint, exodermic deck with light weight concrete, sidewalk replacement with Trex hard deck planks, and installation of 4 post tensioning rods in each pier under the truss (1-3/4" dia, 42" deep).

11 LOAD RATING:
Controlling Point: L5-U6 east truss (Bracing).

26 CONCRETE DECK WITH COATED BARS:
Approach spans only.
Longitudinal cracks with some areas of pattern cracks; aggregate voids scattered throughout wheel lines. Very light tining.
Stop bars at traffic lights are worn away.

29 STEEL DECK CONCRETE FILLED METAL GRID:
In truss span only.
SURFACE: Sporadic aggregate voids in wheel lines.
SOFFIT: Steel grid bottom: No defects noted.

35 CONCRETE DECK SOFFIT:
Approach spans only.
Spans 2, 6, 7, 8, and 9 have multiple full length longitudinal hairline leaching cracks with stalactites.

113 STEEL STRINGER:
Four lines of steel stringers in Span 4.
No defects noted.

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Notes (Continued)

126 STEEL THROUGH TRUSS:
Located at Span 4.

SEE FC SUMMARY SHEET FOR DETAILED GUSSET PLATE CONDITIONS. THE FOLLOWING ARE GENERAL REMARKS.
L0 - L11 and U1 - U10.
LOWER CHORD:
The lower chord between L4 and L7 are comprised of four angles that form an I-beam oriented on its weak axis. Holes have been drilled in angles to allow water to drain, some have become clogged with dirt and debris.
Outside chords have spaces between the angles for drainage, with spacer plates connecting them at regular intervals.
Many bottom chord rivet heads have section loss, most common near panel point connections.
Heavy pack rust is forming between the angles at drain holes locations and connections. The pack rust is more prevalent on the outside face of the east truss.
Heavy section loss on the corners and underside of the back to back angles with L6-L7 exhibiting the worst loss.
Mild to moderate pitting was noted throughout the bottom chord.
The middle of the underside of the splice plates at gusset plate locations typically exhibit moderate section loss.
The east bottom chord exhibits impact deformations in several areas.

UPPER CHORD:
Upper chord connections interior and exterior were inspected with the UBIT.
Moss growth at north portal at WU9-U10, U10, U11.

VERTICAL AND DIAGONALS:
Some of the diagonal members are buckled. See FC summary.

STRUTS AND SWAY BRACING:
Many of the upper middle transverse bracing are sagging.

DIAGONAL LATERAL BRACING:
South end cross bracing are very tight while the north end bracing are loose and can be shaken.

133 GUSSET PLATES:
SEE FC SUMMARY SHEET FOR DETAILED GUSSET PLATE CONDITIONS. THE FOLLOWING ARE GENERAL REMARKS.
Lower chord gusset plates L3-L8 typically exhibit minor to moderate (1/16"-1/8") painted over pitting on the exterior faces and minor to severe (1/8" - holed through) pitting on the interior faces above the clip angles.
The most severe condition exists at L3 on the west truss; 100% section loss, 9" long x 1/2" high in the west face of the interior gusset plate between the vertical clip angles and the lower chord angles.

152 STEEL FLOOR BEAM:
Twelve I-24x80 floor beams numbered FB0-FB11.
Floor beams have abandoned welds from previous stringer connections.
FB3 rust forming on bottom flange.

207 CONCRETE COLUMN WITH STEEL JACKET:
Quantities do not include the 8 columns (not visible for inspection) under Abutments 1 and 10.
Column 2B is out of plumb.

212 CONCRETE SUBMERGED PIER WALL ON TIMBER PILES:
Piers 4 and 5.
Both piers - moderate abrasion below high water mark, leaching at horizontal construction joints, moss and algae growth on pedestals.
P4 - wall is outside of waterline at time of inspection. Footing is not exposed. Seismic retrofit cap has vertical crack full height at bearing 4-2C. Tree growing out of north face.
P5 - spall with rebar at column/wall interface at north side near top. Crack at bottom of column north side.
South face in channel at time of inspection. Footing is exposed full length, see note 361 for details.

215 CONCRETE ABUTMENT:
Abutment 1 - Embankment sloughing under cap at both ends. West void is 6"H x 7'L x 4'D, east void is 6"H x 8'L x 46"D.
Two piles visible under abutment cap. Vertical hairline cracks scattered throughout abutment cap, small spall near midspan.
Abutment 10 - Embankment sloughing at west end, void measuring 20"W x 3"H x 24"D.

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Notes (Continued)

234 CONCRETE PILE CAP:
P3 Cap - leaching hairline crack on bottom face of cap, near centerline.
P7 Cap - hairline vertical crack near Column 7C north face.
P8 Cap - hairline vertical crack at Columns 8B/C both faces. Delam underside of cap near Column 8A.
P9 Cap - hairline vertical crack at column 9B, south face.

264 TIMBER SIDEWALK AND SUPPORTS:
Sidewalk on east side only with varying width, is narrowest at 40".
TREX sidewalk on three lines of timber stringers.
Outside timber stringer is weather checked.

311 ELASTOMERIC BEARINGS:
Transition bearings located at Piers 4 and 5.
No defects noted.

316 ISOLATION BEARINGS:
Truss bearings on Piers 4 and 5.
4A - 1/8" deep pitting on inside face of bearing assembly.
4B - 1/8" deep pitting on the west face of the interior clip angles.
5A - Pack rust between the interior gusset plate and the bearing clip angle.
5B - Pack rust present inside the bearing assembly and bearing clip angle.

321 CONCRETE APPROACH SLAB:
Longitudinal hairline cracks in approach slabs.

330 METAL BRIDGE RAILING:
Scrapes at several locations both rails.

340 METAL PEDESTRIAN RAIL:
Rail is deflected inwards for 20" length near midspan.
Metal chain link fencing and support rails are sagging between posts at several locations.

361 SCOUR - FIELD:
Piers 4 and 5 are at edge of channel. Footings are founded on timber piles.
Pier 4 - Timber bolted beam in channel, possible top of formwork for footing. Footing is not exposed.
Pier 5 - Footing exposed upstream (east) 1.2', at mid-point 2.2' at downstream corner (west) 1.5', length of exposed area is 30'.
Relic piles around footing at downstream side; some protrude above water surface approximately 30".
Soundings taken at upstream side from sidewalk top of rail. Distance from top of rail to deck is 4.5 feet. Measurements taken at each panel point starting at south Pier 4.

Year	PP0	PP1- E/W	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	PP10 E/W	PP11
2021	30.0	38.6	48.3	47.0	46.2	46.3	44.4	44.9	44.2	44.5	42.5	36.3
2019	28.2	38.2	47.8	48.0	47.6	46.2	46.2	45.5	44.0	43.6	41.3	29.5
2015	31.0'	37.5	48.2	48.4	48.4	47.2	47.0	46.5	45.2	45.5	42.1	38.0

404 COMPRESSION SEALS:
North roadway/approach slab seal and approach slab/deck seal has settled 1/2" from top of header.
All approach seals are full of sandy debris.
Minor D-spalls beginning to developing along edges of north seals.

705 TRAFFIC SIGNAL POLE AND BASE:
One traffic control light per approach, inspected with UBIT.
No defects noted.

802 DECK OVERLAY:
Epoxy overlay added to north approach deck in August 2009. Overlay is wearing in wheel lines.

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Notes (Continued)

903	PAINT: Peeling paint common on rivet heads. Light rust staining bottom side of upper sway braces at connections. Active pack rust between gusset plates and upper chord flange. Encapsulation was not achieved in lower chord, active pack rust between angles. EU3 - EU2 peeling and blistered paint bottom side of top flange near EU3. Many areas on the interior faces of the gusset plates below the bottom chord have active rusting with areas of paint failure. Exterior members, typically west side, paint is dulling with some areas of chalky oxidation.
1661	ALIGNMENT: Sharp horizontal curve at north end.
1671	SUPERSTRUCTURE: Heavy section loss on the inside faces of lower chord gusset plates above clip angles. One fracture critical gusset plate is rusted through. See notes in element 133.
1677	CHANNEL: River banks are well vegetated with trees and native shrubs, channel is well defined silty banks, scattered riprap with some woody debris. Water velocity is seasonally slow to moderate, channel bottom is relatively flat. Winter months high flow events with flooding can occur.
1680	SCOUR - OFFICE: Per 1921 Plan for Piers 4 and 5. Top of pier cap to top of footing measures 39'-6". Footing measures 6'-0" deep, founded on 40 timber piles at each pier. See Repair 10016 for Scour.
1687	TERMINALS: Terminal ends are covered with yellow visibility wrap.
2688	REVISE LOAD RATING: New load rating needed based on updated lower chord and gusset plate conditions. Load Rating requires updated NRL rating by December 31, 2022 per FHWA Memorandum.
7672	CURBS: Severe delaminations of three patched areas in west curb at bridge light locations (3W, 6W, 9W). Delamination also occurring at north approach west side, revealing electrical box.

Repairs

Repair No	Pr	R	Repair Descriptions	Noted	Maint	Verified
10001	M	B	MONITOR UPDATED 2021: Pack rust build up between lower chord angles, gusset plates, and floor beam seats.	6/27/2011		
10010	2	B	RAIL: Paint is wearing and has been scraped off in areas on rail. 1. Repaint section of rail that has scraping with exposed steel to prevent corrosion.	9/3/2009		
10011	1	B	LOW CHORD MAINTENANCE: Low chord members are rusting. Rivet heads are experiencing section loss and pack rust has formed between angle connections. 1. Seal sides of built-up members of the upstream lower cord to prevent further rusting. 2. Replace rusted rivets. 3. Clean out drain holes on the low chords.	9/3/2009		
10012	2	B	STEEL TRUSS: Truss has collected dust and debris and is accumulating moss growth. 1. Pressure wash bridge to preserve the paint.	6/25/2019		
10013	2	B	STRIPING: Stop bars at each approach have faded away. 1. Restripe stop bars at traffic signal on both approaches	6/25/2019		

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Repairs (Continued)

Repair No	Pr	R	Repair Descriptions	Noted	Maint	Verified
10014	2	B	CURBS: Severe delaminations of three patched areas in west curb at bridge light locations. Delamination also occurring at north approach west side, revealing electrical box. 1. Repair failed grout around electrical boxes.	6/25/2019		
10015	2	B	TREE REMOVAL: Sapling growing out of Pier 4 north face. 1. Remove sapling.	6/24/2021		
10016	1	S	SCOUR: Pier 5 footing is exposed is exposed full length, up to 2' at mid point. Implement scour protection such as riprap or other design to protect the pier from further scour.	6/24/2021		

Inspections Performed and Resources Required

Report Type	Date	Freq	Hrs	Insp	CertNo	Coinsp	Note
Routine	6/24/2021	24	2.0	MAG	G1103	JJC	
Fracture Critical	6/24/2021	24	6.0	MAG	G1103	BLR	
Equipment	6/24/2021	24	6.0	MAG	G1103	BLR	Schedule full bridge closure for UBIT inspection. Schedule during summer break for local schools.

Resources	Hours	Min	Pref	Max	Freq Date	Need Date	Override	Notes
UBIT	6.00	62	60	ANY	6/24/2021			SDOT UB 62 with bridge closure.
Scheduling Restrictions								Schedule inspection during summer months when school is out of session.

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-134
September 26, 2022
Committee Report

AGENDA BILL INFORMATION

TITLE:	AB22-134: Consultant Services Agreement with KPG-Psomas, for Design of Snoqualmie Parkway Rehabilitation Project	☐ Discussion Only ☒ Action Needed:
PROPOSED ACTION:	Approve Consultant Services Agreement with KPG-Psomas for Design of Snoqualmie Parkway Rehabilitation Project	☒ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	9/14/2022
	Finance	Drew Bouta	9/13/2022
	Legal	Anna Astrakhan	9/14/2022
	City Administrator	Mike Sauerwein	9/14/2022

DEPARTMENT:	Parks & Public Works	
STAFF:	Jeff Hamlin, PE – City Engineer, Deputy Director Parks and Public Works	
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022
MEMBERS:	Ethan Benson Bryan Holloway Jo Johnson	
EXHIBITS:	1. Truck Trip Distribution Analysis 2. Snoqualmie Parkway Jurisdictional Transfer Analysis 3. Consultant Services Agreement - KPG 4. Snoqualmie Parkway Rehabilitation Scope of Work 5. Snoqualmie Parkway Rehabilitation Fee Estimate	

AMOUNT OF EXPENDITURE	$ 320,426.00
AMOUNT BUDGETED	$ 6,400,000
APPROPRIATION REQUESTED	$ 320,426.00

SUMMARY

INTRODUCTION
This agenda bill provides for the engineering design to prepare bid ready documents for pavement overlay, ADA facilities, channelization, and traffic signal upgrades on the Snoqualmie Parkway Rehabilitation Project.

LEGISLATIVE HISTORY
NA

BACKGROUND
The Snoqualmie Parkway was constructed approximately 20 years ago, and the asphalt pavement has deteriorated to the point where it requires rehabilitation soon. The city is also considering a jurisdictional transfer of the Parkway to the Washington State Dept of Transportation (WSDOT) for the ongoing maintenance of the roadway, including pavements, striping and signalization upkeep. WSDOT requires that

all facilities associated with the roadway comply with the Americans with Disabilities Act (ADA) requirements prior to the jurisdictional transfer.

The City contracted with a consultant, Fehr & Peers in 2020 to conduct a study (see attached Truck Trip Distribution Analysis along Snoqualmie Parkway, November 9, 2020) of truck traffic on the Snoqualmie Parkway, which demonstrated that the "*vast majority of the pavement degradation impacts on Snoqualmie Parkway are attributed to heavy vehicles and estimate that 81 percent of truck trip ends start or end outside the City limits*". This was deemed unfair to the citizens of Snoqualmie who carry the financial burden of maintaining a roadway that supports predominantly regional transport of goods and services outside of the community. These findings led to the City's interest in exploring the feasibility of transferring ownership of the Snoqualmie Parkway to WSDOT. The City again contracted with Fehr & Peers in 2022 to review the possibility of a jurisdictional transfer of the Parkway to WSDOT (see attached Snoqualmie Parkway Jurisdictional Traffic Analysis, June 30, 2022). The report concluded that according to the guidelines outlined in RCW 47.17 there is ample justification for a jurisdictional transfer from the City of Snoqualmie to WSDOT. Subsequently, the City received an appropriation of $5 Million from the State legislature under the Move Ahead Washington (MAW) Capital Projects Program to pay a substantial portion of the required pavement upgrades. The city intends to use the funding to move forward with the pavement and other upgrades that will support the jurisdictional transfer of the Parkway to WSDOT.

ANALYSIS

Because of State funding requirements, the city must follow the Local Agency Guidelines (LAG) Manual requirements that include WSDOT review and concurrence with the planned upgrades. The following scope elements are included in the Consulting Services Agreement:

- Survey and Base Mapping
- Primary Pavement Overlay Design
- Environmental Permitting
- Final Pavement Overlay Design
- ADA Design
- Bid Phase Services
- Management Reserve

Additional coordination activities with WSDOT include a striping and channelization plan, signal restoration plan, traffic management plan, Temporary Erosion and Sediment Control, and WSDOT documentation procedures.

BUDGET IMPACTS

The Administration recommends approving a contract with KPG-Psomas to design the pavement overlay, ADA facilities, and channelization and traffic signal upgrades on the Snoqualmie Parkway (Snoqualmie Parkway Rehabilitation Project). The 2021-2022 Biennial Budget included the Snoqualmie Parkway Rehabilitation Project for a total of $704,550. With $162,742 incurred so far this year, the project has a remaining budget of $541,808. Therefore, sufficient appropriation exists within the current 2021-2022 Biennial Budget (Transportation Capital Fund #310) to fund the contract should the consultant complete the work this year.

In addition, the Administration proposes incorporating the project into the 2023-2024 Biennial Budget for $6,400,000 which reflects the adopted 2023-2028 Capital Improvement Plan (CIP) should a portion of the work fall into next year.

NEXT STEPS

Proceed with the design of Snoqualmie Parkway Rehabilitation Project on an abbreviated schedule to meet the estimated March 2023 bid period.

PROPOSED ACTION

Move to approve Consultant Services Agreement with KPG-Psomas for Design of Snoqualmie Parkway Rehabilitation Project

FEHR PEERS

FINAL MEMORANDUM

Date: November 9, 2020

To: Jeff Hamlin and Brian Krause – City of Snoqualmie Public Works Development

From: Emily Alice Gerhart, AICP and Chris Breiland, PE – Fehr & Peers

Subject: Truck Trip Distribution Analysis along Snoqualmie Parkway

SE20-0732

Over the past 20 years, the pavement condition on Snoqualmie Parkway has deteriorated and is now in need of substantial rehabilitation. Heavy trucks and buses are a major contributor to pavement degradation and this memorandum documents the degree to which heavy vehicles that use Snoqualmie Parkway are local or regional in nature. This issue is relevant because Snoqualmie may be seeking regional funding for pavement rehabilitation, but this funding requires justification that Snoqualmie Parkway serves regional trips.

The analysis in this memorandum estimates the number of heavy truck trips that start or end outside the City and translates the truck trip flows into an estimate for the regional versus local pavement degradation. In order to estimate this impact, we utilized the regional travel model to understand origins and destinations for traffic on Snoqualmie Parkway. Then, we reviewed available count information to estimate the approximate average number of trucks on an average weekday relative to cars.

These findings illustrate that the vast majority of the pavement degradation impacts on Snoqualmie Parkway are attributed to heavy vehicles and estimate that 81 percent of truck trip ends start or end outside the city limits.

Truck Trip Distribution

In order to approximate the origins and destinations of truck traffic, we utilized the base year model refined by Fehr & Peers, built off the Puget Sound Regional Council (PSRC) 4k framework. We ran a "select link" analysis on the base year model, which relies on 2015 regional land uses. The land

use is an input into the model, which follows the traditional travel behavior forecasting four-step model process: trip generation, distribution, mode choice, and assignment.

Every forecasting exercise requires the modelling team to review the outputs carefully. Because the PSRC model framework is at a regional scale with large traffic analysis zones (TAZs) and less detail of low volume roadways, it is essential to post-process the results to form conclusions at a local level. Therefore, we ran multiple time periods, including the AM, PM, Midday, Evening, and Daily time periods. Upon reviewing the results of the time period, the midday period proved to be the most conservative and we deemed it to be a reasonable estimate.[1]

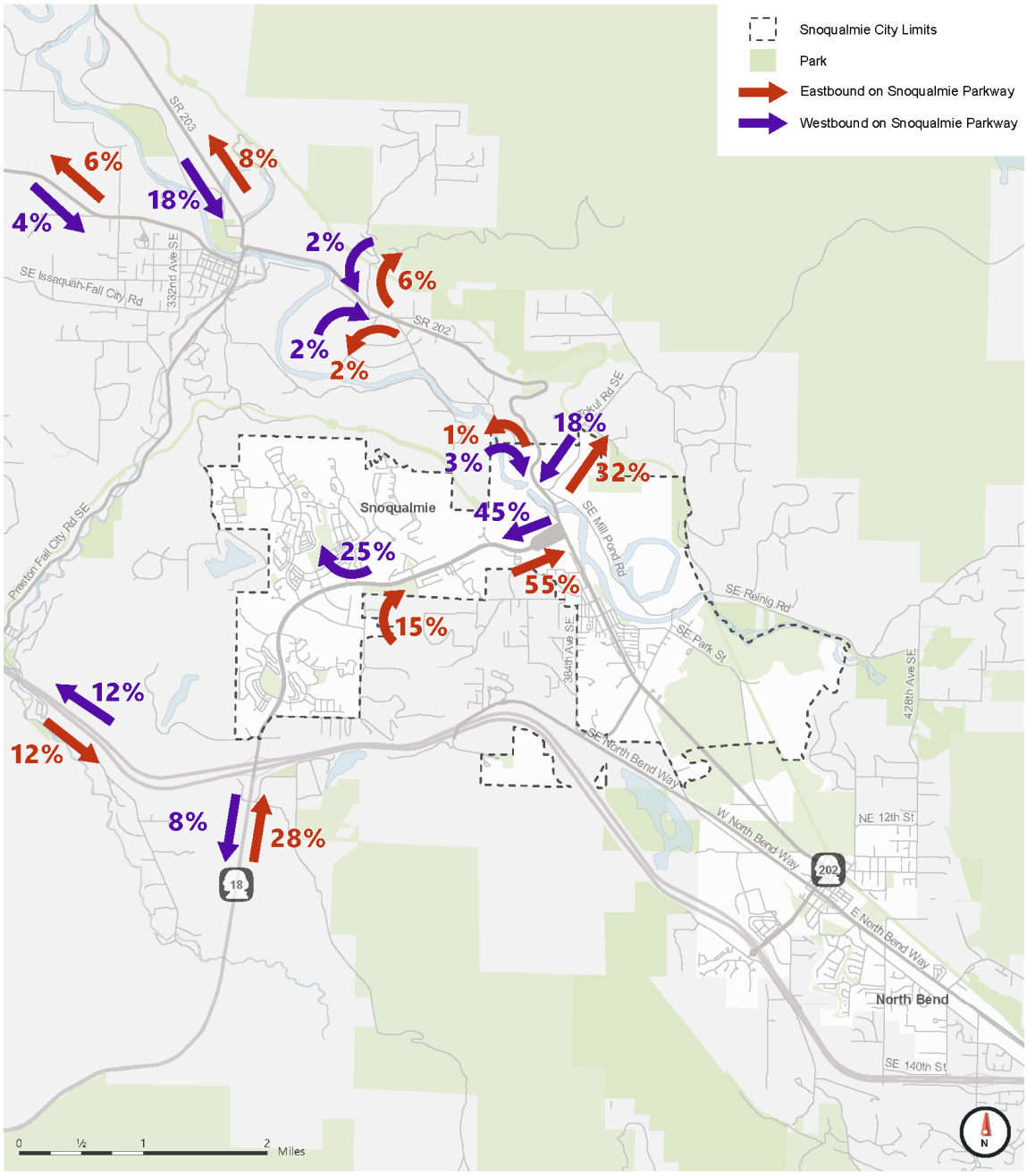
We reviewed the model outputs and our findings show that in the base year model, *81 percent of truck trip ends[2] on Snoqualmie Parkway near SR 202 start or end outside the city limits*. This is based on a calculation of total trip ends that remain internal in the City of Snoqualmie versus those that are outside of the city. As previously mentioned, because this is a regional model, it is more useful for regional distribution and origin-destination estimation, and less so for using raw model volumes directly, such as the total number of truck trips estimated by the model.

Figure 1 shows the truck trip distribution from the model analysis that isolated the paths of truck trips on Snoqualmie Parkway near SR 202. As shown in Figure 1, a TAZ near the quarry outside city limits, generates a substantial number of the truck trips on the Parkway, while other truck trips continue through the city to other parts of the region.

[1] Based on truck trip counts collected throughout the Puget Sound Region, most truck trips occur during the midday (outside of the commuting peak periods).

[2] Each trip has two "trip ends," (an origin and a destination). Trip ends are used in impact calculations so that the jurisdictions/land uses generating the trips can be fairly assessed responsibility for sharing costs of mitigating the impact or fixing the deficiency.

Figure 1 – Distribution of Truck Traffic Traveling on Snoqualmie Parkway near SR 202



Data Source: PSRC Travel Demand Model (2015)

Distribution of Truck Trips Traveling on Snoqualmie Parkway (Near SR 202)

Truck Trip Estimates

In order to estimate average truck traffic on Snoqualmie Parkway, we reviewed Snoqualmie Parkway counts conducted in March 2020, historic counts, and available research on COVID-19 impacts to travel patterns.

We first reviewed the comparison between the roadway counts conducted in March 2020 and counts from 2018. Because the difference between the two counts includes potential growth between 2018 to 2020, we also reviewed more recently available data, including research conducted in the Seattle region comparing counts from March 2020 to the same day the week of February 22, 2020 (link). We reviewed a few different scenarios, and the most reasonable average daily traffic (ADT) volumes are between:

a) Estimate using March 2020 peak period counts (7-9am and 4-6pm) scaled by a factor of 1.9 (comparison with historic counts), with all non-peak period counts scaled by a factor of about 1.4 (from COVID-19 research); and
b) Average counts scaled by a factor of 1.9 (includes potential growth between 2018 to 2020 counts).

Based on these sources, we estimated a mid-week average daily traffic volume of 11,800 – 14,700 on Snoqualmie Parkway west of SR 202.

Then, we reviewed historic heavy vehicle volumes on Snoqualmie Parkway west of SR 202. The total daily heavy vehicle volumes fell between seven to fourteen percent of total trips. When adjusting for discrepancies between historic counts, recent counts, recent logging and quarry activity, and COVID-19 travel impacts, it is reasonable to conclude ten percent of average daily traffic on Snoqualmie Parkway near SR 202 is attributed to heavy vehicle traffic.

After applying this percentage to the range of total traffic (ADT), we concluded that approximately 1,200 to 1,500 trucks travel along Snoqualmie Parkway near SR 202 on a typical weekday.

According to the American Association of State Highway and Transportation Officials (AASHTO—a consortium of state departments of transportation), "heavy trucks and buses are responsible for a majority of pavement damage."[3] This assertion is based on the definition of an "18,000 pound

[3] Considering that a typical automobile weighs between 2,000 and 7,000 lbs. (curb weight), even a fully loaded large passenger van will only generate about 0.003 ESALs while a fully loaded tractor-semi trailer can generate up to about 3 ESALs (depending upon pavement type, structure and terminal serviceability). Source: "Equivalent Single Axle Load." https://pavementinteractive.org/reference-desk/design/design-parameters/equivalent-single-axle-load/. Accessed on October 26, 2020.

Equivalent Single Axle Load" (ESAL) from AASHTO, which is used as the primary loading input to determine pavement design in its *Mechanistic-Empirical Pavement Design Guide: A Manual of Practice, 3rd Edition*, which is the most commonly-used pavement design resource in the Country (WSDOT's Pavement Policy is based on AASHTO research and resources).

Based on data from WSDOT, the average number of ESALs per heavy vehicle ranges from 0.26 for a FHWA Class 5 truck (similar to a UPS package delivery truck) to 1.36 for a FHWA Class 13 truck (which include dump trucks). These two truck classifications are the most common on Snoqualmie Parkway, with substantially more Class 5 than Class 13 trucks. Based on the distribution of trucks by classification from our March 2020 counts, we estimate that the average ESAL per truck is 0.5. Compared to the average ESAL for a passenger vehicle of 0.003, we estimate that truck traffic results in 95% of the pavement damage on Snoqualmie Parkway, with 81 percent of all truck trip ends being outside of Snoqualmie. This result demonstrates the impact of regional travel patterns on pavement degradation on Snoqualmie Parkway.

FEHR PEERS

Memorandum

Date: June 30, 2022

To: Steve Clark and Jeff Hamlin, City of Snoqualmie

From: Tino Jonga, EIT and Chris Breiland, PE, Fehr & Peers

Subject: Snoqualmie Parkway Jurisdictional Traffic Analysis

SE22-0854

Introduction

The City of Snoqualmie is interested in exploring the feasibility of transferring ownership of Snoqualmie Parkway to the Washington State Department of Transportation (WSDOT). In 2009, the House Committee on Transportation designated the Washington State Transportation Commission (WSTC) the responsibility to review route jurisdiction transfer requests from cities, counties, or the state and to provide recommendations to the Senate and House Transportation Committees prior to a legislative session.[1] WSTC utilizes criteria outlined in RCW 47.17.001[2] in evaluating jurisdiction transfer requests. This memorandum documents a traffic analysis conducted pursuant to the criteria described in RCW 47.17.001 to provide data for the City of Snoqualmie to consider with respect to transferring ownership of Snoqualmie Parkway to WSDOT.

Jurisdictional Transfer Review

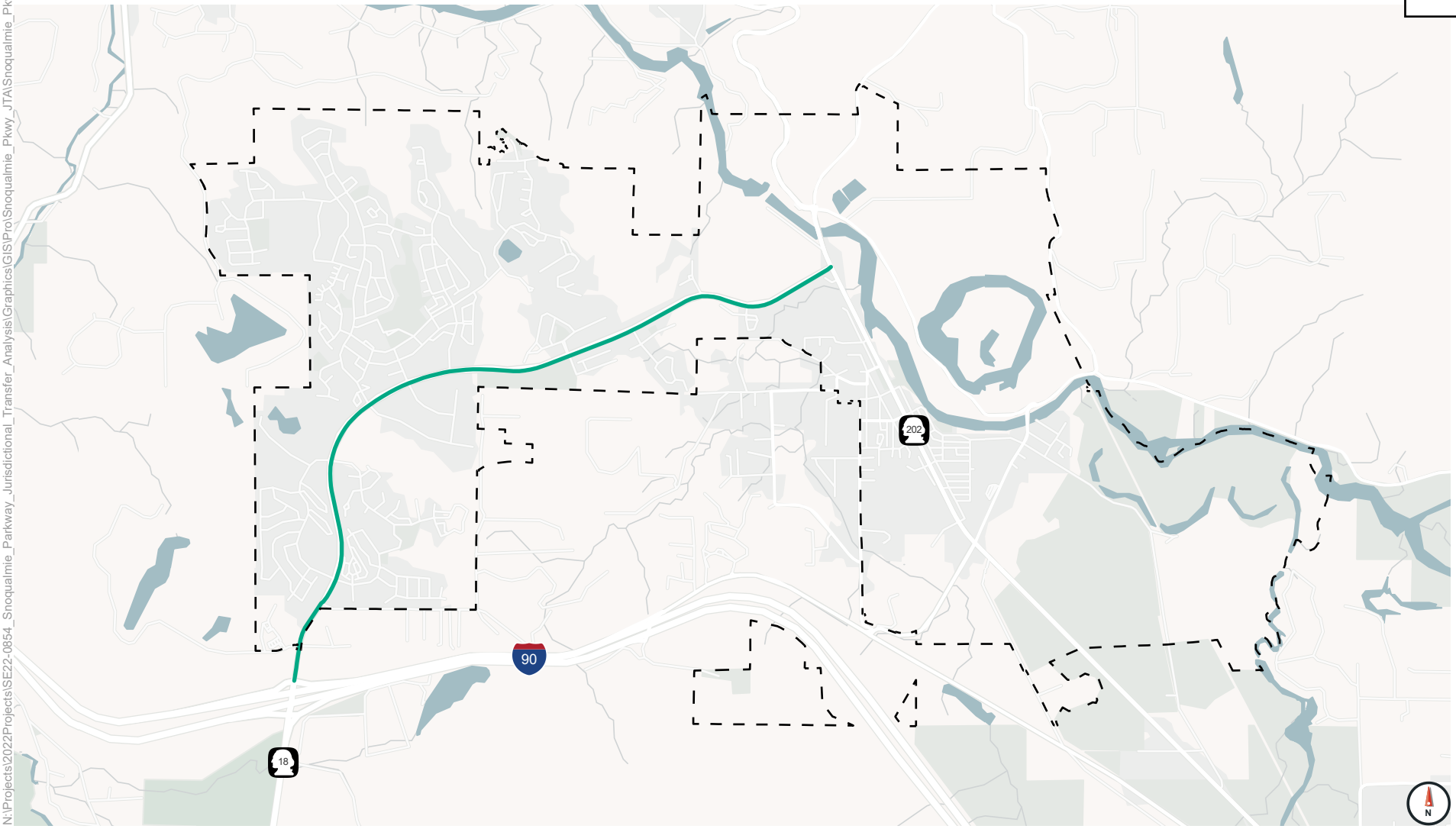
Snoqualmie Parkway is a two-lane divided arterial that facilitates both regional and local trips in the City of Snoqualmie. The City of Snoqualmie's proposed transfer extents encompass the full length of the Snoqualmie Parkway from the terminus of State Route 18 (SR 18) to Railroad Avenue/State Route 202 (SR 202), as shown in **Figure 1**. In relation to RCW 47.17.001, the most relevant criteria related to this type of jurisdictional transfer include:

- **RCW 47.17.001 (2a)**: [The highway] is part of an integrated system of roads and carries in excess of three hundred thousand tons [freight] annually and provides primary access to a rural port or intermodal freight terminal.

[1] House Committee on Transportation. House Bill Report SB 5028, 2009.
[2] Washington State Legislature. RCW 47.17.001: Criteria for changes to system.

- **RCW 47.17.001 (3c)**: [The highway] is an urban extension of a rural state highway into or through an urban area and is necessary to form an integrated system of state highways.
- **RCW 47.17.001 (3d)**: [The highway] is a principal arterial that is a connecting link between two state highways and serves regionally oriented through traffic in urbanized areas with a population of fifty thousand or greater, or is a spur that serves regionally oriented traffic in urbanized areas.

The subsequent sections present an in-depth review of each of the relevant criteria with respect to the existing conditions of Snoqualmie Parkway using various data sources, including WSDOT's 2021 Freight and Goods Transportation System update, historical traffic count data, and Big Data (location-based services and navigation global positioning system (GPS) data from anonymized smartphones and navigation devices in vehicles).



Legend

City_Limits

Snoqualmie_Parkway

Figure 1

RCW 47.17.001 (2a)

The criterion described under **RCW 47.17.001 (2a)** merits a highway based on its role in facilitating freight and good movement. Snoqualmie Parkway is a designated truck route of the state's Freight and Goods Transportation System (FGTS), a Washington-specific freight designation system, which classifies the state's freight corridors by modes based on annual freight tonnage moved through truck, rail, and waterway freight corridors (illustrated in **Figure 2** and **Figure 3**).[3] Based on 2021 WSDOT data, Snoqualmie Parkway is classified as a T-3 corridor that facilitates the transportation of more than three hundred thousand but less than four million tons of freight per year. Consequently, this highlights the critical role of the highway in freight and goods movement as it exceeds the minimum threshold of three hundred thousand tons of freight per year outlined under **RCW 47.17.001 (2a)**. Furthermore, 2018 and 2020 traffic counts indicate that about ten percent of average daily traffic on the highway is attributed to heavy vehicle traffic.

Part of the criterion also requires that a highway provides primary access to a rural port or an intermodal freight terminal. However, out of the 74 ports in the state, none are located in the immediate vicinity of Snoqualmie Parkway, and neither is an intermodal freight terminal. To fully understand where trucks are coming from or going, the project team utilized truck "Big data" from StreetLight Data, which offers several trip-making metrics from navigation-GPS data from a commercial fleet management system. StreetLight Data uses truck data with two classification categories: medium-duty commercial vehicles, defined as those between 14,000 and 26,000 lbs. and heavy-duty commercial vehicles, defined as those over 26,000 lbs.

Figure 2 and **Figure 3** highlight the key origins and destinations for trucks that access Snoqualmie Parkway using all-day truck trip activity data for all days of the week during the months of July and August in 2021. As illustrated in **Figure 2**, the highway not only serves as an access link for trucks originating within city limits or the North Bend/Tanner area but also from different parts of the Puget Sound region, including the Port of Tacoma, Kent Manufacturing/ Industrial Center (MIC), warehouses in Kent and Redmond. Similar trends are shown in Error! Reference source not found. Notable daily truck activity is observed for trucks accessing the area on the northeast side of the City of Snoqualmie, where commercial logging and aggregate extraction/processing occurs. To further reinforce the highway's freight significance, the project team also reviewed pass-through truck trips along Snoqualmie Parkway (trips that neither originate nor have destinations within city limits). One-third of truck trips along Snoqualmie Parkway are pass-through trips to and from other parts of the Puget Sound region, and only 15 percent of all truck trips utilizing Snoqualmie Parkway have an origin-destination pair within city limits. These findings emphasize Snoqualmie Parkway's role in connecting resource extraction

[3] WSDOT. Washington State freight and Goods Transportation System (FTGS) Update, 2021.

activities in East King County to regional manufacturing and export facilities that are linked by the state highway network.

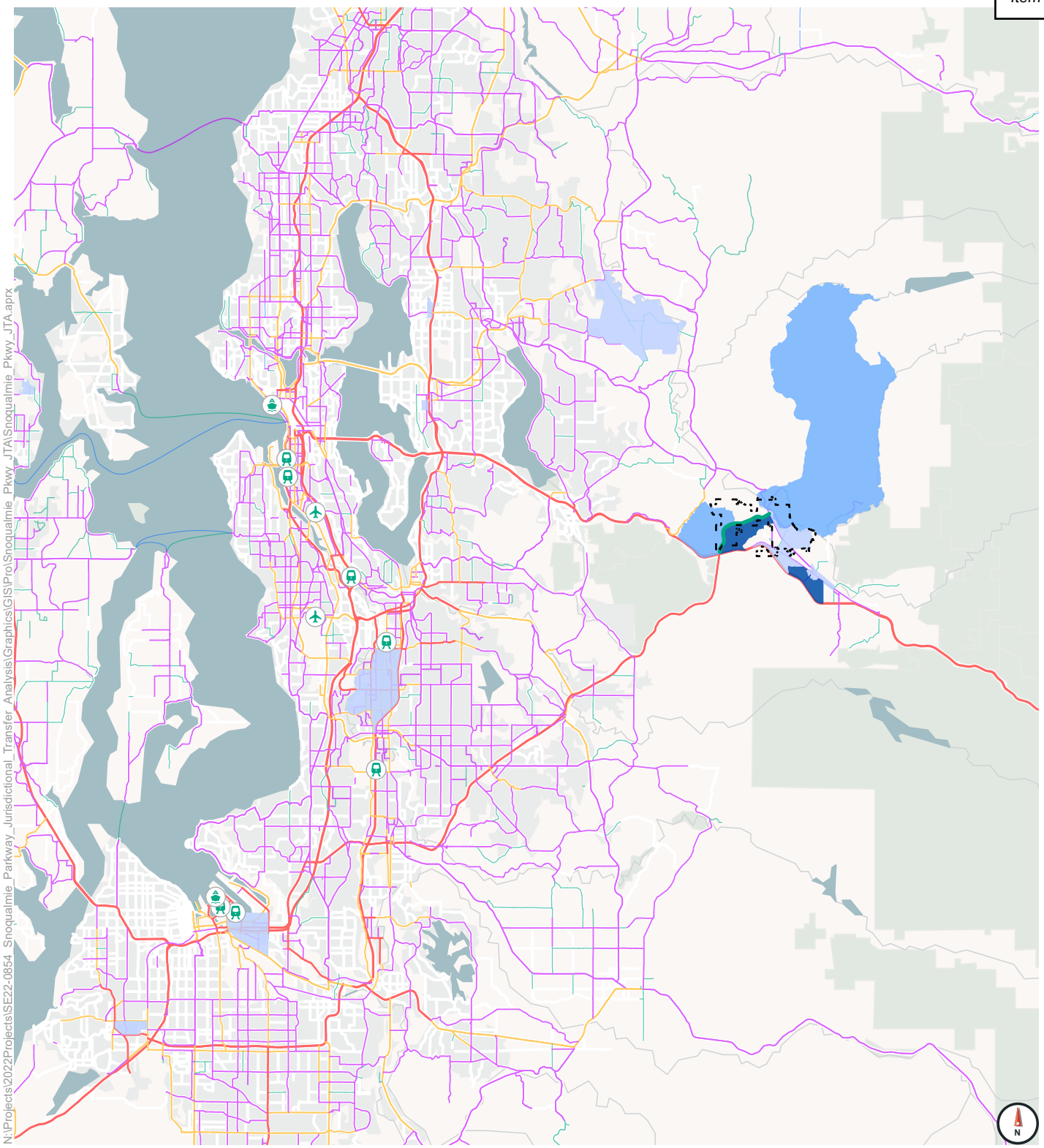


Figure 2

Regional Freight Significance of Snoqualmie Parkway
Top Truck Origin Locations

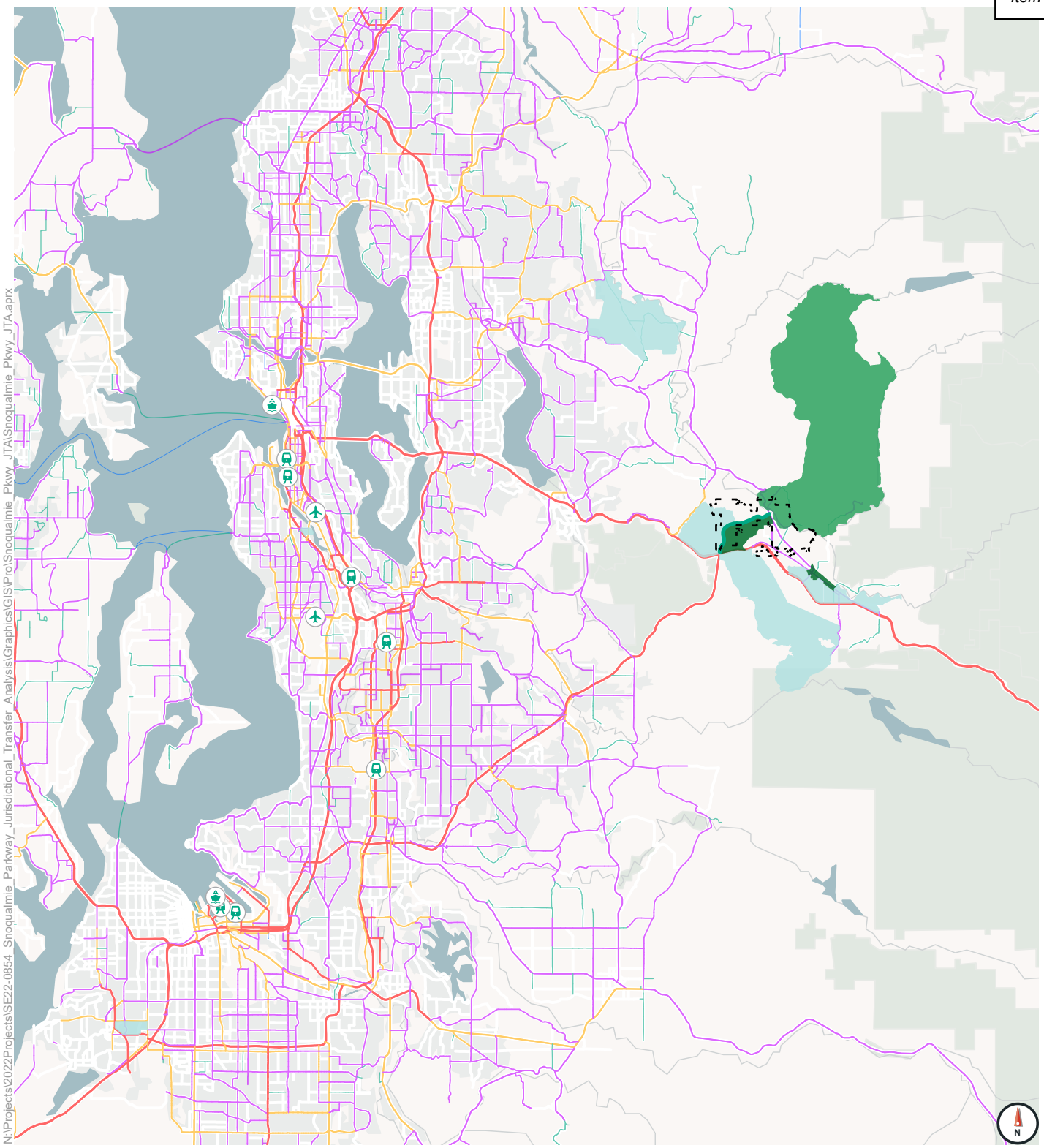


Figure 3

Regional Freight Significance of Snoqualmie Parkway
Top Truck Destination Locations

RCW 47.17.001 (3c)

Snoqualmie Parkway also meets the criterion described under **RCW 47.17.001 (3c)** for jurisdiction transfer from the city to WSDOT. As illustrated in **Figure 1**, the southern terminus of the highway is directly connected to SR 18; therefore, the highway serves as a natural extension of the state highway system, linking SR 18 to SR 202 through the City of Snoqualmie, which is part of the Census Bureau's urban area designation for the greater Puget Sound Region.

RCW 47.17.001 (3d)

To discuss the relevance of criteria **RCW 47.17.001 (3d)**, the project team relied on both GPS and LBS data from StreetLight Data. In addition to the truck GPS data discussed earlier, trip activity for passenger cars was compiled to obtain a comprehensive picture of traffic on Snoqualmie Parkway. Similar to the truck data, the passenger-car data included all-day trip activity for all days of the week during the months of July and August in 2021. Passenger cars accessing Snoqualmie Parkway have a geographic coverage that extends throughout the Puget Sound region. Approximately two-thirds of the total passenger-car trips are regional in nature; the trips have an origin or destination beyond city limits. Approximately 23 percent of passenger-car trips have an origin or destination more than 5 miles away from Snoqualmie Parkway and about 17 percent more than 10 miles away. The top routes for these regional passenger-car trips include Interstate 90 and SR 202.

As highlighted earlier under **RCW 47.17.001 (2a)**, Snoqualmie Parkway plays a critical role in facilitating freight and goods movement. 85 percent of trucks accessing Snoqualmie Parkway are regional in nature, and 34 percent neither originate nor have destinations within city limits, thus only using Snoqualmie Parkway as a connecting link between other state highways. Looking at both passenger-car and truck trips, it is evident that Snoqualmie Parkway serves regionally oriented through traffic.

Conclusion

Based on the travel pattern data reviewed against the guidelines outlined in RCW 47.17, it is evident that there is justification for a jurisdictional transfer from the City of Snoqualmie to WSDOT. Specifically, as it relates to the criteria described in RCW 47.17.001, Snoqualmie Parkway is a designated T-3 freight corridor that is part of an integrated Freight and Goods Transportation System (FGTS) and carries more than three hundred thousand tons of freight per year between resource extraction sites and regional manufacturing and industrial centers and the Port of Tacoma. Additionally, the highway is a natural extension of SR 18 through Snoqualmie, forming an integrated system of state highways SR 202 to I-90, SR 169, SR 516, SR 164, SR 167, and I-5. Snoqualmie Parkway also serves regionally oriented traffic from the greater Snoqualmie/North Bend area. One-third of truck trips on Snoqualmie Parkway are pass-through trips to and from other parts of the Puget Sound region, and only 15 percent of all truck trips utilizing Snoqualmie

Parkway have an origin-destination pair within the City of Snoqualmie. Furthermore, two-thirds of the total passenger-car trips are regional in nature; the trips have an origin or destination beyond city limits, accessed using other state highways – primarily I-90 and SR 202. Approximately 23 percent of these trips have an origin or destination more than 5 miles away from Snoqualmie Parkway and about 17 percent more than 10 miles away.

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES
Contract Title: Snoqualmie Parkway Rehabilitation

THIS AGREEMENT made and entered into by and between the CITY OF SNOQUALMIE, a Washington municipal corporation (the "City"), and KPG Psomas Inc., a Washington State corporation ("Consultant") is dated this ____ day of _____ 2022.

Consultant Business: KPG Psomas Inc.
Consultant Address: 3131 Elliott Ave Suite 400, Seattle, WA 98121

Consultant Phone: 206-286-1640

Consultant Fax: N/A
Contact Name: Kelsey Anderson
Contact e-mail:kelsey@kpg.com
Federal Employee ID No.: 95-2863554

Authorized City Representative for this contract: Jeff Hamlin, Department Director

WHEREAS, the City desires to perform pavement rehabilitation, ADA upgrades, channelization and traffic signal restoration on the Snoqualmie Parkway; and

WHEREAS, public convenience and necessity require the City to obtain the services of a consultant with expertise in the area of transportation and traffic engineering; and

WHEREAS, the City finds that Consultant is qualified to perform and is experienced in performing the required services; and

WHEREAS, the city desires to engage the Consultant to produce bid-ready documents for the completion of said work.

NOW, THEREFORE, the parties herein do mutually agree as follows:

1. Employment of Consultant.

A. The City retains the Consultant to provide the services described in "Exhibit A" (the "Work"). Any inconsistency between this Agreement and the Scope of Work shall be resolved in favor of this Agreement. The Consultant shall perform the Work according to the terms and conditions of this Agreement.

B. The City may revise the Work and the compensation only by a written Change Order signed by the authorized City representative that shall become a part of this Agreement.

C. The project manager(s) of the Work shall be Kelsey Anderson. The project manager(s) shall not be replaced without the prior written consent of the City.

D. Work shall commence when the City issues a notice to proceed and it shall be completed no later than October 31, 2023, unless the completion date is extended in writing by the City.

2. Compensation.

A. The total compensation to be paid to Consultant, including all services and expenses, shall not exceed $320,426.00 as shown on Exhibit B, which shall be full compensation for the Work. Consultant shall notify the City when its requests for payment reach eighty-five percent of the total compensation.

B. The Consultant shall be paid in such amounts and in such manner as described in Exhibit B.

C. Consultant shall be reimbursed for Eligible Expenses actually incurred. "Eligible Expenses" means those types and amounts of expenses that are approved for reimbursement by the City in writing before the expense is incurred. If travel and/or overnight lodging is authorized, Consultant shall lodge within the corporate limits of City.

3. Request for Payment.

A. Not more than once every thirty days the Consultant shall file its request for payment, accompanied by evidence satisfactory to the City justifying the request for payment, including a report of Work accomplished and tasks completed, and an itemization of Eligible Expenses with copies of receipts and invoices.

B. All requests for payment should be sent to

City of Snoqualmie
Attn: Jeff Hamlin
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

4. Work Product.

A. The Consultant shall submit all reports and other documents specified in Exhibit A according to the schedule established in Exhibit A. If, after review by the City, the information is found to not meet the standard of care for similar professional services , Consultant, at its expense, shall expeditiously correct such substandard work. If Consultant fails to correct substandard work, the City may withhold from any payment due an amount that the City reasonably believes will equal the cost of correcting the work.

B. All reports, drawings, plans, specifications, and intangible property created in furtherance of the Work, and any intellectual property in such documents, are property of the City and may be used by the City for any purpose; provided that re-use without Consultant's permission shall be at the City's sole risk.

5. Termination of Contract. City may terminate this Agreement by sending a written notice of termination to Consultant ("Notice") that specifies a termination date ("Termination Date") at least fourteen (14) days after the date of the Notice; provided, however, that in the event of a material breach of this Agreement by Consultant, termination may be effective immediately or upon such date as determined by the City in its sole discretion. For purposes of this Agreement, "material breach" is defined as misfeasance, malfeasance or violation of any criminal law, ordinance or regulation.. Upon receipt of the Notice, the Consultant shall acknowledge receipt to the City in writing and immediately commence to end the Work in a reasonable and orderly manner. Unless terminated for Consultant's material breach, the Consultant shall be paid or reimbursed for all hours worked and Eligible Expenses incurred up to the Termination date, less all payments previously made; provided that work performed after date of the Notice is reasonably necessary to terminate the Work in an orderly manner. The Notice may be sent by any method reasonably believed to provide Consultant actual notice in a timely manner

6. Assignment of Contract – Subcontractors. Consultant shall not assign this contract or sub-contract or assign any of the Work without the prior written consent of the City.

7. Indemnification.

A. To the extent provided by law and irrespective of any insurance required of the Consultant, the Consultant shall defend and indemnify the City from any and all Claims arising out of or in any way relating to this Agreement; provided, however, the requirements of this paragraph shall not apply to that portion of such Claim that reflects the percentage of negligence of the City compared to the total negligence of all persons, firms or corporations that resulted in the Claim.

B. Consultant agrees that the provisions of this paragraph 7 apply to any claim of injury or damage to the persons or property of consultant's employees. As to such claims and with respect to the City only, consultant waives any right of immunity, which it may have under industrial insurance (Title 51 RCW and any amendment thereof or substitution therefore). THIS WAIVER IS SPECIFICALLY NEGOTIATED BY THE PARTIES AND IS SOLELY FOR THE BENEFIT OF THE CITY AND CONSULTANT.

C. As used in this paragraph: (1) "City" includes the City's officers, employees, agents, and representatives; (2) "Consultant" includes employees, agents, representatives sub-consultants; and (3) "Claims" include, but is not limited to, any and all losses, claims, causes of action, demands, expenses, attorney's fees and litigation expenses, suits, judgments, or damage arising from injury to persons or property caused by the negligent, reckless, or willful acts or omissions of Consultant.

D. Consultant shall ensure that each sub-consultant shall agree to defend and indemnify the City to the extent and on the same terms and conditions as the Consultant pursuant to this paragraph.

8. Insurance.

A. Consultant shall comply with the following conditions and procure and keep in force at all times during the term of this Agreement, at Consultant's expense, the following policies of insurance with companies authorized to do business in the State of Washington. The Consultant's insurance shall be rated by A. M. Best Company at least "A" or better with a numerical rating of no less than seven (7) and otherwise acceptable to the City.

1. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance with limits not less than $1,000,000 per occurrence. If the City authorizes sublet work, the Consultant shall require each sub-consultant to provide Workers' Compensation Insurance for its employees, unless the Consultant covers such employees.
2. Commercial General Liability Insurance on an occurrence basis in an amount not less than $1,000,000 per occurrence and at least $2,000,000 in the annual aggregate, including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.
3. Business Automobile Liability Insurance in an amount not less than $1,000,000 per occurrence, extending to any automobile used by Consultant in the course of the Work. A statement by Consultant and approved by the City Administrator, certifying that no vehicle will be used in accomplishing this Agreement, may be substituted for this insurance requirement.

4. Professional Errors and Omissions Insurance in an amount not less than $1,000,000 per claim and $1,000,000 in the annual aggregate. Coverage may be written on a claims made basis; provided that the retroactive date on the policy or any renewal policy shall be the effective date of this Agreement or prior, and that the extended reporting or discovery period shall not be less than 36 months following expiration of the policy. The City may waive the requirement for Professional Errors and Omissions Insurance whenever the Work does not warrant such coverage or the coverage is not available.
5. Each policy shall contain a provision that the policy shall not be canceled without 30 days prior written notice to the City or 10 days' notice for cancellation due to non-payment of premiums.

Upon written request to the City, the insurer will furnish, before or during performance of any Work, a copy of any policy cited above, certified to be a true and complete copy of the original.

B. Before the Consultant performs any Work, Consultant shall provide the City with a Certificate of Insurance acceptable to the City Attorney evidencing the above-required insurance and naming the City of Snoqualmie, its officers, employees and agents as Additional Insured on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on behalf of such Additional Insured. Receipt by the City of any certificate showing less coverage than required is not a waiver of the Consultant's obligations to fulfill the requirements.

C. Consultant shall comply with the provisions of Title 51 of the Revised Code of Washington before commencing the performance of the Work. Consultant shall provide the City with evidence of Workers' Compensation Insurance (or evidence of qualified self-insurance) before any Work is commenced.

D. In case of the breach of any provision of this section, the City may provide and maintain at the expense of Consultant insurance in the name of the Consultant and deduct the cost of providing and maintaining such insurance from any sums due to Consultant under this Agreement, or the City may demand Consultant to promptly reimburse the City for such cost.

9. Independent Contractor. The Consultant is an independent Contractor responsible for complying with all obligations of an employer imposed under federal or state law. Personnel employed by Consultant shall not acquire any rights or status regarding the City.

10. Employment. The Consultant warrants that it did not employ or retain any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement or pay or agree to pay any such company or person any consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right either to terminate this Agreement without liability or to deduct from the Agreement price or consideration or to otherwise recover, the full amount of such consideration.

11. Audits and Inspections. The Consultant shall make available to the City during normal business hours and as the City deems necessary for audit and copying all of the Consultant's records and documents with respect to all financial matters covered by this Agreement.

12. City of Snoqualmie Business License. Consultant shall obtain a City of Snoqualmie business license before performing any Work.

13. Compliance with Federal, State and Local Laws. Consultant shall comply with and obey all federal, state and local laws, regulations, and ordinances applicable to the operation of its business and to its performance of the Work.

14. Waiver. Any waiver by the Consultant or the City of the breach of any provision of this Agreement by the other party will not operate, or be construed, as a waiver of any subsequent breach by either party or prevent either party from thereafter enforcing any such provisions.

15. Complete Agreement. This Agreement contains the complete and integrated understanding and agreement between the parties and supersedes any understanding, agreement or negotiation whether oral or written not set forth herein.

16. Modification of Agreement. This Agreement may be modified by a Change Order as provided in Paragraph 1, or by a writing that is signed by authorized representatives of the City and the Consultant.

17. Severability. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void, insofar as it is in conflict with said laws, the remainder of the Agreement shall remain in full force and effect.

18. Notices.

A. Notices to the City of Snoqualmie shall be sent to the following address:

City of Snoqualmie
Attn: Jeff Hamlin
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

B. Notices to the Consultant shall be sent to the following address:

KPG Psomas
Attn: Kelsey Anderson
3131 Elliott Ave.
Suite 400
Seattle, WA 98121

19. Venue. This Agreement shall be governed by the law of the State of Washington and venue for any lawsuit arising out of this Agreement shall be in King County.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date first above written.

	CONSULTANT: Please fill in the spaces and sign in the box appropriate for your business entity.
CITY OF SNOQUALMIE, WASHINGTON By:_____ Its: Mayor Date:_____	Corporation KPG Psomas Inc. By:_____ Typed/Printed Name:_____ Its: _____ Date:_____
ATTEST: Reina McCauley, Deputy City Clerk Date:	
APPROVED AS TO FORM:	

Anna Astrakan, Deputy City Attorney
Bob C. Sterbank, City Attorney
Date:_____

Exhibit A

Scope of Work

EXHIBIT B

COMPENSATION

EXHIBIT A

CITY OF SNOQUALMIE

SNOQUALMIE PARKWAY REHABILITATION PROJECT

PRELIMINARY AND FINAL DESIGN SERVICES

PROJECT NO. 09SNO01XXXXX

SCOPE OF WORK

August 30, 2022

A. PROJECT DESCRIPTION / BACKGROUND

Snoqualmie Parkway is a four-lane boulevard/arterial. The project limits extend from approximately 50 LF south of SE 99th St intersection to the southwest side of the railroad crossing train tracks at the SR-202 (Railroad Ave) signalized intersection. The project length is approximately 18,150 LF along centerline, or 3.44 roadway miles. There are seven signalized intersections and an additional ten non-signalized intersections and driveway entrances onto the Parkway within the project limits. The asphalt has aged to varying degrees of deterioration and needs rehabilitation. ADA ramps and push buttons that are within grind and overlay limits that do not meet current ADA requirements will be identified and replaced or documented to maximum extent feasible, as required. Traffic Loops will need to be replaced in accordance with King County Standards.

This project has State Funds for both design and construction from the State's Move Ahead Washington (MAW) Capital Projects Program and the City of Snoqualmie.

The goal is to advertise the Project for Bids in February 2023.

B. ASSUMPTIONS

The following are project assumptions:

- This project will not make changes to the vehicle signals within the corridor. The only impact will be in-kind signal loop replacement. During construction, signals will be placed on designated timers and controlled by King County. This scope does not include temporary video detection design.
- Project pavement grind and overlay rehabilitation limits will stop at the southwest side of the train tracks and Railroad Crossing at the SR-202 (Railroad Ave) Intersection.
- Design and construction activity for pavement grind and overlay rehabilitation shall remain between curb to curb and/or edge of pavement when no curb and sidewalk present.
- WSDOT Channelization Plans adhering to NW Region Channelization Checklist will not be required for this Project.
- The City will provide final typical section including depth, grade, and paving section for this project utilizing existing as built information and visual surface inspection. A pavement design analysis, pavement cores, and deliverable geotech report are not included in this project scope.
- The City will create and coordinate all public outreach efforts for this project.
- The City will create and coordinate all franchise utility efforts for this project.

- Horizontal and vertical datums utilized will be NAD83/2011 and NAVD88 respectively.
- The City will coordinate all efforts for WSDOT approval of the contract documents.
- If this Project scope stays within mill and overlay, it does not count as replaced impervious surface. If the project results in 2,000 sf or more of replaced impervious surface with replaced subgrade, then a full drainage review is required and a technical memo will be completed per the 2011 Snoqualmie Addendum to the 2009 adopted King County Stormwater Design Manual. A stormwater evaluation and technical memo are not included in this scope of work.

C. KPG PSOMAS DELIVERABLES

Deliverables prepared by the Consultant are identified at the end of each work element.

D. CITY OF SNOQUALMIE PROVIDED ITEMS:

The City of Snoqualmie will provide / prepare the following:

- Traffic Counts, or other existing information available
- Any adjacent development permits, plans, consultations, reports available through public records.
- Submittal reviews, comments, and approvals (one (1) compiled set per submittal)
- As-built plans, GIS maps, or other existing mapping available
- Boiler plate specifications (word format)

E. SCOPE OF WORK

WORK ELEMENT 1 – MANAGEMENT / COORDINATION / ADMINISTRATION

1.1. The Consultant will provide continuous project management for the project duration through the final design phase (estimate 8 months) and will prepare and update the project schedule using Microsoft Project (estimate 2 updates).

1.2. The Consultant will provide continuous management and administration of all subconsultants included in this scope of work.

1.3. The Consultant will set-up and facilitate monthly check-in meeting between KPG Psomas, City staff, and subconsultant using Microsoft Teams (estimate 8 meetings).

1.4. The Consultant will provide quality assurance / quality control (QA/QC) reviews of all work products and ensure the project meets City guidelines prior to submittal for City review.

Work Element 1 Deliverables:

- *Monthly Progress Reports*

- *Monthly Invoices*
- *Critical Path Project Schedule (Anticipated Ad Feb 2023) (Electronic PDF)*

WORK ELEMENT 2 – SURVEY AND BASE MAPPING

2.1. The Consultant will provide mapping work to prepare 1"=20' topographic base map and digital terrain model (DTM) in AutoCAD Civil 3D format of the project within the limits described below. The survey will be oriented to horizontal and vertical datums of NAD83/2011 and NAVD88 respectively.

- The survey base mapping limits shall include ADA facilities within the signal and non-signalized intersections from the curb radius returns along existing curb to the back of sidewalk or facility to capture all existing and proposed ADA modifications and documentation. Mapping shall extend up to 50 feet past each existing facility within sidewalk or shoulder to ensure drainage concerns and tie-ins are properly addressed. The existing vehicle lane widths and channelization configuration, utility castings in overlay limits, and loops and junction boxes for loops shall be incorporated using GIS data and field measurement verification.

- The Following items shall be mapped during field survey:
  - Curbs, edge of pavement and flow line
  - Face of walk and back of walk
  - Curb ramps
  - Utility castings in sidewalk and ramps
  - Driveways, stairs, bus shelters, utility poles, and other visible features in sidewalk and radius returns
  - Signal poles and cross arms, push button and pedestals
  - Trees (greater than 8" DBH) within the limits of work
  - Utility locates shall be mapped – per private utility locate consultant from curb to back of walk

- The Intersections to be survey mapped include:
  - SE Jacobia St / Snoqualmie Parkway (Signalized) – 8 ramps
  - SE Swenson Dr / Snoqualmie Parkway (Signalized) – 8 ramps
  - SE Douglas St/Douglas Ave SE / Snoqualmie Parkway (Signalized) – 8 ramps
  - SE Center St/Center Blvd SE / Snoqualmie Parkway (Signalized) – 8 ramps
  - Fairway Ave SE / Snoqualmie Parkway (Signalized) – 4 ramps
  - Fisher Ave SE / Snoqualmie Parkway (Non-Signalized) – 8 ramps
  - Orchard Ave SE / Snoqualmie Parkway (Non-Signalized) – 3 ramps
  - Allman Ave SE / Snoqualmie Parkway (Non-Signalized) – 4 ramps
  - Better Way SE / Snoqualmie Parkway (Signalized) – 8 ramps
  - Railroad Ave/SR202 / Snoqualmie Parkway – NW and SW curb returns only. (Signalized) - (3 ramps outside limits)

- One-foot contours generated from the DTM.

Work Element 2 Deliverables:

- *Electronic basemap in KPG AutoCAD Civil 3D 2022 format*

WORK ELEMENT 3 – PRELIMINARY OVERLAY DESIGN

3.1. The Consultant shall prepare Project Prospectus documentation required per the Lag Manual Chapter 21. City will submit documentation and coordinate with WSDOT Local Programs.

3.2. The Consultant will perform a background review of all existing information along the corridor including but not limited to, traffic counts, adjacent parcel development plans, and record drawings of Snoqualmie Parkway. Existing information will be incorporated into Plans and work approach, as feasible.

3.3. Field verify pavement rehabilitation grind and overlay limits and potential pavement repair areas, lane widths and scope with City Staff. (assume 1 visit to document pavement grind and overlay limits, castings, and channelization review and 1 visit for traffic loops review to create base maps from GIS and Aerials)

3.4. Prepare 60% Plans, Specifications, and Engineer's Cost Estimate for **Overlay Design**. The 60% Plans will be formatted to provide sufficient detail for convenient field layout of all proposed improvements and will set the horizontal project envelope baseline. The project basemap will be produced from GIS, Aerials, and site visit inspection and measurements. City Standard Details and WSDOT Standard Plans will supplement the project specific details as required. Plans will include:

- Title and Index sheet with a vicinity map (1 sheet)
- Legends, Abbreviations, Survey Control and General Notes (4 sheets)
- Typical Sections and Details (2 sheets)
- Temporary Erosion and Sediment Control (TESC) Plan & Details (2 sheets)
- Roadway, Loops, and Channelization Plans (15 sheets) – 40 scale
- Signal Loop Details (Loop replacements) (2 sheets)
- Temporary Traffic Control Plans (6 sheets) – 40 scale

32 Total Sheets

Assumptions:

- *Aerial, GIS, and Field visit measurements are adequate to layout the overlay limits and does not require survey basemapping and vertical datum values.*
- *Survey basemapping in Work Element 2 will be used for any ADA and intersection modifications.*

Work Element 3 Deliverables:

- *60% Submittal: Half-size (11"x17") Plans, Specifications, and Engineer's Construction Cost estimate (Electronic PDF)*
- *Project Prospectus per Lag Manual Ch 21*

WORK ELEMENT 4 – ENVIRONMENTAL PERMITTING

4.1. The Consultant and their subconsultant ESA will provide support, exhibits, and coordination efforts to prepare cultural resources review and define the proposed Area of Potential Effects (APE). ESA will also prepare and Inadvertent Discovery Plan (IDP) that will address the procedures if cultural resources are disturbed during project construction.

- The Cultural Resources Literature Review will document the existing conditions and potential for Historic Properties (i.e., NRHP-eligible archaeological sites, historic buildings/structures, and Traditional Cultural Properties) within the proposed APE, incorporate results of background archival research, and provide recommendations regarding further cultural resources that may be required for compliance with state and federal law.
- The Cultural Resources Literature Review and IDP will be included as part of the SEPA submittal in addition to submittal to the Washington State Department of Archaeology and Historic Preservation (DAHP).

Assumptions:

- *Delineation of wetland or stream features is not included in this scope.*
- *Surveys for fish, wildlife, or rare plants are not included in this scope.*
- *The project will not result in impacts to the critical areas and therefore no mitigation will be required.*
- *There will be no ROW take or expansion of the roadway and no modification of riparian vegetation.*
- *The project will not increase pollution generating impervious surfaces or modify the stormwater treatment system.*
- *No archaeological site/isolate forms, or Historic Property Inventory Forms will be needed or prepared and is not part of this scope. The APE will not include any buildings or structures that are already or will be 45 years or older at the time of project construction. If ESA determines that historic buildings or structures are present within the APE, an amendment will be required to document and record the buildings/structures on Historic Property Inventory Forms.*
- *Unless otherwise stated, the SEPA lead agency (City) will provide coordination with DAHP for project set up in the WISAARD system.*
- *Floodplain analysis will not be required as the project will not generate additional fill within the floodplain boundary.*
- *The project is exempt from the City's Critical Area review per Municipal Code Section 19.12.040 (5).*
- *The project is exempt from the City's Shoreline requirements per Chapter 19.08.65(A), This section references RCWs 90.58.355 (3) and 90.58.356(1a) which exempt transportation maintenance projects. A development permit or variance will not be required.*
- *This project will be categorized as maintenance and therefore be exempt from minimum requirements for drainage according to the City's Stormwater Program.*

Work Element 4 Deliverables:

- *Cultural Resources Literature Review and APE Correspondence, Draft and Final (electronic PDF)*

- *Inadvertent Discovery Plan, Draft and Final (electronic PDF)*
- *On behalf of the SEPA lead agency (City), ESA can upload the Final Cultural Resources Literature Review and Inadvertent Discovery Plan to DAHP's WISAARD platform.*

WORK ELEMENT 5 – FINAL OVERLAY DESIGN

5.1. The Consultant will prepare 100% (Draft Bid) Plans, Specifications and Estimate for the **Overlay Design**. The 100% Plans will incorporate comments from the City and WSDOT 60% Submittal review. Plans will be formatted to provide sufficient detail for convenient field layout of all proposed facilities. City Standard Details and WSDOT Standard Plans will be supplemented with specific details as required. Plan information will include:

- Title and Index sheet with a vicinity map (1 sheet)
- Legends, Abbreviations, Survey Control and General Notes (4 sheets)
- Typical Sections and Details (2 sheets)
- Temporary Erosion and Sediment Control (TESC) Plan & Details (2 sheets)
- Roadway, Loops, and Channelization Plans (15 sheets) – 40 scale
- Signal Loop Details (Loop replacements) (2 sheets)
- Temporary Traffic Control Plans (6 sheets) – 40 scale

32 Total Sheets

5.2. The Consultant will prepare a WSDOT Traffic Control Plan (TCP) at 60% Submittal for the SR-202 and Snoqualmie Parkway intersection. (2 sheets – 20 scale)

5.3. The Consultant will prepare Contract Documents for Bid and upload to BXWA on behalf of the City.

Assumptions:

- *The existing roadway profile and cross section will not be modified; no profile elevation sheets will be provided.*
- *Vehicle Signal modifications will be limited to loop replacement. City and King County will coordinate traffic signals on regulated timers for Construction duration.*
- *Traffic Control and Channelization Plans that adhere to WSDOT Checklist Requirements for entire project limits will not be required and is not part of this scope besides the specific traffic control plan location described in Work Element 5.2. The City will submit Work Element 5.2 deliverable and coordinate with WSDOT for documentation review and acceptance.*

Work Element 5 Deliverables:

- *100% (Draft Bid) Check Set Submittal: Half-size (11"x17") Plans, Specifications, and Engineer's Construction Cost estimate (Electronic PDF)*
- *Contract Bid Documents: Half-size (11"x17") Plans, Specifications, and Engineer's Construction Cost estimate (Electronic PDF) and uploaded to BXWA*

- *Traffic Control Plan (11"x17") 20 scale that meets WSDOT TCP Standard for the intersection of SR-202 and Snoqualmie Parkway (Electronic PDF)*

WORK ELEMENT 6 – ADA DESIGN

6.1. The Consultant will prepare an ADA assessment worksheet evaluating each existing curb ramp and crosswalk for slope, dimensional, and pedestrian push button (PPB) compliance. This evaluation will be based on the WSDOT 2012 ADA Fieldbook Guide using the WSDOT assessment worksheet.

6.2. Prepare 60% Plans, Specifications, and Cost Estimate for **ADA Design**. The 60% Plans will be formatted to provide sufficient detail for ADA improvement baseline. City Standard Details and WSDOT Standard Plans will supplement the project specific details as required. Intersections to be evaluated that may require ADA ramp and push button modifications are noted in Work Element 2.1. If the evaluated curb ramps are within ADA compliance, outside paving limits, or not feasible for modification to the maximum extent feasible, it will be documented.

- **Work Element 6.2 assumes that 50% or 27 of the 54 existing ramps identified will require replacement and the remaining ramps will be outside paving limits or are not feasible to replace within this project scope.**

- **Work Element 6.2 assumes that 3 of the 7 signalized intersections identified in Work Element 2.1 will require all four crossing modifications to the existing pedestrian push buttons**.

6.3. The Consultant will prepare 100% (draft bid) Check Set Plans, Specifications, and Estimate for the ADA Design. The 100% Plans will incorporate comments from previous 60% submittal, as applicable. Plans will be formatted to provide sufficient detail for convenient field layout of all proposed facilities. City Standard Details and WSDOT Standard Plans will be supplemented with specific details as required. The number of ramps and pushbuttons to be replaced and included in this task is noted in Work Element 6.3. The Plan information will include:

- Intersection Plans and Details (27 curb ramps) (10 sheets) – 10 scale
- Signal Modification Plan and Details (ADA pushbutton) (6 sheets) – 10 scale

16 Total Sheets

6.4. The Consultant will prepare draft and final Maximum Extent Feasibility (MEF) documentation for ADA facilities that do not meet ADA guidelines that are within paving limits and project prospectus. Draft MEFs to be included at the 60% submittal review. Final MEFs will be included in the appendices of the Contract Document Specifications.

Assumptions:

- *Survey basemapping in Work Element 2 will be used for any ADA modifications.*

- *Final Contract Document preparation package for ADA design is combined Work Element 5.4.*
- *Signal modifications will be limited to new pedestrian push buttons (PPBs), and pedestrian heads, as needed. City and King County will coordinate traffic signals on regulated timers for Construction duration.*
- *Proposed design will be limited to the roadway prism, back of curb to back of curb, and ADA curb ramp upgrades within signalized intersections. (no additional sidewalk or driveway upgrades will be included with this project).*
- *KC Metro bus stops are not included in scope for ADA compliant landings that are outside footprint of pushbutton and ADA ramp and landing.*

Work Element 6 Deliverables:

- *Curb ramp assessment worksheet (Electronic PDF)*
- *60% Submittal: Half-size (11"x17") Plans, Specifications, and Engineer's Construction Cost estimate (Electronic PDF)*
- *100% (Draft Bid) Check Set Submittal: Half-size (11"x17") Plans, Specifications, and Engineer's Construction Cost estimate (Electronic PDF)*
- *MEF documentation per City forms, Draft and Final (Electronic PDF)*

WORK ELEMENT 7 – BID PHASE SERVICES AND SUPPORT

7.1. Consultant will assist the City Project Manager in advertisement of the contract documents.

7.2. Consultant will prepare addenda and respond to bidders questions relayed through the City. It is assumed that the Consultant will prepare up to two (2) addenda.

7.3. The Consultant will prepare Conformed Documents (to include all Project Addenda) for the City to be provided to the Contractor.

Work Element 7 Deliverables:

- *Prepare responses for up to (5) bidder questions (incl. with Addenda)*
- *Prepare up to two (2) Addendum Packages.*
- *Prepare Bid Tabulation and evaluation*
- *Conformed Documents: (5) hard copies of half-size (11x17) and Specifications, and (1) full-size (22x34) Bid Plans.*

MANAGEMENT RESERVE

Included in this Contract's Management Reserve is:

- Coordination with WSDOT for jurisdiction changes of the project limits between City of Snoqualmie and WSDOT.
- Coordination with King County if loop replacement is revised to include temporary and/or permanent video detection at signalized intersections.
- Any additional ADA ramp or pedestrian push button replacements outside the limit assumed in Work Element 6.
- Any additional services requested from the City.

The above work activities will require written authorization from City to access management reserve funds.

ADDITIONAL SERVICES

The City may require additional services of the Consultant in order to advance the project through final design and construction. This work may include items identified in the current task authorizations as well other items, which may include, but are not necessarily limited to the following:

- Additional survey.
- Geotechnical reconnaissance and investigation for pavement section considerations.
- Additional design for sidewalk, stormwater, traffic signal and illumination evaluation and design, and additional documentation for WSDOT Intersection Control Evaluation.
- Construction management and inspection services.
- Record Drawings at construction closeout.
- Any additional services requested from the City.

These services will be authorized under a future contract supplement if necessary. At the time these services are required, the Consultant shall provide a detailed scope of work and an estimate of costs. The Consultant shall not proceed with the work until the City has authorized the work and issued a notice to proceed.

EXHIBIT D
PRIME CONSULTANT COST COMPUTATIONS
Client: City of Snoqualmie
Project: Snoqualmie Parkway Rehabilitation Project
v4
DATE: August 2022

Task No.	Task Description	Labor Hour Estimate																										Total Hours and Labor Fee Estimate by Task	
		Principal	Engineering Manager	Senior Engineer	Senior Project Engineer	Project Engineer II	Project Engineer I	Design Engineer	Survey Manager	Survey Crew II (W/Equip)	Survey Crew I (W/Equip)	Project Surveyor	Senior Field Surveyor	Field Surveyor	Senior Survey Technician	Survey Technician	Survey Assistant	Urban Design Manager	Project Landscape Architect	Landscape Technician	Landscape Assistant	Senior Construction Manager	Document Control Specialist	CAD Manager	Senior CAD Technician	Business Manager	Senior Admin	Office Admin	Office Assistant		
		$285.00	$251.00	$213.00	$197.00	$172.00	$146.00	$132.00	$251.00	$249.00	$196.00	$164.00	$136.00	$124.00	$137.00	$112.00	$92.00	$200.00	$151.00	$102.00	$90.00	$245.00	$134.00	$180.00	$138.00	$178.00	$130.00	$98.00	$82.00	Hours	Fee
Task 1 - Management/Coordination/Adminstration																													
1.1	Project Management		8			16			8																				32	$ 6,768.00
1.2	Administration		2			8			2																	12	8	12	4	48	$ 7,060.00
1.3	Monthly Meetings (est 8 meetings)		8			12																								20	$ 4,072.00
1.4	Quality Assurance/Quality Control (QA/QC)			4																		8								12	$ 2,812.00
	Task Total	**0**	**18**	**4**	**0**	**36**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**12**	**8**	**12**	**4**	**112**	**$ 20,712.00**
Task 2 - Survey and Basemapping																															
2.1	Survey ADA facilities at Intersections					4			16	80		30			80															210	$ 40,504.00
	Task Total	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**16**	**80**	**0**	**30**	**0**	**0**	**80**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**210**	**$ 40,504.00**
Task 3 - Preliminary Overlay Design																															
3.1	Project Prospectus Documentation		2			12	8																							22	$ 3,734.00
3.2	Review Existing Information			4		8	8																	4	8					32	$ 5,220.00
3.3	Site Visit		4	8		20	20																							52	$ 9,068.00
3.4	60% Overlay Design		8	28		40	118																8	2	32					236	$ 37,928.00
	Task Total	**0**	**14**	**40**	**0**	**80**	**154**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**6**	**40**	**0**	**0**	**0**	**0**	**342**	**$ 55,950.00**
Task 4 - Environmental Permitting																															
4.1	Cultural Resources		2			8																								10	$ 1,878.00
	Task Total	**0**	**2**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**$ 1,878.00**
Task 5 - Final Overlay Design																															
5.1	100% PS&E for Overlay Design		8	24		32	90	16															4		4					178	$ 28,964.00
5.2	WSDOT SR-202 Intersection TC Plan			4		16	16																		4					40	$ 6,492.00
5.3	Prepare PS&E Contract Documents		4	16		24	40	8															4							96	$ 15,972.00
	Task Total	**0**	**12**	**44**	**0**	**72**	**146**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**8**	**0**	**0**	**0**	**0**	**314**	**$ 51,428.00**
Task 6 - ADA Design																															
6.1	Curb Ramp & Traffic Pushbutton Assessment			16		24	24																							64	$ 11,040.00
6.2	60% Preliminary ADA Design		8	32		40	140																							220	$ 36,144.00
6.3	100% PS&E for ADA Design		4	28		40	80																							152	$ 25,528.00
6.4	MEF ADA Docmentation		2			24	24																							50	$ 8,134.00
	Task Total	**0**	**14**	**76**	**0**	**128**	**268**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**486**	**$ 80,846.00**

EXHIBIT D
PRIME CONSULTANT COST COMPUTATIONS
Client: City of Snoqualmie
Project: Snoqualmie Parkway Rehabilitation Project
v4
DATE: August 2022

Task No.	Task Description	Labor Hour Estimate																										Total Hours and Labor Fee Estimate by Task	
		Principal	Engineering Manager	Senior Engineer	Senior Project Engineer	Project Engineer II	Project Engineer I	Design Engineer	Survey Manager	Survey Crew II (W/Equip)	Survey Crew I (W/Equip)	Project Surveyor	Senior Field Surveyor	Field Surveyor	Senior Survey Technician	Survey Technician	Survey Assistant	Urban Design Manager	Project Landscape Architect	Landscape Technician	Landscape Assistant	Senior Construction Manager	Document Control Specialist	CAD Manager	Senior CAD Technician	Business Manager	Senior Admin	Office Admin	Office Assistant	
		$285.00	$251.00	$213.00	$197.00	$172.00	$146.00	$132.00	$251.00	$249.00	$196.00	$164.00	$136.00	$124.00	$137.00	$112.00	$92.00	$200.00	$151.00	$102.00	$90.00	$245.00	$134.00	$180.00	$138.00	$178.00	$130.00	$98.00	$82.00	Hours	Fee
Task 7 - Bid Phase Services & Support																													
7.1	Assist Project Advertisement		2	2		2																	4							10	$ 1,808.00
7.2	Prepare Addenda (assume 2)		2			10																								12	$ 2,222.00
7.3	Prepare Conformed Documents		2			4																						6		12	$ 1,778.00
	Task Total	**0**	**6**	**2**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**6**	**0**	**34**	**$ 5,808.00**
	Total Labor Hours and Fee	**0**	**66**	**166**	**0**	**344**	**568**	**24**	**26**	**80**	**0**	**30**	**0**	**0**	**80**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**20**	**6**	**48**	**12**	**8**	**18**	**4**	**1,508**	**257,126.00**
Subconsultants																															
																													ESA (Environmental Permitting)		$ 10,000.00
																													Subtotal	$ 10,000.00
																													Total Subconsultant Expense	**$ 10,000.00**
Reimbursable Direct Non-Salary Costs																															
																													Utility Locates	$ 2,500.00
																													Mileage at current IRS rate	$ 300.00
																													Reproduction Allowance	$ 500.00
																													Total Reimbursable Expense	**$ 3,300.00**
Management Reserve																															
																														$ 50,000.00
																													Management Reserve	**$ 50,000.00**
																													Total Estimated Budget	**$ 320,426.00**

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-138
September 26, 2022
Discussion

AGENDA BILL INFORMATION

TITLE:	AB22-138: Community Center Expansion Project -- Alternative Public Works Contracting Options	☒ Discussion Only ☐ Action Needed:
PROPOSED ACTION:	N/A. Discussion only.	☐ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	9/16/2022
	Finance	Choose an item.	Click or tap to enter a date.
	Legal	Bob Sterbank	9/16/2022
	City Administrator	Mike Sauerwein	9/16/2022

DEPARTMENT:	Legal		
STAFF:	Bob C. Sterbank, City Attorney		
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022	
MEMBERS:	Bryan Holloway	Jo Johnson	Ethan Benson
EXHIBITS:	N/A.		

AMOUNT OF EXPENDITURE	$ n/a
AMOUNT BUDGETED	$ n/a
APPROPRIATION REQUESTED	$ n/a

SUMMARY

INTRODUCTION

This agenda bill provides an introductory discussion concerning available alternative public works contracting options available to the City for design and construction of the Community Center Expansion Project.

LEGISLATIVE HISTORY

Resolution No. 1508, adopted August 12, 2019.

Res. No. 1508 authorized and requested that the Mayor and Administration refine the proposed Snoqualmie Community Center expansion project, and present to the City Council recommendations for action on certain identified subjects, including identification of project partners, *e.g.*, YMCA of Greater Seattle, Snoqualmie Valley School District No. 410 ("School District") and/or the Si View Metropolitan Park District ("Park District"), along with the type and general parameters of any contracts, operating agreements or such other legal documents needed to memorialize partners' participation.

Resolution No. 1520, adopted October 14, 2019.
In Res. No. 1520, the City Council formally declined the Si View Park District's proposal for City of Snoqualmie participation in a proposed Si View Park District aquatics facility, due to the substantial project cost of the proposed aquatics facility and need for additional property tax increases on City of Snoqualmie taxpayers. Res. No. 1520 also renewed the City Council's request for development of options for a six-lane pool and presentation to the Council of recommendations for action on components outlined in Res. No. 1508.

BACKGROUND
For a number of years, the City of Snoqualmie has been considering expansion of the Community Center with a pool and related improvements. Through the resolutions described above, in late 2019 the Council outlined a path forward and sought additional analysis, options and recommendations from the Administration. The onset of the COVID-19 pandemic a short brought active planning for Community Center expansion to a halt for several years.

At the 2022 City Council retreat, the Council identified the Community Center expansion project as a priority. The Council also included the Community Center Expansion Project (Project ID No. FAC21001CIP) in the 2023-2028 Capital Improvement Plan with an identified budget of $29.8 million for a 24,000 square-foot expansion with an aquatic center with six-lane lap pool, expanded cardio center, improved locker rooms, a common use space, additional community meeting rooms, and additional office space.

ANALYSIS
"Public Work" Bid Requirements.
Under Washington law, any "work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the state or of any municipality," or which by law constitutes a lien or charge on any municipal property, constitutes a "public work." Typically, a "public work" must first be designed by an architect or engineer selected through a statutorily-specified process. Likewise, construction of "public work" projects are subject to several statutory requirements, primarily, the requirement that a "public work" project with an estimated cost in excess of $350,000 must be performed by contract. Generally speaking, by statute, the design and proposed construction contract for a "public work" must be publicly bid, and the contract for construction awarded to the lowest responsible, response bidder. This process is referred to as the "design/bid/build" process for a "public work."

Exceptions to Bid Requirements – Lease / Lease Back
There are certain exceptions to the design/bid/build requirements. One exception, the "lease / lease back" option, allows a city or town desiring to acquire a building to lease city-owned land for a term not to exceed fifty years, and then lease the newly-constructed building back over the same term. The existing Snoqualmie Community Center was originally constructed using this method. A city may purchase the building at the end of the lease term, or may accelerate the lease by essentially pre-paying purchasing the building and land. The statute requires that "[a] lease and lease back agreement requiring a lessee to build on city or town property shall be made pursuant to a call for bids upon terms most advantageous to the city or town," although this terminology has typically been interpreted as allowing a city some flexibility in selecting a proposed builder/lessee, rather than requiring award to a lowest bidder.

The lease / lease back statute also requires, however, that "No part of the cost of construction of the building shall ever be or become an obligation of the city or town," which means that the lessee must typically bear most construction cost risks. This can affect who and how many builders respond to a lease / lease back proposal, and who may be able to successfully negotiate a contract meeting the statute's requirements. Additional complications can result from circumstances where existing buildings stand on property to be leased, and the buildings themselves have existing tenants with ongoing operations, as is the case with the Community Center and its existing operator (YMCA). In addition, tax-exempt bond limitations on private use

can limit or preclude use of the lease / lease back option if facility expansion is expected to be financed with tax-exempt bonds, or if the public agency desires to retain the option of future use of tax-exempt bond financing at some point during the project.

Exceptions to Bid Requirements – Alternative Public Works Contracting Methods in Ch. 39.10 RCW.
Other exceptions to a traditional design/bid/build process are provided by the "alternative public works contracting" methods outlined in state statute, Chapter 39.10 RCW. These alternative methods are described primarily as the "design-build" and "general contractor construction manager" ("GCCM") methods.

Under a design-build approach, a city would advertise for proposals and select a single entity to both design and build the project. The design-builder is selected based on qualifications and scoring against criteria identified in the request for a proposal, and the city would then negotiate a contract with the selected design-builder, based on terms that are acceptable to the city. If the city is unable to execute a contract with the finalist submitting the highest scored proposal, negotiations with that finalist may be suspended or terminated and negotiations begun with the next highest scored finalist, continuing with this procedure until a contract agreement is reached or the selection process is terminated. Overall, this process provides considerably more flexibility than the traditional design/bid/build, or a lease / lease back process, greater control over risk allocation, which typically also results in greater total design/construction cost certainty.

The GCCM process is similar to the design-build, except that before inviting a GCCM proposal, a city typically has some or all of design work completed by the city's own architect/ engineer/design team, before inviting proposals from interested contractors. The invitation for proposals must include an estimated "maximum allowable construction cost," or "MACC." Like a design-builder, a GCCM contractor is selected first based on qualifications, which include experience and technical competence of key personnel; past performance with negotiated or similarly complex projects; the proposer's capacity to perform the work; the scope of work the firm proposes to self-perform and its past performance of that scope of work; and the proposer's approach to executing the project, including ability to meet the project time and budget requirements. Using these qualifications, the city selects finalists, who then must submit proposals that include a sealed bid with a proposed contractor fee, expressed as a percentage of the project's MACC. The public body shall select the firm submitting the highest scored final proposal using the evaluation factors and the relative weight of factors published in the public solicitation of proposals. As with design-build, once a preferred GCCM candidate is selected, the city then negotiates a contract with the selected proposer to arrive at a final negotiated MACC, along with the fixed amount for the detailed specified general conditions work, negotiated support services, and the percent fee on the negotiated maximum allowable construction cost. If the city is unable to negotiate a satisfactory MACC within available funds with the selected firm, negotiations are formally terminated and negotiations begin with the next highest scored firm.

Use of Alternative Public Works Contracting Methods Requires State Approval.
When alternative public works methods were first allowed in Washington State by statute in the early 2000s, only the State, the University of Washington, and certain large counties and cities were able to use these alternative methods, and only for specified types of projects that exceeded certain price thresholds. Gradually, the Legislature loosened these restrictions, finally making the alternative methods generally permanently available to all public bodies in Washington in 2019.

However, a public body that has not previously utilized an alternative method must first apply to a State committee, the Project Review Committee ("PRC") of the State Capital Projects Advisory Review Board ("CPARB"). To obtain PRC approval, a city must first receive approval from the PRC for a specific, identified project, and then demonstrate successful completion of that project. The city may thereafter apply for and

obtain PRC approval to generally use alternative methods; if granted such certification is valid for a three-year term.

To obtain PRC approval process for a specified project, a city must demonstrate to the PRC that:

(a) the alternative contracting procedure will provide a substantial fiscal benefit or the use of the traditional method of awarding contracts in lump sum to the low responsive bidder is not practical for meeting desired quality standards or delivery schedules;
(b) The proposed project meets the requirements for using the alternative contracting procedure as described in state statutes;
(c) The public body has the necessary experience or qualified team to carry out the alternative contracting procedure including, but not limited to: (i) Project delivery knowledge and experience; (ii) sufficient personnel with construction experience to administer the contract; (iii) a written management plan that shows clear and logical lines of authority; (iv) the necessary and appropriate funding and time to properly manage the job and complete the project; (v) continuity of project management team, including personnel with experience managing projects of similar scope and size to the project being proposed; and (vi) necessary and appropriate construction budget;
(d) For design-build projects, public body personnel or consultants are knowledgeable in the design-build process and are able to oversee and administer the contract; and
(e) The public body has resolved any audit findings related to previous public works projects in a manner satisfactory to the committee.

BUDGET IMPACTS
N/A at this time. Discussion only.

NEXT STEPS

Staff will present an agenda bill for a contract for consultant services for assistance with an application for Project Review Committee approval of the use of an alternative public works method for the Community Center Expansion Project.

PROPOSED ACTION

N/A. Discussion only.

BUSINESS OF THE CITY COUNCIL
CITY OF SNOQUALMIE

AB22-139
July 25, 2022
Choose an item.

AGENDA BILL INFORMATION

TITLE:	AB22-139: Job Order Contracting Consulting Services Contract with the Gordian Group.	☐ Discussion Only ☒ Action Needed:
PROPOSED ACTION:	Move to approve the contract with The Gordian Group, Inc. for Job Order Contracting Consulting Services and authorize the Mayor to sign.	☒ Motion ☐ Ordinance ☐ Resolution

REVIEW:	Department Director/Peer	Mike Chambless	9/15/2022
	Finance	Drew Bouta	9/16/2022
	Legal	Anna Astrakhan	9/16/2022
	City Administrator	Mike Sauerwein	9/16/2022

DEPARTMENT:	Parks & Public Works	
STAFF:	Mike Chambless	
COMMITTEE:	Parks & Public Works	**COMMITTEE DATE:** September 20, 2022
MEMBERS:	Bryan Holloway Jo Johnson Ethan Benson	
EXHIBITS:	1. Agreement for Consultant Services with The Gordian Group, Inc. 2. City of Shoreline Request for Proposals RFP 9596 3. The Gordian Group Inc. Response to RFP 4. City of Shoreline Notice of Intent to Award 5. City of Shoreline Professional Services and License Agreement	

AMOUNT OF EXPENDITURE	$ 200,000
AMOUNT BUDGETED	$ 200,000
APPROPRIATION REQUESTED	$ n/a

SUMMARY

SUMMARY STATEMENT

The Gordian Group, Inc. will develop, implement and support a JOC program for the City as provided for in Chapter 39.10 RCW Alternative Public Works Contracting Procedures. The primary objectives of the JOC program are to rapidly engage contractors in the performance of small to medium sized public work projects; to reduce construction, design, and planning costs; and to develop relationships with contractors to respond to community needs more quickly and efficiently.

BACKGROUND

During the 2019 Legislative Session, Revised Code of Washington (RCW) sections 39.10.420 through 39.10.460 were amended to allow all public agencies to use Job Order Contracting (JOC) for public works projects when a determination is made that the use of job order contracts will benefit the public.

Under RCW 39.10.430, job order contracts must be awarded through a competitive process using requests for proposals. RCW 39.34.030 authorizes local government agencies to use another public agency's active contract for purchases of products and services in order to save time and obtain better prices and terms than they might be able to on their own – a process known as "piggybacking." Here, the City will piggyback on the contract awarded by the City of Shoreline after a JOC selection process. The consultant chosen through the selection process - The Gordian Group, Inc. - has successfully supported and implemented JOC programs for agencies including the City of Bellevue, Snohomish County, Port of Everett, City of Kirkland, City of Everett, and the Seattle Housing Authority.

The JOC program is anticipated to be utilized for many time-sensitive projects, including minor construction, street operations and maintenance, wastewater operations, parks, and other public works programs/projects.

ANALYSIS

The JOC provides an effective means of reducing the total lead-time and cost for public works projects by eliminating time-consuming, costly aspects of the traditional public works process.

BUDGET IMPACTS

The Administration recommends approving a contract with the Gordian Group, Inc. in an amount not to exceed $200,000 for Job Order Contracting (JOC) consulting services. The City of Snoqualmie may pay the Gordian Group, Inc. up to a total of 5.00% of the value of work ordered and 10.95% if project management services are included. This means that the City can order up to $4,000,000 in work or $1,826,484 if project management services are involved. One intent of Job Order Contracting (JOC) is to reduce construction, design, and planning costs in an amount equal to the fee imposed. Therefore, sufficient appropriation exists within the 2021-2022 Biennial Budget and in the proposed 2023-2024 Biennial Budget to fund the contract.

PROPOSED ACTION

Move to approve the Job Order Contracting Consulting Services contract with the Gordian Group, Inc. and authorize the Mayor to sign.

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES

THIS AGREEMENT made and entered into by and between the CITY OF SNOQUALMIE, a Washington municipal corporation (the "City" or "Owner"), and The Gordian Group, Inc., ("Consultant" or "Gordian") (each a "party" and collectively, the "parties") is dated this _____ day of _____2022.

Consultant Business: The Gordian Group Inc.
Consultant Address: 30 Patewood Drive,
Suite 350
Greenville, SC 29615

Contact Name: Dan Cook

Contact e-mail: d.cook@gordian.com

Federal Employee ID No.:

Authorized City Representative for this contract: Michael Chambless, Parks and Public Works Department Director

WHEREAS, the City may utilize any other government entity's open contracts that have been competitively bid and awarded in accordance with applicable laws or regulations. In response to a Request for Proposal for Job Order Contracting Consulting Services, Gordian competitively bid to provide such services to the City of Shoreline. Gordian and the City of Shoreline subsequently entered into a Contract on or about September 16th, 2020 (the "Underlying Contract").

WHEREAS, the City desires to acquire certain services set forth in the Underlying Contract in accordance with the pricing and other terms set forth in the Underlying Contract which is incorporated by reference herein and included as Exhibit A. The parties intend that this Agreement, including all additional terms stated in this Agreement that are not expressly stated in the Underlying Contract, and the underlying Contract serve as the Agreement between the parties.

WHEREAS, public convenience and necessity require the City to obtain the services of a consultant with expertise in the development, implementations and support of a Job Order Contracting ("JOC") program (the "Services).

WHEREAS, the City finds that Consultant is qualified to perform and is experienced in performing the Services.

NOW, THEREFORE, the parties herein do mutually agree as follows:

1. Employment of Consultant.

A. The City retains the Consultant to provide the services described in "Exhibit B" (the "Work"). Any inconsistency between this Agreement and the Scope of Work shall be resolved in favor of this Agreement. The Consultant shall perform the Work according to the terms and conditions of this Agreement.

B. The City may revise the Work and the compensation only by a written Change Order signed by the authorized City representative that shall become a part of this Agreement.

C. The project manager(s) of the Work shall be Dan Cook. The project manager(s) shall not be replaced without the prior written consent of the City which shall not be unreasonably withheld.

D. The City hereby retains Gordian as the City's JOC Services provider for the term commencing on the date of this Agreement and expiring 2 years after the award of the first JOC construction contract (the "Term"), unless terminated or extended as provided for herein. This Agreement may be extended for additional period of 12 months by the mutual written agreement of the parties.

2. Compensation.

A. The total compensation to be paid to Consultant, including all services and expenses, shall not exceed $200,000 as shown on Exhibit C, which shall be full compensation for the Work.

B. The Consultant shall be paid in such amounts and in such manner as described in Exhibit C. In the event that the City directs the Consultant to perform supplemental services or to repeat a service, any such additional activities will be compensated according to the schedule in Exhibit C.

C. Consultant shall be reimbursed for Eligible Expenses actually incurred. "Eligible Expenses" not included in Exhibit C, such as air travel and overnight lodging, shall be approved for reimbursement by the City in writing before the expense is incurred. If travel and/or overnight lodging is authorized, Consultant shall lodge within the corporate limits of City.

3. Request for Payment.

A. Not more than once every thirty days the Consultant shall file its request for payment, accompanied by evidence satisfactory to the City justifying the request for payment, including a report of Work accomplished and tasks completed, and an itemization of Eligible Expenses with copies of receipts and invoices.

B. All requests for payment should be sent to

City of Snoqualmie
Attn: Michael Sauerwein City Administrator
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

4. Work Product.

A. The Consultant shall submit all reports and other documents specified in Exhibit B according to the schedule established in consultation with the City once this Agreement is signed.

B. Except as otherwise provided in Exhibit D, all reports, drawings, plans, specifications, and intangible property created in furtherance of the Work, and any intellectual property in such documents, are property of the City and may be used by the City for any purpose; provided that re-use without Consultant's permission shall be at the City's sole risk.

5. Termination of Contract. City may terminate this Agreement by sending a written notice of termination to Consultant ("Notice") that specifies the reason for termination, a reasonable period to cure any alleged breaches, and the effective termination date ("Termination Date"), which shall be a

minimum of fourteen (14) days after the date of the Notice. Upon receipt of the Notice, the Consultant shall acknowledge receipt to the City in writing and immediately commence to end the Work in a reasonable and orderly manner. In the event the City exercises its right to Terminate the Agreement, the Consultant shall be paid or reimbursed for all services performed and Eligible Expenses incurred up to the Termination date, less all payments previously made; provided that work performed after date of the Notice is reasonably necessary to terminate the Work in an orderly manner. The notice shall be sent in accordance with the Notice provision of this Agreement.

6. Assignment of Contract – Subcontractors. Consultant shall not assign this contract or sub-contract or assign any of the Work without the prior written consent of the City which shall not be unreasonably withheld.

7. Indemnification.

A. To the extent provided by law and irrespective of any insurance required of the Consultant, the Consultant shall defend and indemnify the City from any and all Claims arising out of or in any way relating to this Agreement; provided, however, the requirements of this paragraph shall not apply to that portion of such Claim that reflects the percentage of negligence of the City compared to the total negligence of all persons, firms or corporations that resulted in the Claim.

B. Consultant agrees that the provisions of this paragraph 7 apply to any claim of injury or damage to the persons or property of consultant's employees. As to such claims and with respect to the City only, consultant waives any right of immunity, which it may have under industrial insurance (Title 51 RCW and any amendment thereof or substitution therefore). THIS WAIVER IS SPECIFICALLY NEGOTIATED BY THE PARTIES AND IS SOLELY FOR THE BENEFIT OF THE CITY AND CONSULTANT.

C. As used in this paragraph: (1) "City" includes the City's officers, employees, agents, and representatives; (2) "Consultant" includes employees, agents, representatives sub-consultants; and (3) "Claims" include, but is not limited to, any and all losses, claims, causes of action, demands, expenses, attorney's fees and litigation expenses, suits, judgments, or damage arising from injury to persons or property.

D. Consultant shall ensure that each sub-consultant shall agree to defend and indemnify the City to the extent and on the same terms and conditions as the Consultant pursuant to this paragraph.

8. Insurance.

A. Consultant shall comply with the following conditions and procure and keep in force at all times during the term of this Agreement, at Consultant's expense, the following policies of insurance with companies authorized to do business in the State of Washington. The Consultant's insurance shall be rated by A. M. Best Company at least "A" or better with a numerical rating of no less than seven (7) and otherwise acceptable to the City.

1. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance with limits not less than $1,000,000 per occurrence. If the City authorizes sublet work, the Consultant shall require each sub-consultant to provide Workers' Compensation Insurance for its employees, unless the Consultant covers such employees.
2. Commercial General Liability Insurance on an occurrence basis in an amount not less than $1,000,000 per occurrence and at least $2,000,000 in the annual aggregate,

including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.

3. Business Automobile Liability Insurance in an amount not less than $1,000,000 per occurrence, extending to any automobile used by Consultant in the course of the Work. A statement by Consultant and approved by the City Administrator, certifying that no vehicle will be used in accomplishing this Agreement, may be substituted for this insurance requirement.

4. Professional Errors and Omissions Insurance in an amount not less than $1,000,000 per occurrence and $1,000,000 in the annual aggregate. Coverage may be written on a claims made basis; provided that the retroactive date on the policy or any renewal policy shall be the effective date of this Agreement or prior, and that the extended reporting or discovery period shall not be less than 36 months following expiration of the policy. The City may waive the requirement for Professional Errors and Omissions Insurance whenever the Work does not warrant such coverage or the coverage is not available.

5. No policy required by this agreement shall be canceled or materially changed by either the Consultant or the Consultant's insurer without the Consultant giving at least a 30 day prior written notice to the City.

6. Upon written request to the City, the insurer will furnish, before or during performance of any Work, a copy of any policy cited above, certified to be a true and complete copy of the original.

B. Before the Consultant performs any Work, Consultant shall provide the City with a Certificate of Insurance acceptable to the City Attorney evidencing the above-required insurance and naming the City of Snoqualmie, its officers, employees and agents as Additional Insured on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on behalf of such Additional Insured. Receipt by the City of any certificate showing less coverage than required is not a waiver of the Consultant's obligations to fulfill the requirements.

C. Consultant shall comply with the provisions of Title 51 of the Revised Code of Washington before commencing the performance of the Work. Consultant shall provide the City with evidence of Workers' Compensation Insurance (or evidence of qualified self-insurance) before any Work is commenced.

9. Independent Contractor. The Consultant is an independent Contractor responsible for complying with all obligations of an employer imposed under federal or state law. Personnel employed by Consultant shall not acquire any rights or status regarding the City.

10. Employment. The Consultant warrants that it did not employ or retain any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement or pay or agree to pay any such company or person any consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right either to terminate this Agreement without liability or to deduct from the Agreement price or consideration or to otherwise recover, the full amount of such consideration.

11. Audits and Inspections. The Consultant shall make available to the City during normal business hours and as the City deems necessary for audit and copying all of the Consultant's records and documents with respect to all matters covered by this Agreement.

12. City of Snoqualmie Business License. Consultant shall obtain a City of Snoqualmie business license before performing any Work.

13. Compliance with Federal, State and Local Laws. Consultant shall comply with and obey all federal, state and local laws, regulations, and ordinances applicable to the operation of its business and to its performance of the Work.

14. Waiver. Any waiver by the Consultant or the City of the breach of any provision of this Agreement by the other party will not operate, or be construed, as a waiver of any subsequent breach by either party or prevent either party from thereafter enforcing any such provisions.

15. Complete Agreement. This Agreement contains the complete and integrated understanding and agreement between the parties and supersedes any understanding, agreement or negotiation whether oral or written not set forth herein.

16. Modification of Agreement. This Agreement may be modified by a Change Order as provided in Paragraph 1, or by a writing that is signed by authorized representatives of the City and the Consultant.

17. Severability. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void, insofar as it is in conflict with said laws, the remainder of the Agreement shall remain in full force and effect.

18. Notices.

A. Notices to the City of Snoqualmie shall be sent to the following address:

City of Snoqualmie
Attn:
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

B. Notices to the Consultant shall be sent to the following address:

The Gordian Group, Inc.
Attn: Legal Department
30 Patewood Drive, Suite 350
Greenville, SC 29615
Phone: (800) 874 2291
Email: legal@gordian.com

Unless otherwise provided for herein, all notices and other communications required by this Agreement shall be deemed to have been given when made in writing and either (a) delivered in person, (b) delivered to an agent, such as an overnight or similar delivery service, or (c) deposited in the United States mail, postage prepaid, certified or registered, addressed in accordance with the Sectio

19. Venue. This Agreement shall be governed by the law of the State of Washington and venue for any lawsuit arising out of this Agreement shall be in King County.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date first above written.

	CONSULTANT: Please fill in the spaces and sign in the box appropriate for your business entity.
CITY OF SNOQUALMIE, WASHINGTON By:_____ Its: Mayor Date:_____	Corporation [Consultant's Complete Legal Name] By:_____ Typed/Printed Name: Its: Date:_____
ATTEST: _____ , City Clerk Date:	
APPROVED AS TO FORM:	

Bob C. Sterbank, City Attorney
Date:_____

Exhibit A

UNDERLYING CONTRACT

EXHIBIT B

SCOPE OF WORK

Gordian will perform the following duties and responsibilities to complete the Services:

1. **Required Services:** Gordian shall provide the following services ("Required Services") to Owner for the term of this Agreement:

   a) Program Development, Implementation and Support: Gordian shall be responsible for the development, implementation, and on-going support of the Owner's customized JOC program.

   b) **Contract Documents:** Gordian shall be responsible for preparing the JOC documents that will be used by the Owner to procure the JOC construction contractors including:

      i. **Unit Price Book(s):** Gordian shall prepare one or more customized Unit Price Books (also known as a Construction Task Catalog®) containing prices covering material, equipment, and labor costs for various units of construction, and adjusting these costs to current market conditions. Only local prevailing wages and local material and equipment costs (obtained directly from local, contractors, subcontractors, and suppliers) to price the Unit Price Books shall be used. The use of generic factors to localize prices is not acceptable. Unit prices for demolition shall be provided for each construction task. Therefore, every cost to install an item or unit shall be accompanied by a corresponding cost to remove the same item or unit. Tasks may also have several modifiers which adjust the price for variations in materials or for quantity discounts; and

      ii. **Technical Specifications:** Gordian shall prepare and publish Technical Specifications describing the materials, performance, and installation requirements for each of the construction tasks listed in the unit price book. Where available, the Owner standard specifications shall be incorporated into the Technical Specifications; and

      iii. **Contractual Terms and Conditions and Bid Forms:** Gordian shall prepare, in conjunction with Owner staff, contractual terms and conditions and bid forms which incorporate JOC language and forms with all appropriate Owner contract language and forms.

   c) **Information Management System:** Gordian shall be responsible for providing the Owner with a comprehensive web-based JOC Information Management System (hereinafter referred to as "IMS") for an unlimited number of Owner users. The JOC IMS must be capable of providing full project tracking, developing cost proposals, preparing independent Owner estimates, generating all project documentation, providing project scheduling, budgeting and cost control, tracking MBE participation, and generating customized reports. Gordian must incorporate any current Owner forms and documentation into the IMS; and

   d) **Procurement Support:** Gordian shall be responsible for providing Owner with procurement support to market the Owner JOC Program to potential JOC Contractor's. If required by the Owner, Gordian shall conduct a bidder prequalification process to determine a qualified list of bidders. Gordian shall be required to organize and conduct pre-bid meetings with the interested bidders as well as make presentations on behalf of the Owner

with various business and Construction organizations. Gordian's staff assigned to perform procurement support must have JOC procurement experience; and

e) **Training Programs:** Gordian shall be responsible for developing and conducting all training programs for the Owner and JOC Contractor staff to ensure that the JOC program functions properly. The training programs must include specialized training courses that will involve all Owner staff and JOC Contractors utilizing and administering the JOC program. The training programs must include extensive training on the use of the JOC IMS. All training must be "hands on" with user competency as the objective. Actual Owner projects that the Owner plans to perform through JOC may be included in the training programs; and

f) **Job Order Development:** Gordian shall be responsible for providing the following Job Order Development services:

i. **Project Identification:** When a project is identified and requested by Owner, Gordian will contact Owner and assist with determining whether the project is appropriate for JOC.

ii. **Contractor Identification:** In the event Owner has multiple JOC Contractors, Gordian will assist the Owner in identifying the appropriate JOC Contactor for the project based on factors which include, but are not limited to, the type of work involved and the location of the project.

iii. **Joint Scope Meeting:** The Gordian's project manager will schedule a Joint Scope Meeting at the project site to help Owner and the JOC Contractor agree on the details of the work that the JOC Contractor will perform. The purpose of the scoping process is to allow the JOC Contractor an opportunity to inspect the site and ask questions before submitting a Price Proposal. The goals of this process are to foster open communication, reduce misunderstandings and mistakes that lead to change orders, and provide results that are more cost-effective and collaborative.

iv. **Develop Detailed Scope of Work:** Gordian will assist in preparing a Detailed Scope of Work that describes the work the JOC Contractor will perform. Gordian will also assist with resolving issues when project plans and actual conditions vary.

v. **Request for Price Proposal:** After all parties agree that the Detailed Scope of Work properly reflects the work to be performed, Gordian's project manager will send the Detailed Scope of Work and a Request for Proposal to the JOC Contractor.

vi. **Request Price Proposal:** As the next step in the process, the JOC Contractor prepares and submits a Price Proposal by selecting the appropriate tasks from the Unit Price Book. Gordian's IMS will automatically multiply the unit price of the task by the required quantities by the JOC Contractor's competitively bid Adjustment Factor. Gordian shall also request the JOC Contractor's preparation of any additional Owner required information (e.g., construction schedule, list of proposed local subcontractors, etc.).

vii. **Price Proposal Review:** Gordian's project manager will review the Price Proposal to make sure the JOC Contractor has selected the appropriate tasks and quantities and will ask the JOC Contractor to make any required changes. Gordian will also obtain and review any Owner required information submitted by the JOC Contractor such as a construction schedule and list of proposed subcontractors. Gordian's project manager will submit the Price Proposal and related documents to Owner.

viii. **Issue Job Order:** Once Owner approves the Price Proposal and related documents, and decides to move forward with the project, Owner is then responsible for the issuance of a job order (which may be in the form of a purchase order) to the selected JOC Contractor.

ix. **Construction Management:** During construction, Owner's project managers will follow its standard internal policies and procedures for construction management and site inspections, including coordinating any required code inspections. When unforeseen conditions arise or Owner desires to change the Detailed Scope of Work, a supplemental Job Order is developed in the same manner as the original Job Order.

g) **On-Going Technical Support:** Gordian shall be responsible for providing extensive on-going technical support to the Owner during normal business hours, excluding holidays. On-going technical support shall include providing updated contract documents, assisting with the procurement of additional JOC Contractors, providing Owner with access to all applicable updates and revisions to the IMS, and providing training for new Owner staff and JOC Contractors during the term of the Agreement. Providing on-going technical support is considered a vital component to ensuring a successful Owner JOC program.

2. Optional Project Management Services: On a project-by-project basis, Gordian shall provide project management services ("Project Management Services") to Owner, to be requested by Owner in its sole discretion. The project management services shall include the following:

a) **Preconstruction**: Gordian's project manager will assist Owner in determining whether professional design services are required and conduct a pre-construction meeting with the Owner's representative(s), the JOC Contractor and, if applicable, the architect or engineer to review the basic project parameters and funding. Where design services are required, the project manager will work with the architects or engineers to coordinate necessary studies and design standards, and deliver plans and specifications that maximize the benefits of JOC for each Owner project. Next, the project manager will coordinate and share any preconstruction information with Owner, the JOC Contractor and other appropriate parties, and will assist in the coordination of the JOC Contractor obtaining the necessary permits.

b) **Site Visit**: During construction, Gordian's project manager will monitor the JOC Contractor's work in-progress, manage the JOC Contractor's compliance with the approved safety plan and complete a report for each site visit.

c) **Communication**: Gordian's project manager will provide weekly construction status reports to Owner, conduct project progress meetings with the JOC Contractor and staff on a periodic basis, and coordinate any required technical and code inspections.

d) **Supplemental Job Orders**: In the event there are unforeseen conditions or Owner requests changes to the Detailed Scope of Work after construction has begun, Gordian's project manager will analyze and process a supplemental Job Order by utilizing the procedures to develop the initial Job Order.

e) **Approvals:** Gordian's project manager will review and recommend for approval, or direct necessary revisions to, the JOC Contractor's applications for payment and obtain Owner's approval of the work. Final acceptance of the work will be the responsibility of Owner. Technical and code inspections will be the responsibility of the appropriate inspection agencies.

f) **Project Close-out**: As the final step in the process, Gordian's project manager will enter all Job Order related information into the IMS and collect any required as-builts, warranties and OEMs from the JOC Contractor.

EXHIBIT C

FEES AND PAYMENT

Not-to-Exceed Price = $200,000

FEES AND PAYMENT

1. **Fees for Required Services**: In consideration of the Required Services set forth Exhibit B of this Agreement and the JOC System License granted to Owner, Gordian shall be paid Fees according to the following schedule.

    a) **JOC System License Fee**: Owner shall pay Gordian a JOC System License Fee equal to 1.95% of the value of the work ordered. The JOC System License Fee shall be payable when a Job Order is issued to the JOC Contractor.

    b) **Job Order Development Fee:** Owner shall pay Gordian a Job Order Development Fee of 3.05% of the value of work ordered. The Job Order Development Fee shall be payable when a Job Order is issued to the JOC Contractor.

    c) Except for Fees for Optional Services set forth in Section 2 of this Exhibit C, the fees listed in this Section 1 are the only fees due by the City to Consultant for Consultant's services. These fees do not include the Contractor License Fee set forth in Section 4 below, which Gordian shall charge to participating construction contractors.

2. **Fees for Optional Services:** In consideration of the optional Project Management Services set forth set forth in Exhibit B of this Agreement, Gordian shall, in addition to the applicable fees for the Required Services, be paid fees according to the following schedule:

    a) **Project Management Fee**: Owner shall pay Gordian a Project Management Fee equal to 5.95% of the value of work ordered for requested Project Management Services. The Project Management Fee shall be payable upon completion and acceptance of the work by Owner, except at Gordian's election Job Orders requiring more than 60 days to complete may be invoiced monthly on a percentage of completion basis.

3. **Invoicing and Payment**: Gordian shall submit invoices for the Services to Owner monthly. Invoices for Fees shall include a description of all work ordered through the JOC program during the month. Owner shall pay Gordian's invoices within 30 calendar days from the invoice date. Any invoice not disputed by Owner in writing within 14 calendar days from the invoice date shall be deemed proper. In the event of a dispute, Owner shall pay all undisputed invoice amounts within 30 days of the original invoice date.

4. **Contractor License Fee**: It is understood that Gordian shall charge participating construction contractors a Contractor Licensing Fee ("CLF") of one percent (1%) of the value of the work ordered for the JOC Contractors' access to the Gordian's proprietary construction data and JOC applications. Gordian shall be responsible for all administrative duties relating to the invoicing and collections of the CLF.

EXHIBIT D

JOC SYSTEM LICENSE

Gordian hereby grants to Owner, and Owner hereby accepts from Gordian for the term of this Agreement, a non-exclusive right, privilege and license to Gordian's Job Order Contracting System and other related proprietary materials (collectively referred to as "Proprietary Information") to be used for the sole purpose of operating Owner's Job Order Contracting program. The parties hereby agree that Proprietary Information shall include, but is not limited to, the JOC Information Management System (as defined below) applications and support documentation, Construction Task Catalog® (also commonly referred to as a unit price book), construction cost data, training materials and other proprietary materials provided by Gordian. In the event this Agreement expires or terminates as provided herein, this JOC System License shall terminate and Owner shall return to Gordian all Proprietary Information in Owner's possession.

Owner acknowledges that disclosure of Proprietary Information will result in irreparable harm to Gordian for which monetary damages would be an inadequate remedy and agrees that no such disclosure shall be made to anyone without first receiving the written consent of Gordian. Owner further acknowledges and agrees to respect the copyrights, registrations, trade secrets and other proprietary rights of Gordian in the Proprietary Information during and after the term of this Agreement and shall at all times maintain complete confidentiality with regard to the Proprietary Information provided to Owner, subject to federal and state laws related to public records disclosure.

Upon expiration or termination of this Agreement as provided herein, Gordian shall provide to Owner all project data generated by Owner in a form accessible by a standard database program, such as Microsoft® Access®.

Gordian agrees to grant a license to each contractor that is awarded a JOC contract by Owner, provided the JOC contractor agrees to pay Gordian's contractor license fee in effect when Owner awards the contract, and provided the Contractor agrees to abide by the terms and conditions of the JOC System License Agreement presented as part of their use of the software. No other third-parties may access the Proprietary Information without Gordian's Consent.

In the event of a conflict in terms and conditions between this JOC System License and any other terms and conditions of this Agreement or any purchase order or similar purchasing document issued by Owner, this JOC System License shall take precedence.

CITY OF SHORELINE
REQUEST FOR PROPOSALS
RFP 9596

Job Order Contracting (JOC) Consulting Services
Submit no later than March 17, 2020 4:00 p.m. Exactly Pacific Local Time

The City of Shoreline, Washington is soliciting proposals (RFP) from qualified consultants to develop, implement, and support a Job Order Contracting (JOC) program for the City as provided for in Chapter 39.10 RCW Alternative Public Works Contracting Procedures.

Primary Objectives

The objectives of the City's JOC program are to rapidly engage contractors in the performance of small to medium sized public work projects; to reduce construction, design, and planning costs; and to develop relationships and contracts with contractors to more quickly and efficiently respond to emergency situations.

Background

During the 2019 Legislative Sessions, RCW 39.10.410.420 - .460 was amended to allow all public agencies to use Job Order Contracting (JOC) for public works projects when a determination is made that the use of job order contracts will benefit the public. The JOC program is anticipated to be utilized in many different departments/divisions including Public Works Engineering & Construction, Road Maintenance, Wastewater, Surface Water, Facilities, Parks, Recreation and Cultural Services and other public works areas/projects.

Preliminary Timeline

RFP Release	February 21, 2020
Deadline for Written Inquires	March 10, 2020
Proposals Due	March 17, 2020
Interview Top Candidates	March 24-26, 2020 (if needed) *
Selection	March 2020 *
Contract Executed	April 2020 *
	**dates are approximate*

Scope of Work

The Scope of Work is expected to include, but not be limited to, the following tasks:

A. Development Stage: The successful consultant shall work with the City to develop the JOC program. Program development includes meeting with various departments and divisions to assess their needs for this program and then preparing and proposing a JOC program which will most effectively meet the City's requirements.

B. Request for Proposal Stage: The successful consultant shall work with the City to develop specifications, terms, and conditions for a Request for Proposal (RFP) to contract with one or two contractors as determined in the Development Stage. Successful consultant will also assist with the evaluation of the proposals submitted.

C. Implementation Stage: Successful consultant shall assist the City with implementation of the JOC Program including training for both the contractor(s) and City staff. Training shall include administration, performing estimates, and reconciliation. Successful consultant shall work with City to create and document all processes and forms needed to successfully implement the JOC Program.

D. On-Going Program Support: Successful consultant shall assist City with initial and on-going job orders and follow up as needed. Successful consultant shall also provide updates for unit price book. Books must be updated at least annually. If the awarded contract includes software, the consultant shall also provide on-going technical support and training for the software.

Schedule

The proposed timeline is to engage in the consultant's services starting in April 2020, resulting in a JOC Program by November 2020. The contract term will be effective upon the date of contract execution for two years with the option to renew for two additional one-year terms. Contract prices shall remain firm during the contract term.

RFP Evaluation Components/Criteria

Submittal Requirements
One (1) unbound original and One (1) CD or flash drive in pdf format of the RFP shall be submitted to the City of Shoreline, City Clerk's Office – RFP **9596**, 17500 Midvale Avenue North, Shoreline, Washington, 98133-4905. The deadline for proposals by interested parties is **March 17, 2020** by 4:00 p.m. Exactly Pacific Local Time. Respondents assume the risk of the method of dispatch chosen. The City assumes no responsibility for delays caused by any delivery service. Postmarking by the due date will not substitute for actual receipt of qualifications. Proposals shall not be delivered by facsimile transmission or other telecommunication or electronic means.

Questions related to this solicitation may be directed to Janet Bulman, Purchasing Coordinator, jbulman@shorelinewa.gov . Questions via phone will not be accepted. The deadline for questions is March 10, 2020 by 4:00 p.m. All substantive questions and answers will be formalized and issued as an addendum to this RFP.

Supplemental information, such as brochures, may be submitted if desired. Proposals shall be limited to single spaced, 8 1/2" by 11" typewritten pages (min. 12 point font). The submittal shall be no more than 12 pages, not including resumes and Unit Price Book sample. The following format and content shall be adhered to by each firm and presented in the following order:

A. **Executive Summary**

An executive summary letter should include the key elements of the respondent's RFP and an overview of the consultant team. Indicate the address and telephone number of the respondent's office located nearest to Shoreline, Washington, and the office from which the project will be managed.

B. **Approach**

1. Methodology(ies): This section should clearly describe your approach in developing, implementing, and supporting a JOC program including how training is accomplished for both contractor(s) and City staff and the methodology or methodologies planned to be used to carry out the specific tasks described in the Work Plan.
2. Work Plan: Describe the sequential tasks to be used to accomplish this project. Indicate all key deliverables and their contents. Include a list of information required or tasks to be completed by City staff.
3. Unit Price Book: Respondents shall propose the use of a unit price book for JOC cost reference and determination. Respondents may propose the use of their own unit price book, propose to create a new book, and/or propose the use of a unit price book from a third-party source, or a combination of any of the fore mentioned. Identify what type of unit price book is proposed and provide a representative snapshot sample.

   Tasks and prices in the unit price book(s) must reflect the local prevailing and other wage requirements of applicable local laws in King County and the State of Washington. Please provide the following information on the unit price book:
   1) Revision cycle (when was it last updated/when is it scheduled to be updated):
   2) Revision methodology
   3) Price collection methodology
   4) Approach to localizing prices
   5) Anticipated number of materials, labor, and equipment line items
   6) Maturity of book (how long has it been published/in use)
   7) Other relevant factors to describe the quality or comprehensiveness of the book.

4. Software: Respondent may propose software that will be helpful in the implementation of this program. Respondent shall be very specific on the cost of the software, the complexity of using it, training to be provided, and whether this software is optional, recommended, or required for implementation.
5. Project Organization and Staffing: Describe the qualifications and experience of key personnel who will be assigned to this project. Identify each by their proposed role and the percentage of time they will be committed to the City. Include for each their name and current, pertinent resume. Identify and provide the same information for any proposed subcontractors.
6. Project Schedule: Provide a schedule for completing each task in the Scope of Work, including deadlines for preparing project deliverables. Demonstrate your team's ability to perform the work requested within an established budget and schedule.

C. **Related Experience**

Describe recent (within the last 4 years), directly related experience in JOC program development and implementation. Briefly describe each project and for each

reference provide up-to-date individual contact name with email and phone number. Provide the size, scope, and dates of each project. At least four references should be included. The City reserves the right to contact any organizations or individuals listed

D. **Statement of Experience**
The respondent is required to provide evidence of experience in working with local agencies to develop, implement, support and train all parties in a successful JOC program. The experience listed must be that which was performed by the respondent's staff and/or team's staff that will be assigned to this project. The City will be focusing on the experience of the Lead Consultant/Project Manager who will be assigned to this project. The RFP shall also identify other projects the proposed Lead Consultant/Project Manager will be committed to during the same timeline.

E. **Cost**
Provide estimate of cost for services, initial and on-going costs of proposed software, and other costs that may be incurred to develop, implement, and support a JOC program.

The City's Evaluation Panel will use the following criteria to evaluate each RFP:

Criteria	**Points**
Approach	Maximum 30 Points
Related Project Experience	Maximum 20 Points
Expertise of Project Team	Maximum 20 Points
Cost	Maximum 30 Points
Maximum Points	**Maximum Points 100**

The proposals will be the basis from which interested individuals or firms will be selected for interviews. Following the City staff evaluation of the proposals received, selected individuals or firms may be invited to make oral presentations before the City's Evaluation Panel. The City's Project Manager will provide additional details outlining the preferred content of the presentation to each firm or team of firms that are invited to participate. Upon completion of the evaluations, the City's Evaluation Panel will determine the most qualified individual or firm based on all materials and information presented. The City will then begin the negotiations for an agreement with the selected individual or firm.

Any individual or firm failing to submit information in accordance with the procedures set forth in the RFP may be subject to disqualification. The City reserves the right to change the solicitation schedule or issue amendments to the solicitation at any time. The City reserves the right, at its sole discretion, to waive immaterial irregularities contained in the solicitation. The City reserves the right to reject any and all proposals at any time, without penalty. The City reserves the right to refrain from contracting with any respondent. Individuals or firms eliminated from further consideration will be notified by mail by the City as soon as practical.

Proposals remain confidential until closing deadline after which proposals are considered a public record subject to public disclosure under RCW 42.56, the Public Records Act. Proposers shall mark as “proprietary” any information that the Proposer believes meets the exemption under RCW 42.56.270(1). This designation will be considered by the City in response to public records requests.

Any Proposal may be withdrawn, either personally or by written request, at any time prior to the time set for the Proposal submittal deadline.

The City of Shoreline, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation, issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

Attachment: City of Shoreline Sample Contract Document

Contract No. _____
Brief Description: _____

CITY OF SHORELINE
AGREEMENT FOR SERVICES

This Agreement is entered into by and between the City of Shoreline, Washington, a municipal corporation hereinafter referred to as the "CITY," and _____, hereinafter referred to as the "CONSULTANT."

WHEREAS, the City desires to retain the services of a consultant to _____ and

WHEREAS, the City has selected _____ to perform the above-mentioned services;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, it is mutually agreed as follows:

1. **Scope of Services to be Performed by the Consultant.**
   The Consultant shall perform the services outlined in Exhibit A. In performing these services, the Consultant shall at all times comply with all federal, state and local statutes, rules and ordinances applicable to the performance of such services. In addition, these services and all duties incidental or necessary therefore, shall be performed diligently and completely and in accordance with professional standards of conduct and performance. All services performed under this Agreement will be conducted solely for the benefit of the City and will not be used for any other purpose without written consent of the City.

2. **Compensation.**
   A. Services will be paid at the rate set forth in Exhibit A, not to exceed a maximum of $_____, including all fees and those reimbursable expenses listed in Exhibit A.
   B. The City shall pay the Consultant for services rendered after receipt of an itemized invoice or billing voucher in the form set forth on Exhibit B. Payments will be processed within 30 (thirty) days from receipt of billing voucher. The Consultant shall be paid for services rendered but, in no case shall the total amount to be paid exceed the amount(s) noted in the Exhibit(s) and approved by the City. The consultant shall complete and return a W-9 to the City prior to contract execution by the City. Mail all invoices or billing vouchers to: Accounts Payable, 17500 Midvale Avenue North, Shoreline, Washington 98133-4905 or email to accountspayable@shorelinewa.gov .

3. **Term.**
   A. The term of this Agreement shall commence _____and end at midnight on the _____ day of _____, 20_____.

4. **Termination.**
   A. The City reserves the right to terminate this Agreement at any time, with or without cause by giving fourteen (14) days notice to Consultant in writing. In the event of such termination or suspension, all finished or unfinished documents, data, studies, worksheets, models and reports, or other material prepared by the Consultant pursuant to this Agreement shall be submitted to the City.
   B. In the event this Agreement is terminated by the City, the Consultant shall be entitled to payment for all hours worked and reimbursable expenses incurred to the effective date of termination, less

all payments previously made. This provision shall not prevent the City from seeking any legal remedies it may have for the violation or nonperformance of any of the provisions of this Agreement and any such charges due the City shall be deducted from the final payment due the Consultant. No payment shall be made by the City for any expenses incurred or work done following the effective date of termination unless authorized in advance in writing by the City.

C. The Consultant reserves the right to terminate this Agreement with not less than sixty (60) days written notice, or in the event outstanding invoices are not paid within 30 days.

D. If the Consultant is unavailable to perform the scope of services, the City may, at its option, cancel this Agreement immediately.

5. Ownership of Documents.

A. All documents, data, drawings, specifications, software applications and other products or materials produced by the Consultant in connection with the services rendered under this Agreement shall be the property of the City whether the project for which they are made is executed or not. All such documents, products and materials shall be forwarded to the City at its request and may be used by the City as it sees fit. The City agrees that if the documents, products and materials prepared by the Consultant are used for purposes other than those intended by the Agreement, the City does so at its sole risk and agrees to hold the Consultant harmless for such use.

B. The Consultant acknowledges that the City is a public agency subject to Washington's Public Records Act, chapter 42.56 RCW, and that all documents produced by the Consultant in connection with the services rendered under this Agreement may be deemed a public record as defined in the Public Records Act and that if the City receives a public records request, unless a statute exempts disclosure, the City must disclose the record to the requestor. All or portions of materials, products and documents produced under this Agreement may be used by the Consultant if the City confirms that they are subject to disclosure under the Public Disclosure Act.

C. The Consultant shall preserve the confidentiality of all City documents and data accessed for use in Consultant's work product. Any requests for City documents and data held by Consultant shall be forwarded to the City which shall be solely responsible for responding to the request.

6. Independent Contractor Relationship.

A. The consultant is retained by the City only for the purposes and to the extent set forth in this Agreement. The nature of the relationship between the Consultant and the City during the period of the services shall be that of an independent contractor, not employee. The Consultant, not the City, shall have the power to control and direct the details, manner or means of services. Specifically, but not by means of limitation, the Consultant shall have no obligation to work any particular hours or particular schedule, unless otherwise indicated in the Scope of Work where scheduling of attendance or performance is critical to completion, and shall retain the right to designate the means of performing the services covered by this Agreement, and the Consultant shall be entitled to employ other workers at such compensation and on such other conditions as it may deem proper, provided, however, that any contract so made by the Consultant is to be paid by it alone, and that employing such workers, it is acting individually and not as an agent for the City.

B. The City shall not be responsible for withholding or otherwise deducting federal income tax or Social Security or contributing to the State Industrial Insurance Program, or otherwise assuming the duties of an employer with respect to Consultant or any employee of the Consultant.

7. Hold Harmless.

The Consultant shall defend, indemnify, and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees resulting from the negligent, gross negligent and/or intentional acts, errors or omissions of the Consultant, its agents or employees arising out of or in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purpose of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

8. Gifts.

The City's Code of Ethics and Washington State law prohibit City employees from soliciting, accepting, or receiving any gift, gratuity or favor from any person, firm or corporation involved in a contract or transaction. To ensure compliance with the City's Code of Ethics and state law, the Consultant shall not give a gift of any kind to City employees or officials.

9. City of Shoreline Business License.

As mandated by SMC 5.05.030, the Consultant shall obtain a City of Shoreline Business License prior to performing any services and maintain the business license in good standing throughout the term of its agreement with the City.

10. Insurance.

Consultant shall obtain insurance of the types described below during the term of this agreement and extensions or renewals. These policies are to contain, or be endorsed to contain, provisions that 1) Consultant's insurance coverage shall be primary insurance with insurance or insurance pool coverage maintained by the City as excess of the Consultant's insurance (except for professional liability insurance); and 2) Consultant's insurance coverage shall not be cancelled, except after thirty (30) days prior written notice to the City.

A. Professional Liability, Errors or Omissions insurance with limits of liability not less than $1,000,000 per claim and $1,000,000 policy aggregate limit shall be provided if services delivered pursuant to their Contract involve or require professional services provided by a licensed professional including but not limited to engineers, architects, accountants, surveyors, and attorneys.

B. Commercial General Liability insurance covering premises, operations, independent contractors' liability and damages for personal injury and property damage with a limit of no less than $1,000,000 each occurrence and $2,000,000 general aggregate. The City shall be named as an additional insured on this policy. The Consultant shall submit to the City a copy of the insurance certificate and relevant endorsement(s) as evidence of insurance coverage acceptable to the City.

C. Automobile Liability insurance with combined single limits of liability not less than $1,000,000 for bodily injury, including personal injury or death and property damage shall be required if delivery of service directly involves Consultant use of motor vehicles.

11. Delays.

Consultant is not responsible for delays caused by factors beyond the Consultant's reasonable control. When such delays beyond the Consultant's reasonable control occur, the City agrees the Consultant is not responsible for damages, nor shall the Consultant be deemed to be in default of the Agreement.

12. Successors and Assigns.
Neither the City nor the Consultant shall assign, transfer or encumber any rights, duties or interests accruing from this Agreement without the written consent of the other.

13. Nondiscrimination.
In hiring or employment made possible or resulting from this Agreement, there shall be no unlawful discrimination against any employee or applicant for employment because of sex, age, race, color, creed, national origin, marital status or the presence of any sensory, mental, or physical handicap, unless based upon a bona fide occupational qualification. This requirement shall apply to but not be limited to the following: employment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. No person shall be denied or subjected to discrimination in receipt or the benefit of any services or activities made possible by or resulting from this Agreement on the grounds of sex, race, color, creed, national origin, age except minimum age and retirement provisions, marital status, or in the presence of any sensory, mental or physical handicap.

14. Notices.
Any notice required under this Agreement will be in writing, addressed to the appropriate party at the address which appears below (as modified in writing from time to time by such party), and given personally, by registered or certified mail, return receipt requested, by facsimile or by a nationally recognized overnight courier service. All notices shall be effective upon the date of receipt.

City Manager	Consultant Name: _____
City of Shoreline	Name of Firm: _____
17500 Midvale Avenue N	Address: _____
Shoreline, WA 98133-4905	Address: _____
(206) 801-2700	Phone Number: _____

15. Governing Law and Venue.
This Agreement shall be construed and enforced in accordance with the laws of the State of Washington. Venue of any suit between the parties arising out of this Agreement shall be King County Superior Court.

16. General Administration and Management.
The City's contract manager shall be (name and title): _____.

17. Severability.
Any provision or part of the Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the City and the Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

18. Entire Agreement.
This agreement contains the entire Agreement between the parties hereto and no other agreements, oral or otherwise, regarding the subject matter of this agreement, shall be deemed to exist or bind any of the parties hereto. Either party may request changes in the agreement. Proposed changes which are mutually agreed upon shall be incorporated by written amendment to this agreement.

19. Captions.
The titles of sections or any other parts of this Agreement are for convenience only and do not define or limit the contents.

20. Counterpart Originals.
This Agreement may be executed in any number of counterpart originals, each of which shall be deemed to constitute an original agreement, and all of which shall constitute one agreement. The execution of one counterpart by a Party shall have the same force and effect as if that Party had signed all other counterparts.

21. Authority to Execute.
Each person executing this Agreement on behalf of a Party represents and warrants that he or she is fully authorized to execute and deliver this Agreement on behalf of the Party for which he or she is signing. The Parties hereby warrant to each other that each has full power and authority to enter into this Agreement and to undertake the actions contemplated herein and that this Agreement is enforceable in accordance with its terms.

This agreement is executed by

CITY OF SHORELINE	**CONSULTANT**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

Attachments: Exhibit A (Scope and compensation), B (Billing Voucher)

Building knowledge

Request For Proposals - Job Order Contracting (JOC) Consulting Services

RFP 9596 | March 2020

CITY OF SHORELINE

GORDIAN®

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SECTION

March 13, 2020

City of Shoreline
City Clerk's Office – RFP 9596
17500 Midvale Avenue North
Shoreline, WA 98133-4905

Attention: Clerk's Office – RFP 9596

Re: Request for Proposals RFP 9596 for Job Order Contracting (JOC) Consulting Services

The Gordian Group, Inc. ("Gordian") is pleased to submit our Proposal in response to the Request for Proposals for JOC Application Management Services for the City of Shoreline (the "City"). We are in receipt of RFP 9596 issued on February 21, 2020.

This project will be managed by our regional team: Joie Serra, Region Director for Pac North will manage our Washington-based team of Charles Meyer, Project Manager, and Tom Widlits, Account Manager. Our regional team will be supported by our software development, customer support, marketing, operations administration and accounting teams located in our main office at 30 Patewood Drive, Greenville, SC 29615. In addition, our construction cost research and database administration functions are primarily performed in our office at 1099 Hingham St., Suite 201, Rockland, MA 02370.

Gordian is the best-qualified firm to provide the requested products and services for the following reasons:

- We are the leading firm that can provide single point responsibility for all of the products and services necessary for a JOC program. We prepare, customize and support, with in-house staff, the Contract Documents, Construction Task Catalog, Technical Specifications and the JOC Information Management System that we provide to our clients. We do not rely on third parties or independent vendors, and we do not subcontract or white-label third-party products. We will be 100% responsible for the success of your JOC program using in-house resources for software, data and services.
- Gordian has successfully implemented and supported our JOC solutions for over 250 public owners throughout the United States, including the Seattle Housing Authority, City of Bellevue, Snohomish County, Port of Everett, City of Kirkland, and City of Everett. In 2019 more than $2.3 billion dollars of construction work was procured using Job Order Contracting programs implemented and supported by Gordian.
- Building a JOC program takes more than preparing customized documents and providing software. The devil is in the details. Our experience provides us with the knowledge to develop a comprehensive, fully functioning JOC program that will deliver the most value possible. We possess the best personnel, software, and construction cost data in the industry. No other firm has our knowledge, experience and available resources for establishing and managing JOC programs.

We appreciate the opportunity to present our Proposal for Job Order Contracting products and services to the City of Shoreline. If you have any questions concerning the information provided in this response, please contact me at (800) 874-2291 or A.Lesher@Gordian.com.

Sincerely,

Ammon T. Lesher
Vice President, General Counsel

Approach

Gordian has nearly three decades of experience developing, implementing and support JOC programs. We have established and currently support hundreds of JOC programs for city, county, state, school district and university clients. No other firm can match the level of experience Gordian possesses in connection with the advertisement, evaluation and award of JOC contracts. A description of all phases of Gordian's approach to developing, implementing and supporting JOC programs is provided below. **Gordian will provide any and all services required by the RFP or offered in this proposal to ensure that the City of Shoreline ("City") has a successful JOC program.**

Methodology

The core of Gordian's approach to JOC is the rigorous and proven process we will follow to identify the City's needs and create a customized Job Order Contracting program around those needs. We do not cobble together generic unit price books or limited purpose software off the shelf and try to make them work. Our experience has taught us that to achieve maximum performance, a JOC program needs to be carefully crafted using a disciplined and thorough process. The process has been time tested and designed to minimize the effort required by the owner while producing maximum repair, alteration and minor construction results. Gordian will provide on-going technical support for the City's JOC program for the duration of the contract term, including outreach and education initiatives, JOC program updates to the Contract Documents, Construction Task Catalog and Technical Specifications, Job Order development services, additional contractor procurement, contract implementation support and training, and IMS maintenance, upgrades and system support. Gordian's job order development services, which will be included for all Job Orders, include onsite assistance with the Joint Scope Meeting, development of the Detailed Scope of Work, review and revision of the JOC contractor's Price Proposal and facilitation of the NTP from the City to the JOC contractor. Additional detail on these services will be available to the City during the evaluation process if requested.

Program Development

The Program Development process incorporates all the activities necessary to establish the structure of the City's JOC program. While JOC is a method of procurement, it is very different from the traditional methods and many factors must be considered when organizing a JOC program. We will assist the City in making educated decisions about the structure of its JOC program, from the minimum and maximum value of the contracts to the differentiation between individual Bid Factors. We will not reinvent the wheel or learn as we go. We will bring with us our experience and knowledge gained from other similar facility and infrastructure owners.

To ensure a successful JOC program, the proper policies and procedures must be prepared and implemented. Our experience will enable us to develop a comprehensive set of Execution Procedures that adhere to the City's general operating and organizational philosophies. These Execution Procedures must incorporate all phases of the JOC process. Specific issues that must be addressed include:

- **Project Initiation**
- **Project Development**
- **LSEDV Compliance Procedures**
- **Subcontractor Identification**
- **Permit Procedures**
- **Project Review and Approval**
- **Construction Inspection and Acceptance**
- **Project Close Out Procedures**
- **Payment Policy and Process**

Approach

Our experience has given us insight into each of these issues and allows us to make proven, efficient and cost effective recommendations. We propose to organize and manage a series of conferences and meetings with key City staff to create a comprehensive set of Execution Procedures that will be used to implement and administer the JOC program.

The Work Plan for our comprehensive Job Order Contracting Solutions details the major resource components necessary for a successful JOC program: Data, Technology and Services. A detailed description of our approach to develop, implement and support the City's JOC program is provided below.

Construction Task Catalog (Unit Price Book)

During the past 29 years, our team has prepared thousands of customized Construction Task Catalogs, specifically designed for JOC programs. We have customized thousands of Construction Task Catalogs for state, municipal, educational, transportation, healthcare, housing and water management clients. This depth of experience has created a comprehensive database from which we can draw upon when customizing a Construction Task Catalog for a particular client.

Gordian recognizes that each client is unique and has proven that the best JOC results are achieved when a program is tailored to fit the client's requirements. To reach the highest level of success in efficiency, client control and cost savings, the City's JOC program must have documents prepared and customized specifically for your use. Gordian prepares all of the Job Order Contracting Documents for the City including the Construction Task Catalog®, Technical Specifications, Contract and General Conditions, and Bid Documents. No other firm provides this level of service.

When we build a new Construction Task Catalog, we start with our 380,000 line item database that is continually improved and updated. As part of our ongoing support role, we produce updated Construction Task Catalogs for each JOC solicitation. When we notice areas for improvement, we bring in our engineering and estimating team to incorporate the improvement into the very next published book. With over 1,000 catalogs currently in use, client feedback and requests have allowed us to continually raise our level of quality. If any items are not already included in our database, Gordian will develop them for the City. These new tasks will be for the exact construction product or material that the City requires for its projects including, if necessary, unique owner supplied material and equipment.

Gordian currently employs more than 50 full-time personnel including engineers, estimators, construction cost researchers, data scientists, database administrators and statisticians that continuously research, update, QA and analyze construction data and construction tasks for our construction cost database. Gordian's construction cost data team performs more than 22,000 hours of cost research alone annually. This is in stark juxtaposition to other firms that may propose the use of off-the-shelf estimating data or a database managed by only a few persons.

Revision Methodology

As part of our ongoing support role, we will produce an updated Construction Task Catalog for each new City JOC contract. When we notice areas for improvement, we bring in our cost estimating and engineering team to incorporate the improvement into the very next published book using our DMAP (Database Manager and Publishing) software and its component pricing capability. As described above, Gordian has substantial resources dedicated to the continuous tracking, updating and development of construction costs. Our construction cost database is updated every day to ensure that the unit prices provided as part of each bid package are the most accurate on the

market today. Updates are not an "as-needed" exercise; they are performed continuously across all markets to ensure that when updated cost data is required, it's readily available in all 930 geographic regions served by Gordian's Construction Task Catalog. No other firm can come close to matching the dedicated resources and expertise of Gordian when it comes to building an updated, accurate and flexible construction cost database. In addition to continuous updates, Gordian's account team will work with our Data and Engineering team to develop and publish any construction tasks identified as recurring non-prepriced tasks during a previous JOC contract term.

Localized Pricing

We use local prevailing wages and local material and equipment costs (which we obtain directly from local subcontractors and suppliers) to price our Construction Task Catalog. That allows us to be extremely accurate. The pricing of the Construction Task Catalog will be specific for the City and will incorporate current actual local equipment and material prices, along with local area prevailing wage rates. Gordian currently serves several agencies surrounding the King County metropolitan area and the City of Shoreline, including the Seattle Housing Authority, City of Kirkland, and Snohomish County. We are continuously collecting, analyzing and compiling new and updated construction tasks within King County and the surrounding area.

If any items are not already included in our database, Gordian will gladly develop them for the City. These new tasks will be for the exact construction product or material that the City requires for its projects including, if necessary, unique owner supplied material and equipment. Prior to the publication of any new Construction Task Catalog, Gordian can identify and provide all non-prepriced tasks approved by the City under the previous contracts. Working directly with the City, Gordian can create line items for recurring non-prepriced tasks which are anticipated for the new contracts. We understand that new technologies and materials are being developed every day, as these materials become available, Gordian will assist the City with incorporating these new tasks into current and future Construction Task Catalogs.

Technical Specifications – We have prepared more than 3,000 sets of Technical Specifications specifically for JOC. The Technical Specifications will include the same CSI specification numbers as the applicable tasks, and dictate the quality of the workmanship and the quality of the materials for the tasks detailed in the Construction Task Catalog. Customization of the JOC Technical Specifications will also allow the City the flexibility to standardize equipment and materials. Preferred vendors and suppliers can be incorporated into the Technical Specifications with the City having the final approval of "or equal" substitutions.

Procurement Support

This phase incorporates all the activities necessary to establish the structure of the City's JOC program, inform internal City staff and the contracting community about JOC, and procure the JOC contractors. Specific services will include preparing and conducting an external marketing program, an internal marketing program and pre bid seminars.

Pre-Bid Seminars – A central feature of Gordian's procurement plan for Job Order Contracting is the pre-bid seminar for intending bidders. Since most facility owners want to attract local contractors, but often many of the local contractors are not familiar with the JOC process, it is essential that a proactive educational program occur prior to bidding. Gordian believes that the increased information exchange between the owner and the intending bidders will lead to a better understanding of the JOC program, less bid risk for the contractors and ultimately, lower bids.

We will take the lead in reaching out to local contractors to inform them about JOC. We will prepare and conduct extensive pre-bid conferences that have been refined over time to secure for the City the very best qualified contractors at a meaningful, competitive price.

Software

Gordian will provide unlimited access to our IMS (the "JOC Software") that is required to run a Gordian JOC program. Our JOC Software is capable of generating all of the JOC documents, including the contractor's Price Proposal, the independent estimate, Job Orders, and all management reports and forms. Our proven software was specifically designed to support JOC programs and will be configured to meet the information management needs of the City's JOC program. It is essential to optimizing the efficiency and convenience of a Gordian JOC system. Gordian's JOC Software is a web solution, making it accessible anytime and anywhere there is an Internet connection. Best of all, the JOC Software can handle an unlimited number of Users, Job Orders, Construction Task Catalogs and other information. As part of the JOC System License, the City will receive with a Gordian JOC solution, you will be provided with unlimited access to the JOC Software for the term of the contract.

The JOC Software is a critical component of any JOC program, and it must be designed and configured specifically for JOC. Gordian's JOC Software was developed using 25+ years of experience in managing JOC programs, and it ensures efficiency, ease of use, and maximum control at each step in the JOC process. For instance, our JOC Software enables tracking of price proposal revisions to ensure no changes go unnoticed, locks adjustment factors and unit prices to ensure no price manipulation can occur, and can generate custom reports and forms which will enable the City to tailor the software to its workflow, and ensure proactive management with advanced reporting capabilities.

Software Support and Maintenance

In terms of supporting and maintaining system applications for JOC, Gordian is the most experienced firm. Our in-house software design and development team created and supports the JOC Software. They are available 8:00 AM EST – 10 PM EST, Monday thru Friday. When you need help, we are there.

Training

Gordian will be responsible for providing a comprehensive JOC Master Training Program, which will include different course modules so that all elements of the City and JOC contractor staff will receive specialized training. Gordian will develop and publish all training aids and materials necessary to support the JOC training courses. The JOC Master Training Program will be modified to fit the City's processes and procedures.

Below is a description of each module:

The JOC Overview Module is a general purpose introduction designed to familiarize the City staff with the JOC concept. Topics include an overall JOC orientation as well as a discussion of how JOC will be implemented. In addition, JOC is presented from a contractor's perspective so the City staff can better understand the contractor's risk and potential reward. Included in this module is a discussion of how a contractor prepares a JOC bid.

The JOC Contract Documents Module is a detailed discussion of the contractual terms of the contract. This module is designed for project managers and procurement staff. The contract

documents are the "rules" under which the JOC program will be implemented. It is critical that key operational and procurement staff fully understand the Contract Documents. Copies of all materials and the contract terms and conditions are contained in the training manual.

The JOC Program Execution Module includes a detailed, comprehensive review of the City's approved JOC Execution Procedures. Training for this module includes ensuring that the City facilities and procurement staff have a full understanding of the procedures and forms that will be used to approve JOC work.

The Job Order Development Module includes training on a complete series of practical exercises designed to prepare a complete Job Order based on actual City projects. Gordian will be performing the Job Order development tasks for the City under this contract, but will provide an overview of the process for the benefit of City staff.

The JOC Software Module provides a thorough overview of our proprietary JOC Software, designed for project managers. JOC Software training is provided for each step of the JOC process, from project initiation, to reviewing and validating a contractor's Price Proposal, to project closeout. Because the primary interface is Windows Explorer-based, the City staff will readily adapt to the user-friendly nature of our software. This Module is presented in a mixed lecture and practical exercise format using computer generated overhead projection materials, handouts and hands-on computer exercises.

Gordian will provide **JOC Refresher Training** as needed or requested by the City. Our refresher training consists of a workshop discussion of all aspects of the JOC process and is offered to those who have had an opportunity to get some actual experience with the JOC process. The focus of this session is on the lessons learned and the sharing of those lessons with other staff members. We recommend that everyone attend at least two refresher training workshops; one after about a month's experience and the second one after three month's experience.

Gordian will conduct as many training sessions as required to ensure that City staff and the JOC contractors are fully prepared to execute the JOC program. Training will include a comprehensive training/reference manual with sample Job Orders, flowcharts, and forms.

Technical Support

Gordian will provide ongoing technical support in a number of areas during the term of the contract. Specific technical assistance will include:

JOC Program Updates

During the term of the contract, Gordian will provide continual updates for the City's JOC program as follows:

- Provide the City updated JOC Contract Documents for all new JOC contracts and JOC re-bids. This support will include: updating Construction Task Catalogs and Technical Specifications; monitoring recent changes and recommending improvements to the Contract and General Conditions to clearly specify the requirements of the City; further developing and implementing pre-award criteria; identifying new processes to further define contract requirements and contractor capabilities to ensure that the City retains qualified JOC contractors; and customizing the JOC process and documents to meet the ever changing needs of the City.

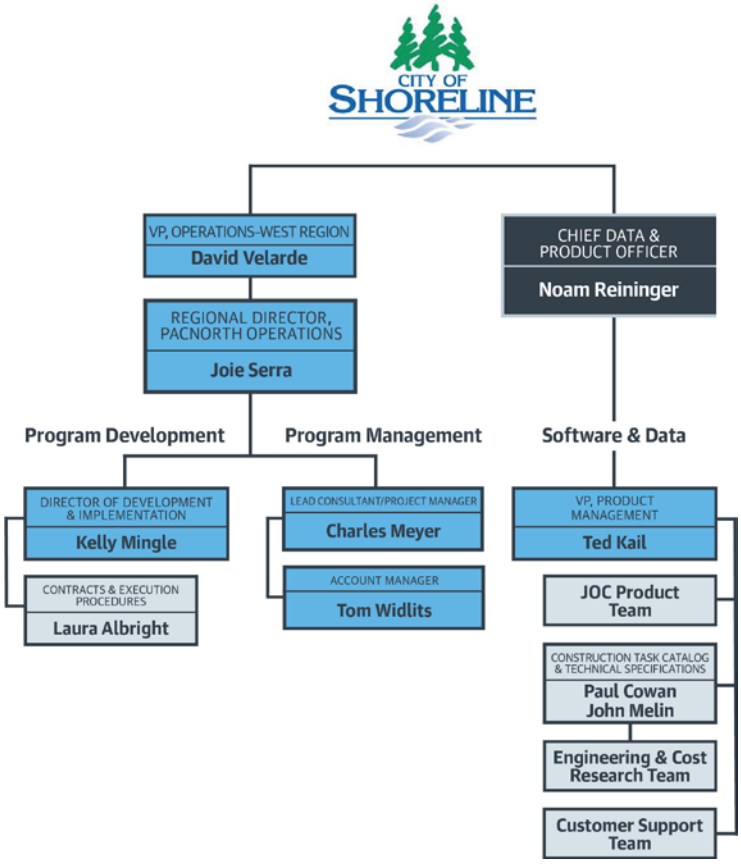
- Provide procurement and marketing support during the solicitation of JOC contracts. This support will include preparing all necessary documents and notices, preparing and participating in all pre-bid conferences, external marketing to the local contracting community, evaluating the contractor's proposed management plan, staffing and personnel plans, and assisting new contractors during mobilization.

Project Organization and Staffing

With an employee count of more than 550, including more than 300 JOC professionals, no other firm can match the level of experience Gordian possesses in connection with the advertisement, evaluation and award of JOC contracts.

The breadth of support provided to the City is not limited to the direct day-to-day interactions with our account management team, but will cover all aspects of our organization dedicated to supporting our JOC clients. Gordian's direct support for the City's program will include members of the following teams: Program Development, Program Management, Software and Construction Cost Data. Additional resources are provided by Program Analysts, Product Management, Engineering Cost Research and Customer Support.

Organizational Chart



Program Management

Key Staff is comprised of three **Program Management team members. This team is led by Joie Serra, Region Director** of the PacNorth Operations. Ms. Serra is the JOC Project Executive with primary oversight of the development of the City's JOC system. She becomes the management point of contact for communications with the City, relevant stakeholders, and the public. Reporting directly to Ms. Serra, **Charles (Chuck) Meyer** will serve as the **Lead Consultant/Project Manager** for the City's JOC program. His primary responsibilities will include overseeing the implementation phase, training, and day-to-day management and support of the City's JOC program. Mr. Meyer will collaborate with the City staff as part of their JOC bidding process, and assist to develop and finalize bidding documents; customize the Construction Task Catalog; participate in pre-bid presentations; conduct scope identification and proposal review; and assist with JOC Contractor training. Mr. Meyer will be directly supported by **Tom Widlets, Account Manager** for the City's JOC Program. Mr. Widlets will assist with responsibilities that include day-to-day development, implementation, training and support of the City's JOC program.

Program Development

This team is led by **Kelly Mingle, Director of Development and Implementation**. Ms. Mingle will manage Gordian's activities relating to the compilation of bid documents, general conditions, and other program documents required to procure the City's JOC contractors. This includes the citation and incorporation of best practices during each rebidding process, and providing standard work for contractor outreach and pre-bid meetings. The team includes a Contracts and Execution Procedures Specialist, Laura Albright, and works under the guidance of our Vice President and General Counsel, Ammon Lesher. As a licensed attorney, Mr. Lesher will work with Ms. Mingle and her team to ensure all contracts and bid documents meet City requirements.

Software and Data

The Software and Data team is led by Noam Reininger, **Chief Data & Product Officer** for Gordian. Mr. Reininger leads all aspects of product development and management, including product & data strategy, innovation, software development & data operations. He will be supported by Ted Kail for Product Management; and John Melin and Paul Cowan for Estimating services.

Implementation Schedule

Gordian can develop and implement a JOC program for the City within 120 days of the receipt of a contract. **Meeting the 120-day schedule will require working as a team.** Timely response from the City staff to our requests for information and requests to review draft documents is critical to the development and implementation process. We are aware that your staff has multiple demands placed on them in addition to your JOC program. Experience has shown us that it is best to work in our client's facilities during the early stages of the contract, so we are available to meet with client staff at their convenience. We request that the City assume the following duties and responsibilities:

- Review all documentation and requests for information submitted by Gordian in a timely manner.
- Provide full information regarding requirements for the JOC program, including but not limited to, facilities lists, current Owner procedures, programs, technical specifications and bidding information.

- Designate, in writing, a representative who shall render or obtain decisions pertaining to the JOC program in a timely manner.
- Provide work space and access to the Internet, copiers, printers, facsimile machines, and local telephone service for use by Gordian's on-site JOC development staff, which shall consist of two on-site employees during the program development phase and one employee during implementation and support phases.
- Provide reproduction services for the Construction Task Catalog, Technical Specifications, Contract and General Conditions, Instructions to Bidders and Bid Forms, including the bid packages distributed to construction contractors.

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Related Experience

The Scope of Work for the following client references include the products and services required by RFP 9596.

Seattle Housing Authority

Construction Value: $2,503,325 of construction completed to date
Program Type: Implementation and Support of a Job Order Contracting Program, including Job Order Development
Period of Service: October 2017 – On Going
Reference: Jena Richmond, CPPB
Contracts and Procurement Manager
190 Queen Anne Ave N
Seattle, WA 98109
Tel.: (206) 615-3473
Jena.Richmond@seattlehousing.org

City of Everett

Construction Value: $17,000,000 of construction completed to date
Program Type: Implementation and Support of a Job Order Contracting Program, including Job Order Development, Construction Management, and Estimating Services
Period of Service: July 2014 – On Going
Reference: Ms. Theresa Bauccio-Teschlog, Purchasing Manager
3200 Cedar Street, Door #5
Everett, WA 98201
Tel.: (425) 257-8901
TBauccio@everettwa.gov

City of Kirkland

Construction Value: $5,242,241 of construction completed to date
Program Type: Implementation and Support of a Job Order Contracting Program, including Job Order Development
Period of Service: April 2013 – On Going
Reference: Ms. Anneke Davis, Senior Capital Projects Coordinator
123 5th Avenue
Kirkland, WA 98033
Tel.: (425) 587-3828
ADavis@kirklandwa.gov

Port of Everett

Construction Value: $4,800,000 of construction completed to date
Program Type: Implementation and Support of a Job Order Contracting Program, including Job Order Development
Period of Service: July 2014 – On Going
Reference: Maija Lampinen, CPPB - Contracts Administrator
1205 Craftsman Way, Suite 200
Everett, WA 98201
Tel.: (425) 388-0606
maijal@portofeverett.com

Statement of Experience

Project Management Team Experience

Joie Serra serves as **Region Director for PacNorth Operations**. As such, she is the JOC Project Executive whose primary role will be oversight of the development and migration of the City's JOC system. She becomes the management point of contact for communications with the City, relevant stakeholders, and the public. Mrs. Serra is currently responsible for the operations of many Pacific Northwest programs, including the Seattle Housing Authority; City of Kirkland; Port of Everett, and City of Everett. Mrs. Serra has been with Gordian for nine years. She will devote 15% of her time overseeing program management team for the City's new JOC Program. During her time with Gordian, Mrs. Serra has worked many JOC programs, including:

- Jackson Health System
- Miami Dade County Schools
- City of Miami
- City of Miami Beach
- Broward County
- Pinellas County
- Palm Beach County
- City of Portland
- City of Richmond, BC
- Anchorage School District
- Hawaii Dept. of Education
- Seattle Housing Authority
- City of Kirkland
- City of Everett
- City of Bellevue
- Snohomish County
- Community Transit

Charles (Chuck) Meyer will serve as the **Lead Consultant/Project Manager** for the City and will report directly to Mrs. Serra. Mr. Meyer has been supporting PacNorth region programs for more than two years, and has been involved in all aspects of the programs. Before joining Gordian Mr. Meyer worked for 5 years as a project manager on JOC projects for a local contractor. Mr. Meyer will be the City's primary point of contact for all day-to-day activities associated with the implementation and execution of the JOC program. Mr. Meyer will devote 50% of his time to the City. During, and prior to, his time with Gordian, Mr. Meyer has worked on the following JOC programs:

- City of Richmond, BC
- Whatcom Transit Authority
- City of Everett
- Port of Everett
- Snohomish County
- Community Transit
- City of Bellevue
- University of Washington
- Sound Transit

Tom Widlets will serve as **Account Manager** for the City's JOC Program. He will assist Mr. Meyer with responsibilities including handling day-to-day development, implementation, training and support of the JOC program. Mr. Widlets will devote 35% of his time to the City. During, and prior to, his time with Gordian, Mr. Meyer has worked on the following JOC programs:

- Port of Portland
- City of Vancouver
- City of Bellevue
- Hawaii Dept. of Education
- Seattle Housing Authority
- City of Kirkland

Cost

Gordian Fees

A significant benefit of Gordian's approach to providing our JOC solutions is that we do not charge an upfront fee to our clients to implement a JOC program. Our contracts are pure performance-based contracts; we do not succeed unless you succeed. Accordingly, there is no risk to the City for the development and implementation of a Gordian JOC program since the City is under no obligation to use the program once it is operational. However, we are 100% confident that the City will continue to see the substantial time and cost savings afforded by a Gordian JOC program.

The pricing set forth below includes all of the development, implementation and technical support services required by the RFP, as well as the Job Order Development Services, Gordian will provide for every project. The fees for these products and services consist of a City License Fee and Job Order Development Fee, as set forth below:

City License Fee:	One and ninety-five hundredths percent (1.95%) of the value of construction work procured through the City's JOC program; and
Job Order Development Fee:	Three and five hundredths percent (3.05%) of the value of construction work procured through

The City License Fee and Job Order Development Fee are payable upon the issuance of each Job Order by the City. It is important to note that the pricing set forth above includes additional training for new employees and contractors beyond the implementation period, which is included at no additional cost.

Gordian's implementation of the City JOC program includes a license to our proprietary JOC System and other related materials which includes our JOC software, construction cost data and training materials, among other documentation. Our proposal is being submitted with the understanding that City agrees to incorporate into any agreement between City and Gordian the standard JOC System License.

Gordian will charge each JOC contractor a contractor license fee ("Contractor License Fee") of one percent (1.00%) of the value of each Job Order, Purchase Order, or similar purchasing document issued to the JOC contractor by the City. The Contractor License Fee is assessed to the JOC contractor in return for their access to our proprietary construction data, JOC applications and training, and is not a fee assessed to the City. Gordian is responsible for all administrative duties related to the invoicing and collections of the Contractor License Fee. The Contractor License Fee is payable by the JOC contractor when a Job Order is issued by the City, and will be assessed to the JOC contractor for all work ordered by County using the JOC program.

APPENDIX

Dave Velarde

Vice President of Operations – West Region

19 years of employment with Gordian

Education

- B.S. Electrical Engineering, Texas Tech University

Licensures

- State of Florida Class "A" General Contractors License, #CGCO057291

Relevant JOC Experience

Gordian

As Vice President of Operations, Mr. Velarde is responsible for the development, implementation and continued support for the western sector of Gordian's client base, including but not limited to the following:

- Alameda County
- University of California
- California State University
- City of Long Beach
- Port of Long Beach
- Los Angeles County Community Development Commission
- Los Angeles County Housing Authority

As the Mountain Region Director, Mr. Velarde was responsible for the development, implementation and continued support of the Job Order Contracting program for the following:

- University of New Mexico
- New Mexico Cooperative Educational Services
- New Mexico State University
- Los Alamos Public Schools, NM
- City of Las Cruces

Davis Monthan AFB, AZ

At Davis Monthan Mr. Velarde served as Project Manager and was responsible for the on-site performance of the account with full authority to commit resources to ensure successful project completion. Mr. Velarde maintained full responsibility and authority to manage the team responsible for planning, designing, estimating, project negotiation, scheduling and execution of the Simplified Acquisition of Base Engineering Requirements (SABER) projects. Completed 334 projects in the 3-year period for a contract value of $10 million.

White Sands Missile Range, NM

As the Project Engineer at the White Sands Missile Range, Mr. Velarde was responsible for all areas of JOC Construction Management including construction quality control, estimating, scheduling, testing and closeout procedures. Mr. Velarde processed all construction invoices and submittals, and solved all on-site problems while still ensuring project completion.

Other Experience

Roy Jorgensen Associates, Inc., MD

Project Director overseeing 102 Toyota Motor Sales, USA facilities nationwide, totaling 6.5 million square feet and $15 million in maintenance activities and $40 million in construction. Responsibilities included development of a strong customer service relationship with the client and solving related problems. Developed and implemented programs to incorporate all aspects of facilities management, day-to-day operations, negotiate contracts, long range planning, expense and capital budgeting, and construction management.

NBD/BankOne, MI

As Director of Facilities overseeing 602 Branch Banks for NBD, renamed BankOne, across Michigan and Indiana, Mr. Velarde's responsibilities included the initial startup of the NBD contract in Southeast Michigan and two subsequent increases for Indiana and the remainder of Michigan branches. The startup included the hiring and training of 85 employees. Maintenance included full facilities components, utility management, bank equipment maintenance and project management of the capital budget.

NationsBank of Florida

As the Director of Facilities at NationsBank of Florida, Mr. Velarde was responsible to oversee the startup and day-to-day operations of 475 Branch Banks and remote ATM locations across Florida. While there, Mr. Velarde helped develop and implement all related programs to incorporate all aspects of facilities management, routine maintenance, preventative maintenance, negotiate contracts, construction management, disaster planning, cost accounting, and quality benchmarking. Further, Mr. Velarde developed and adhered to operating and capital budgets, conducted on-site facility inspections to benchmark overall quality of services performed by Jorgensen and subcontractors.

Dieter & James, Inc. TX

As the Project Engineer at Dieter Mr. Coffey was responsible for the complete overview of the project engineering aspects from estimating to the closeout of projects. Quality control of on-going projects such as: scheduling and its control, submittal review and distribution, direct contact with owners representatives for specific requirements, all inspections, punch lists, as-builts and operations and maintenance manuals. Completed 17 projects totaling $14.6 million. Some examples of these projects include: Hoover Vacuum's 112,000 SF tilt-up plastic stamping plant, Paragon Cable's 40,000 SF tilt-up offices, Two Home Club's exposed aggregate 120,000 SF tilt-up buildings and International Paper's 140,000 SF tilt-up building.

Professional Associations

International Facility Management Association - Associate Member

Joie M. Serra

Region Director, PacNorth Operations

9 years of employment with Gordian

Education

- B.S., Architectural Engineering; University of Miami, FL
- A.A., Edison State College, FL

Relevant JOC Experience

Gordian

As the Account Executive, Ms. Serra works closely with client's upper management to maintain a successful and sustainable JOC program through varying communication including program reports consisting of data analysis and benchmarks. She is also responsible for identifying new revenue opportunities across Gordian's solution offerings and partnering with Gordian's product team to ensure innovations and enhancements to our services, data, and software satisfy clients' needs.

Other Experience

F.H. Paschen, S.N. Nielsen

As a Project Engineer, Ms. Serra supported all Miami office contracts regarding permits, notice of commencement as well as project close out. She was responsible for preparing scopes of work, PROGEN proposals and estimates, developed schedules, field reports and submittals.

Pulte Homes

As an Assistant Superintendent responsible for in assisting on all phases of home construction. Constructed two sales models to new national specifications. Assisted customer relations manager on service appointments and homeowner meetings.

Charles (Chuck) Meyer

Lead Consultant/Project Manager

2.5 years of employment with Gordian
Over 19 years of Construction Experience

Education

B.S., Architecture, The Ohio State University, Columbus OH

Relevant JOC Experience

Gordian

Mr. Meyer provides management services and communicates with clients to ensure JOC products and services are implemented and properly carried through. He conducts pre-bid presentations, assists with training of staff and new contractors, and responds to questions involving tasks in the CTC, bids or proposals. Mr. Meyer's JOC program experience includes the following:

- City of Everett
- Port of Everett
- Snohomish County
- Transit Authority
- Community Transit
- City of Bellevue
- Whatcom

Other Experience

Hazel Point Company

As Project Manager and Lead Carpenter, duties included executing and managing all phases of construction. Supervised all subcontractor coordination including contract negotiation, change order log, and SOV approvals. Worked directly with architects.

Forma Construction Co.

Project Manager responsible for managing multiple projects simultaneously to complete over 80 JOC Work Orders in 4 years. Developed job means and methods of execution while value engineering project scope to meet jurisdictional budget requirements. Full project management from initial scoping to negotiation of contract, buy-out, procurement of materials, processing submittals, and securing change orders. Coordinated with superintendents to manage budgets, schedules, and subcontractors to deliver projects on-time and within budget. Trained and supported new employee PEs and Managers on adjacent JOC contracts within the company.

Charles Meyer Design, LLC

As the General Contractor, procured, bid, managed and supervised the project with responsibilities that included conducting value engineering meetings with the owner and architect. Coordinated, scheduled and supervised subcontractors and suppliers to deliver the completed project on time, within budget, and with desired quality standards.

Certifications

- Construction Management Certificate
- OSHA 30
- 48-Hour Revit Certificate
- Certified Lead Renovator

Tom Widlits

Account Manager

2.5 years of employment with Gordian
Over 13 years of Project Management experience

Education

- BBA, Landscape Architecture, University of Oregon
- A.A.., Landscape Architecture, San Diego State University

Relevant JOC Experience

Gordian

As the Account Manager, Mr. Widlits responsibilities include handling day-to-day development, implementation and support of the JOC program. He assists in training staff in the proper execution of the JOC program and use of the eGordian system, developing project assignments, scope identification, contractor proposal accuracy, and overall contract compliance. Additional duties include assisting the Owner with proposal review and ensuring the use of appropriate line items. Mr. Widlits has worked with the following JOC programs:

- City of Vancouver
- City of Kirkland
- City of Bellevue
- Port of Portland
- Seattle Housing Authority
- Hawaii Dept. of Education

Other Experience

Nike, Inc.

As a Project Manager undertook and successfully completed a wide range of tenant improvement projects including 3-D print labs, Innovation spaces for apparel, football equipment testing, collaboration/lounge spaces, apparel merchandising rooms and commercial office space. Developed RFPs as well as RFIs in the research phase of various projects. Responsibilities included contractor bid development, contractor response reviews, contractor selection, contract negotiation as well as development of project charter, timeline and budget. Collaborated with other organizations at Nike to develop long term sustainable processes for prioritization of Tenant requested projects and facility upgrades. Developed a strategic planning matrix to enable a rolling five-year site plan. Responsible for reporting project status to senior leadership teams, as well as maintaining great rapport with project stakeholders and trades.

Tri-Met

Project Manager responsible for construction on Tri-Met's "Special Needs Assessment" facility in NW Portland. Facilitated processing of RFIs, submittals and samples among the general contractor, the owner and the owner's consultants. Submitted all project closeout documents in accordance with the contract. Worked with facilities department to set long term strategic plans for track protections prioritizing security concerns and setting plans and budgets for various projects.

MBank

As a Facilities Director, oversaw construction on bank branch expansions as well as Bank Operations Center. Assigned projects and tasks to employees based on their competencies and specialties. Performed construction site pre-inspections and coordinated post-construction audits. Led and managed resolution of all issues during project construction and commissioning phases. Facilitated processing of RFI's submittals and samples among the general contractor, the owner and the owner's consultants. Collaborated with senior leadership to develop a long-term strategy for maintenance and equipment obsolescence on all bank owned properties to allow for better utilization of operational budgets. Initiated process for multi-trade maintenance schedules for all bank properties, setting Service Level Agreements with vendors, contract negotiation for long term maintenance and oversight of the program.

Certifications

- LEEDS
- Project Management Professional

Kelly Mingle

Director of Development and Implementation

9.5 years of employment with Gordian

Education

- A.S., Environmental Design/Architecture, Cosumnes River College

Relevant JOC Experience

Gordian

As Director of Development and Implementation, Ms. Mingle coordinates the accurate development and preparation of Contracts and General Conditions used to procure the JOC construction contractors.

In her previous role as an Account Manager, Ms. Mingle was responsible for the implementation and continued support of the Job Order Contracting programs for the following:

- California Administrative Office of the Courts
- Sacramento County

Other Experience

County of Sacramento, Architectural Services Division

Ms. Mingle was with the County of Sacramento for 9 years, serving primarily as a JOC Program Coordinator following one year as a Program Manager with the Architectural Services Division (ASD). Responsibilities included project management, supervision of 3 Project Managers, and coordination of the JOC program County-wide. ASD utilized JOC for the Sheriff, Probation, Parks, Courts, General Services, Department of Water Resources, County Airports System and Department of Transportation completing 300+ construction projects with a combined value greater than $88 million.

Gap, Inc.

While at the Gap, Inc., Ms. Mingle was the Senior Project Manager and was responsible for multiple, simultaneous retail projects including indoor malls, outdoor malls, and strip center locations throughout the United States and Puerto Rico.

Ray Bailey Architects, Inc., MD

While at Ray Bailey Architects, Inc., Ms. Mingle performed construction administration duties on a multi-phased, $85 million renovation/addition to The Mall of Columbia, Columbia Maryland. The Scope of the project included three new multi-level parking decks, a new two-level wing to the mall, relocation of the food court, and extensive site work.

Laura Albright, CSI, CDT

Development and Implementation Specialist

7 years of employment with Gordian

Education

- B.A., California State University/ Sacramento
  Bachelor of Arts - Design, cum laude

Credentials

- Construction Specifications Institute
- Construction Document Technologist

Relevant JOC Experience

Gordian

As a Development and Implementation Specialist, Ms. Albright is responsible for preparing the Contract and General Conditions that are used to procure the JOC construction contractors.

Other Experience

Gap, Inc.

While at the Gap, Inc., Ms. Albright was a Project Manager and was responsible for multiple, simultaneous retail projects including indoor malls, outdoor malls, and strip center locations throughout the United States and Puerto Rico.

Tech Events, Inc.

While at Tech Events, Inc., Ms. Albright was the Director of Client Service, managed and implemented full delivery for corporate technical event logistics, composed and managed all client contracts and renewals, managed all aspects of client relationships, department and team coordination, and solutions implementation. Business strategy development and launch of sister company SolvD, marketing strategy, and social media strategy, content and implementation.

Closed Loop, Inc.

While at Closed Loop, Inc., Ms. Albright was the Director of Operations managing all aspects of facilities, finances, office operations, remote office coordination, business development and resource allocation.

Borges Architectural Group

While at Borges Architectural Group, Ms. Albright was the Design Project Manager and was responsible for all Interior Design projects, client services, design specifications, construction management, proposals and bid reviews.

Noam Reininger

Chief Product & Data Officer

3 years of employment with Gordian and over 15 years of Data and IT industry experience

Education

- B.B.A., Information Systems and East Asian Studies, University of Wisconsin

Experience

Gordian

Mr. Reininger is the Chief Product & Data Officer responsible for the development of Gordian's portfolio of technology and data solutions that solve the unique challenges of the construction industry. Mr. Reininger leads all aspects of development including product & data strategy, innovation, software development & data operations.

Other Experience

Dun & Bradstreet

As the Senior Vice President, Master Data and Data-as-a Service Solutions, lead global product management organization responsible for $330 million in annual revenue. Organization includes both strategy and execution teams with over 150+ cross-functional staff members responsible for D&B's Master Data & Data-as-a-Service Portfolio.

DELL

As the Director of Solution Centers started up and led an enterprise class pre-sales organization from the ground up. Hired, trained and lead a staff of 22 solution architects and oversaw multi-million-dollar facility bring-ups in Austin, Chicago, DC and New York. Engaged with senior government dignitaries and drove media relation activities.

SALESVU

As the Chief Operating Officer was a founding member, started up, staffed and oversaw offshore development and drove sales and marketing activities. Responsibilities included investor relations, strategy and operations.

Ted Kail

Vice President of Product Management

15 years of employment with Gordian

Education

- Executive M.B.A., Northeastern University
- B.S., Business, Northeastern University

Relevant JOC Experience

Gordian

As the VP of Product Management, Mr. Kail is responsible for determining the strategic direction of all products across the construction lifecycle, which includes Planning, Estimating, and Procurement solutions.

Other Experience

Sightlines, LLC

Sr. Director of Product Management responsible for directing Sightlines' offerings across the full life cycle – from ideation through service implementation. Determined the strategic direction of all Sightlines' current products and made decisions around all new services and markets. Directed the acquisition and integration of the Pacific Partners Consulting Group (PPCG). Prior to product, Ted managed all new client relationships in the operations department. Implemented and provided Sightlines' services at over 100 institutions throughout North America.

John B. Melin, Jr.

CTC Cost Estimator - Manager

24 years of employment with Gordian

Education

- B.S., Building Construction, Georgia Institute of Technology

Licensures

- Certified Cost Professional, #1194, Originally certified 9/1/1991
- Project Management Professional, #04539, Originally certified 5/17/1995

Relevant JOC Experience

Gordian

Mr. Melin is the Manager for the CTC Data Team and responsible for gathering and processing data for use in developing our Construction Task Catalog database. Mr. Melin has prepared customized Construction Task Catalogs for over 100 public facility owners, including:

- New York Department of Transportation
- New York State Department of Environmental Conservation
- New York State Dormitory Authority
- State University Construction Fund

Project Time and Cost, Atlanta

Department of Defense, Worldwide

Project Manager responsible for the coordination and preparation of site specific Unit Price Books for DOD Job Order Contracts worldwide.

Database and Estimating Software Experience

- CACES, MCACES, M-CACES Composer Gold, MC2, Navy's CES, CEG

Professional Associations

- Association for the Advancement of Cost Engineers International

Paul Cowan

Senior CTC Engineer

13 years of employment with Gordian

Education

- B.S., Management, Georgia Institute of Technology, Atlanta, GA, 2001

Certification

- Information Technology Certificate, Georgia Institute of Technology, 2001

Relevant JOC Experience

Gordian

As a Senior CTC Engineer, Mr. Cowan is responsible for improving, expanding and maintaining Gordian's proprietary Construction Task Database and for customizing and publishing client specific Construction Task Catalogs. He has well developed company expertise in design engineering and construction consulting, as well as value engineering.

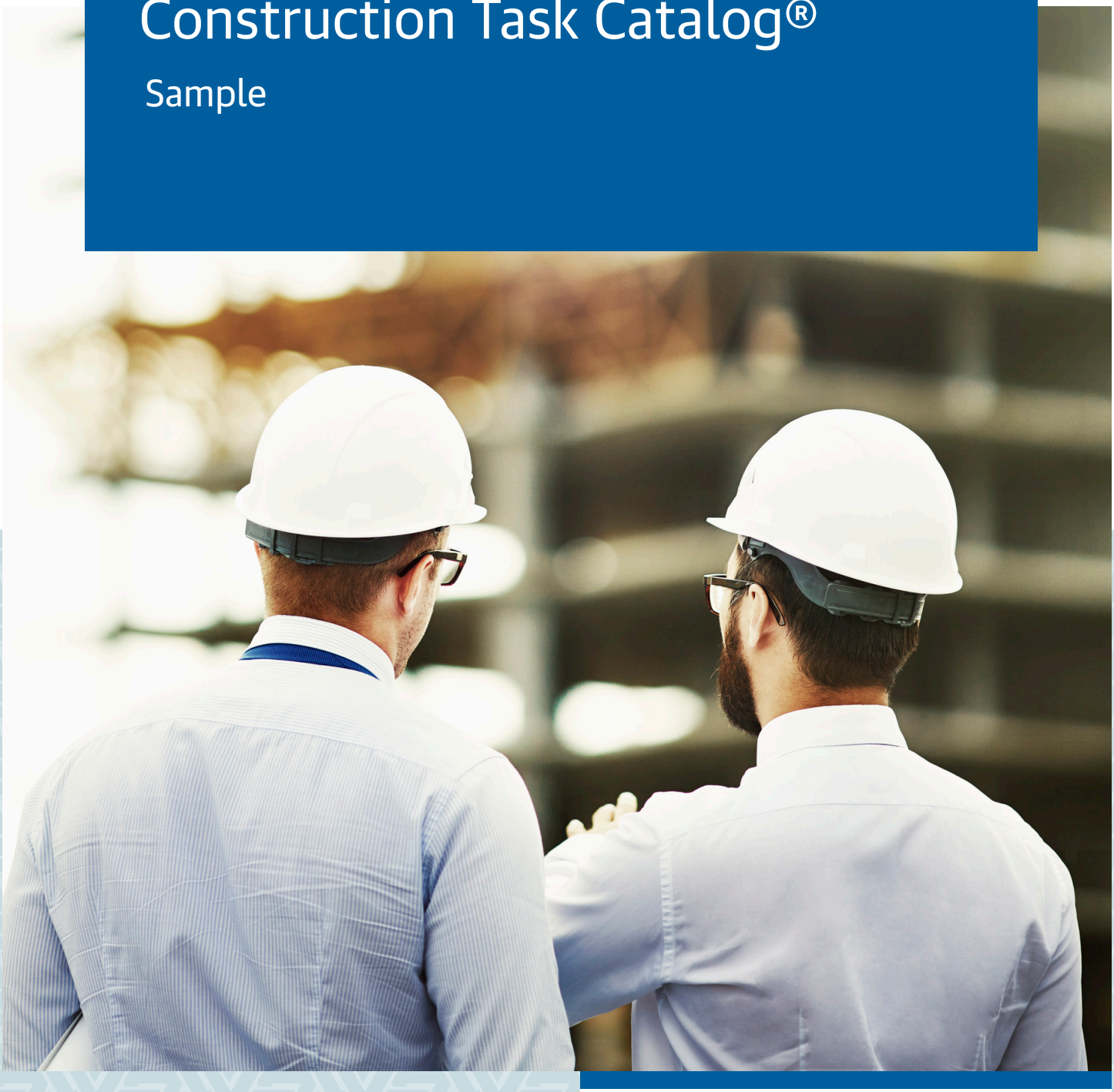
Other Experience

Mr. Cowan has worked with manufacturing partners to design and produce products to assist the US Air Force with production and safety requirements.

Building knowledge

Job Order Contract Construction Task Catalog®

Sample



GORDIAN®

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MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST

28 Electronic Safety And Security

Note: Termination costs are included with all safety and security equipment, panel boards, and devices. Terminations are not included with patch panels.

28 05 Common Work Results For Electronic Safety And Security *(28)*

28 05 13 Conductors And Cables For Electronic Safety And Security *(28 05)*

28 05 13 13 CCTV Communications Conductors And Cables *(28 05 13)*

See CSI section 26 05 19 00-0000 for low-voltage electrical power cable, 26 05 23 00-0000 for control-voltage electrical power cable, 27 14 00 00-0000 for conductors and cables.

28 05 13 16 Access Control Communications Conductors And Cables *(28 05 13)*

See CSI section 26 05 19 00-0000 for low-voltage electrical power cable, 26 05 23 00-0000 for control-voltage electrical power cable, 27 14 00 00-0000 for conductors and cables.

28 05 13 19 Intrusion Detection Communications Conductors And Cables *(28 05 13)*

See CSI section 26 05 19 00-0000 for low-voltage electrical power cable, 26 05 23 00-0000 for control-voltage electrical power cable, 27 14 00 00-0000 for conductors and cables, 28 05 13 23-0000 for Type FPLP.

28 05 13 23 Fire Alarm Communications Conductors And Cables *(28 05 13)*

28 05 13 23-0001 Fire Alarm/Life Safety Cable *(28 05 13 23)*

28 05 13 23-0002 Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable *(28 05 13 23-0001)*

28 05 13 23-0003 Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit *(28 05 13 23-0002)*

28 05 13 23-0004	MLF	1-Pair, 18 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,328.71	430.93
28 05 13 23-0005	MLF	2-Pair, 18 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,759.48	446.52
28 05 13 23-0006	MLF	1-Pair, 16 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,517.51	489.83
28 05 13 23-0007	MLF	2-Pair, 16 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,215.57	507.32
28 05 13 23-0008	MLF	1-Pair, 14 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,765.72	548.36
28 05 13 23-0009	MLF	2-Pair, 14 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,767.90	568.12
28 05 13 23-0010	MLF	1-Pair, 12 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,378.53	627.02
28 05 13 23-0011	MLF	2-Pair, 12 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	3,948.41	649.38

28 05 13 23-0012 Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed *(28 05 13 23-0002)*

28 05 13 23-0013	MLF	1-Pair, 18 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,046.94	861.99
28 05 13 23-0014	MLF	2-Pair, 18 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,503.67	893.04
28 05 13 23-0015	MLF	1-Pair, 16 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,333.91	979.80
28 05 13 23-0016	MLF	2-Pair, 16 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	3,061.09	1,014.63
28 05 13 23-0017	MLF	1-Pair, 14 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,679.65	1,096.97
28 05 13 23-0018	MLF	2-Pair, 14 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	3,714.77	1,136.24
28 05 13 23-0019	MLF	1-Pair, 12 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	3,423.56	1,254.04
28 05 13 23-0020	MLF	2-Pair, 12 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	5,030.82	1,299.01

28 05 13 23-0021 Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit *(28 05 13 23-0001)*

28 05 13 23-0022	MLF	2/c #22 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	720.54	352.65
28 05 13 23-0023	MLF	4/c #22 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	804.19	365.19
28 05 13 23-0024	MLF	2/c #18 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	873.62	430.93
28 05 13 23-0025	MLF	3/c #18 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	963.73	438.72
28 05 13 23-0026	MLF	4/c #18 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,014.12	446.52
28 05 13 23-0027	MLF	6/c #18 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,190.56	462.09

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 05 13 23-0028	MLF	8/c #18 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,454.20	477.68
28 05 13 23-0029	MLF	2/c #16 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,039.22	489.83
28 05 13 23-0030	MLF	4/c #16 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,236.07	507.32
28 05 13 23-0031	MLF	2/c #14 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,233.28	548.36
28 05 13 23-0032	MLF	4/c #14 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,552.43	568.12
28 05 13 23-0033	MLF	2/c #12 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,570.36	627.02
28 05 13 23-0034	MLF	4/c #12 AWG, Shielded, Non-Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,099.66	649.38
28 05 13 23-0035		Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable *(28 05 13 23-0001)*		
28 05 13 23-0036		Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit *(28 05 13 23-0035)*		
28 05 13 23-0037	MLF	2/c #22 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	710.09	352.65
28 05 13 23-0038	MLF	2/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	866.83	430.93
28 05 13 23-0039	MLF	3/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,029.35	438.72
28 05 13 23-0040	MLF	4/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,032.29	446.52
28 05 13 23-0041	MLF	6/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,285.39	462.09
28 05 13 23-0042	MLF	2/c #16 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,028.96	489.83
28 05 13 23-0043	MLF	4/c #16 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,259.09	507.32
28 05 13 23-0044	MLF	2/c #14 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,187.10	548.36
28 05 13 23-0045	MLF	4/c #14 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,735.96	568.12
28 05 13 23-0046	MLF	2/c #12 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,555.27	627.02
28 05 13 23-0047	MLF	4/c #12 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,378.28	649.38
28 05 13 23-0048		Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed *(28 05 13 23-0035)*		
28 05 13 23-0049	MLF	2/c #22 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,297.84	705.56
28 05 13 23-0050	MLF	2/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,585.06	861.99
28 05 13 23-0051	MLF	3/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,760.24	877.20
28 05 13 23-0052	MLF	4/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,776.48	893.04
28 05 13 23-0053	MLF	6/c #18 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,055.55	924.07
28 05 13 23-0054	MLF	2/c #16 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,845.36	979.80
28 05 13 23-0055	MLF	4/c #16 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,104.61	1,014.63
28 05 13 23-0056	MLF	2/c #14 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,101.03	1,096.97
28 05 13 23-0057	MLF	4/c #14 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,682.83	1,136.24
28 05 13 23-0058	MLF	2/c #12 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,600.30	1,254.04
28 05 13 23-0059	MLF	4/c #12 AWG, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	3,460.69	1,299.01
28 05 13 23-0060		Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable *(28 05 13 23-0001)*		
28 05 13 23-0061		Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit *(28 05 13 23-0060)*		
28 05 13 23-0062	MLF	2/c #22 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	753.11	352.65
28 05 13 23-0063	MLF	2/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	897.55	430.93
28 05 13 23-0064	MLF	3/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,143.39	438.72

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 05 13 23-0065	MLF	4/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,063.73	446.52
28 05 13 23-0066	MLF	6/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,317.54	462.09
28 05 13 23-0067	MLF	2/c #16 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,099.57	489.83
28 05 13 23-0068	MLF	4/c #16 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,291.75	507.32
28 05 13 23-0069	MLF	2/c #14 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,339.39	548.36
28 05 13 23-0070	MLF	4/c #14 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,659.60	568.12
28 05 13 23-0071	MLF	2/c #12 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	1,667.96	627.02
28 05 13 23-0072	MLF	4/c #12 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit	2,146.44	649.38
28 05 13 23-0073		Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed *(28 05 13 23-0060)*		
28 05 13 23-0074	MLF	2/c #22 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,340.86	705.56
28 05 13 23-0075	MLF	2/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,615.78	861.99
28 05 13 23-0076	MLF	3/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,874.28	877.20
28 05 13 23-0077	MLF	4/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,807.92	893.04
28 05 13 23-0078	MLF	6/c #18 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,087.70	924.07
28 05 13 23-0079	MLF	2/c #16 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	1,915.97	979.80
28 05 13 23-0080	MLF	4/c #16 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,137.27	1,014.63
28 05 13 23-0081	MLF	2/c #14 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,253.32	1,096.97
28 05 13 23-0082	MLF	4/c #14 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,606.47	1,136.24
28 05 13 23-0083	MLF	2/c #12 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	2,712.99	1,254.04
28 05 13 23-0084	MLF	4/c #12 AWG, Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed Exposed	3,228.85	1,299.01

28 05 26 Grounding And Bonding For Electronic Safety And Security *(28 05)*

See CSI section 26 05 26 00-0000 for grounding and bonding.

28 05 28 Pathways For Electronic Safety And Security *(28 05)*

28 05 28 29 Hangers And Supports For Electronic Safety And Security *(28 05 28)*

See CSI section 26 05 29 00-0000 for hangers and supports.

28 05 28 33 Conduits And Backboxes For Electronic Safety And Security *(28 05 28)*

See CSI section 26 05 33 13-0000 for conduits.

28 05 28 36 Cable Trays For Electronic Safety And Security *(28 05 28)*

See CSI section 26 05 36 00-0000 for cable trays.

28 05 28 39 Surface Raceways For Electronic Safety And Security *(28 05 28)*

See CSI section 26 05 33 23-0000 for surface raceways.

28 05 53 Identification For Electronic Safety And Security *(28 05)*

See CSI section 26 05 53 00-0000 for identification.

28 10 Electronic Access Control And Intrusion Detection *(28)*

Note: Includes testing of new devices and certification.

28 13 Access Control *(28 10)*

28 13 33 Access Control Interfaces *(28 13)*

28 13 33 16 Access Control Interfaces to Access Control Hardware *(28 13 33)*

28 13 33 16-0001		Stand Alone Access Controls *(28 13 33 16)*		
28 13 33 16-0002		Push Button Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0003		Interior Mount, Push Button Controls, Stand Alone Access Controls *(28 13 33 16-0002)*		
28 13 33 16-0004	EA	Exit Push Button, Push Button Controls, Interior Stand Alone Access Controls Note: Controls mount to a standard mullion.	67.67	15.84
28 13 33 16-0005	EA	Exit Push Button, Push Button Controls, Interior Stand Alone Access Controls Note: Controls mount into a single gang electrical box. Excludes electrical box.	70.67	15.84
28 13 33 16-0006	EA	Three Button, Push Button Controls, Interior Stand Alone Access Controls For Gate Operators Note: Controls mount into a single gang electrical box. Excludes electrical box.	87.92	15.84
28 13 33 16-0007		Exterior Mount, Push Button Controls, Stand Alone Access Controls *(28 13 33 16-0002)* Note: Includes a lockable, gasketed 16 gauge steel enclosure. Excludes mounting posts.		
28 13 33 16-0008	EA	Handicap/Push To Open, Push Button Controls, Exterior Stand Alone Access Controls Note: Controls mount into a single gang electrical box. Excludes electrical box.	83.67	15.84
28 13 33 16-0009	EA	42" High Aluminum Post With Handicap/Push To Open, Push Button Controls, Exterior Stand Alone Access Controls Note: Includes post, mounting base and push button control. Excludes concrete foundation.	394.00	47.50
28 13 33 16-0010	EA	Three Button, Exterior Stand Alone Access Controls For Gate Operators Note: Includes open, close and stop controls.	132.92	15.84

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0011		Key Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0012		Interior Mount, Key Controls, Stand Alone Access Controls *(28 13 33 16-0011)*		
28 13 33 16-0013	EA	Standard Mortise Key, Key Controls, Interior Stand Alone Access Controls Note: Controls mount into a single gang electrical box. Excludes electrical box.	93.55	15.84
28 13 33 16-0014		Exterior Mount, Key Controls, Stand Alone Access Controls *(28 13 33 16-0011)* Note: Includes a lockable NEMA rain resistant steel enclosure. Excludes mounting posts.		
28 13 33 16-0015	EA	Postal Or Fire Department Lock Box, Key Controls, Exterior Stand Alone Access Controls Note: Opens door or gate with a postal or fire department key.	145.84	31.67
28 13 33 16-0016	EA	Standard Mortise Key, Key Controls, Exterior Stand Alone Access Controls	225.34	31.67
28 13 33 16-0017	EA	Ace Key, Key Controls, Exterior Stand Alone Access Controls	225.34	31.67
28 13 33 16-0018	EA	Standard Mortise Key And Push Button Intercom, Key Controls, Exterior Stand Alone Access Controls	339.34	31.67
28 13 33 16-0019		Keypad Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0020		Interior Mount, Keypad Controls, Stand Alone Access Controls *(28 13 33 16-0019)*		
28 13 33 16-0021	EA	One Code Memory, Keypad Control, Interior Stand Alone Access Controls Note: Stores one 4-digit entry code and one 4-digit hold code. Controls mount into a single gang electrical box. Excludes electrical box.	129.17	15.84
28 13 33 16-0022		Exterior Mount, Keypad Controls, Stand Alone Access Controls *(28 13 33 16-0019)* Note: Includes a surface mounted lockable NEMA rain resistant steel enclosure. Excludes mounting posts.		
28 13 33 16-0023		Keypad Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0022)*		
28 13 33 16-0024	EA	1000 Code Memory, Keypad Control, Exterior Stand Alone Access Controls Note: Includes lighted keypad. Stores one thousand 4-digit entry codes and six 5-digit entry codes.	539.17	63.34
		For Flush Mount, Add	*92.81*	
28 13 33 16-0025		Keypad Controls With Push Button Intercom, Exterior Stand Alone Access Controls *(28 13 33 16-0022)* Note: Includes intercom sub-station. Excludes additional receiving intercoms.		
28 13 33 16-0026	EA	1000 Code Memory, Keypad Controls With Push Button Intercom, Exterior Stand Alone Access Controls Note: Includes lighted keypad. Stores one thousand 4-digit entry codes and six 5-digit entry codes.	652.51	71.25
		For Flush Mount, Add	*114.75*	
28 13 33 16-0027		RF Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0028		Exterior Mount, RF Controls, Stand Alone Access Controls *(28 13 33 16-0027)* Note: Includes a lockable NEMA rain resistant steel enclosure. Excludes mounting posts and transmitters.		
28 13 33 16-0029		RF Receivers, RF Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0028)* Note: Includes a lockable NEMA rain resistant steel enclosure. Excludes mounting posts and transmitters.		
28 13 33 16-0030	EA	50 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	329.17	63.34
28 13 33 16-0031	EA	100 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	369.67	63.34
28 13 33 16-0032	EA	250 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	408.67	63.34
28 13 33 16-0033	EA	500 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	450.67	63.34
28 13 33 16-0034	EA	1000 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	489.67	63.34
28 13 33 16-0035	EA	5000 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	531.67	63.34
28 13 33 16-0036	EA	16000 Code Memory, RF Receiver, RF Controls, Exterior Stand Alone Access Controls	570.67	63.34
28 13 33 16-0037		RF Transmitters, RF Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0028)*		
28 13 33 16-0038	EA	1 Button, RF Transmitter, RF Controls, Exterior Stand Alone Access Controls	25.50	
		For >40 To 110, Deduct	*-1.28*	
		For >110, Deduct	*-2.55*	
		For Built In Proximity Tags, Add	*5.10*	
28 13 33 16-0039	EA	2 Button, RF Transmitter, RF Controls, Exterior Stand Alone Access Controls	27.00	
		For >40 To 110, Deduct	*-1.35*	
		For >110, Deduct	*-2.70*	
		For Built In Proximity Tags, Add	*5.40*	
28 13 33 16-0040	EA	3 Button, RF Transmitter, RF Controls, Exterior Stand Alone Access Controls	28.50	
		For >40 To 110, Deduct	*-1.43*	
		For >110, Deduct	*-2.85*	
		For Built In Proximity Tags, Add	*5.70*	
28 13 33 16-0041		Accessories For RF Receivers, Exterior Stand Alone Access Controls *(28 13 33 16-0028)*		
28 13 33 16-0042	EA	Coax Antenna Kit For RF Receivers, Exterior Stand Alone Access Controls Note: Includes 15' of coax cable.	131.00	47.50
28 13 33 16-0043	EA	Antenna Amplifier For RF Receivers, Exterior Stand Alone Access Controls Note: Includes 20' of coax cable.	245.00	47.50
28 13 33 16-0044	EA	Yagi High-Gain Antenna Kit For RF Receivers, Exterior Stand Alone Access Controls Note: Includes 15' of coax cable.	224.00	47.50

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0045		Proximity Card Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0046		Exterior Mount, Proximity Card Controls, Stand Alone Access Controls *(28 13 33 16-0045)* Note: Includes a lockable NEMA rain resistant steel enclosure. Excludes mounting posts.		
28 13 33 16-0047		DKS Proximity Card Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0046)*		
28 13 33 16-0048		DKS Proximity Card Readers, Exterior Stand Alone Access Controls *(28 13 33 16-0047)*		
28 13 33 16-0049	EA	DKS Proximity Card Reader, Exterior Stand Alone Access Controls	614.17	63.34
28 13 33 16-0050		AWID Proximity Card Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0046)*		
28 13 33 16-0051		AWID Proximity Card Readers, Exterior Stand Alone Access Controls *(28 13 33 16-0050)*		
28 13 33 16-0052	EA	AWID Proximity Card Reader, Exterior Stand Alone Access Controls	666.67	63.34
28 13 33 16-0053		HID Proximity Card Controls, Exterior Stand Alone Access Controls *(28 13 33 16-0046)*		
28 13 33 16-0054		HID Proximity Card Readers, Exterior Stand Alone Access Controls *(28 13 33 16-0053)*		
28 13 33 16-0055	EA	HID Proximity Card Reader, Exterior Stand Alone Access Controls	786.67	63.34
28 13 33 16-0056		Magnetic Stripe Card Controls, Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0057		Interior Mount, Magnetic Stripe Card Controls, Stand Alone Access Controls *(28 13 33 16-0056)*		
28 13 33 16-0058	EA	Magnetic Stripe Reader, Interior Stand Alone Access Controls	374.17	63.34
28 13 33 16-0059		Exterior Mount, Magnetic Stripe Card Controls, Stand Alone Access Controls *(28 13 33 16-0056)* Note: Includes a lockable NEMA rain resistant steel enclosure. Excludes mounting posts.		
28 13 33 16-0060	EA	Magnetic Stripe Reader, Exterior Stand Alone Access Controls	458.87	63.34
28 13 33 16-0061		Other Stand Alone Access Controls *(28 13 33 16-0001)*		
28 13 33 16-0062	EA	Toggle Switch, Interior Access Controls For Gate Operators Note: Controls mount into a single gang electrical box. Excludes electrical box.	65.42	15.84
28 13 33 16-0063		Wiegand Output Access Controls *(28 13 33 16)* Note: Excludes controllers.		
28 13 33 16-0064		Proximity Card Controls, Wiegand Output Access Controls *(28 13 33 16-0063)*		
28 13 33 16-0065		DKS, Proximity Card Controls, Wiegand Output Access Controls *(28 13 33 16-0064)*		
28 13 33 16-0066		DKS, Proximity Cards *(28 13 33 16-0065)*		
28 13 33 16-0067	EA	Clamshell Type, DKS Proximity Card (DKS 170)	3.99	
28 13 33 16-0068	EA	ISO Compliant Graphics Card, DKS Proximity Card (DKS 80)	6.58	
28 13 33 16-0069	EA	DKS Proximity Key Fob (DKS 50)	6.93	
28 13 33 16-0070	EA	Active Tag, DKS Proximity Tag (DKS 150) Note: Battery powered tag to boost signal.	39.20	
28 13 33 16-0071	EA	Active Tag, DKS Proximity Tag (DKS 200) Note: Battery powered tag to boost signal.	51.10	
28 13 33 16-0072		DKS, Proximity Card Readers, Wiegand Output Access Controls *(28 13 33 16-0065)*		
28 13 33 16-0073	EA	Up To 2" Read Range, 12 Volt DC, DKS Proximity Card Reader, Wiegand Output Access Controls (DKS Small)	238.14	79.17
28 13 33 16-0074	EA	Up To 3" Read Range, 12 Volt DC, DKS Proximity Card Reader, Wiegand Output Access Controls (DKS Mullion)	238.14	79.17
28 13 33 16-0075	EA	Up To 4" Read Range, 12 Volt DC, DKS Proximity Card Reader, Wiegand Output Access Controls (DKS Single Gang)	238.14	79.17
28 13 33 16-0076	EA	Up To 30" Read Range, 12 Volt DC, DKS Proximity Card Reader, Wiegand Output Access Controls (DKS) Note: Includes mounting bracket and 12 VDC regulated power supply.	611.94	79.17
28 13 33 16-0077		AWID, Proximity Card Controls, Wiegand Output Access Controls *(28 13 33 16-0064)*		
28 13 33 16-0078		AWID, Proximity Cards *(28 13 33 16-0077)*		
28 13 33 16-0079	EA	Clamshell Type, AWID Proximity Card (AWID Prox-Linc CS)	3.36	
28 13 33 16-0080	EA	ISO Compliant Graphics Card, AWID Proximity Card (AWID Prox-Linc GR)	5.25	
28 13 33 16-0081	EA	AWID Proximity Key Fob (AWID Prox-Linc KT)	5.60	
28 13 33 16-0082	EA	Windshield Tag For LR 2000 Readers, AWID Proximity Tag	19.60	
28 13 33 16-0083	EA	Metal Mount Tag For LR 2000 Readers, AWID Proximity Tag	19.60	
28 13 33 16-0084		AWID, Proximity Card Readers, Wiegand Output Access Controls *(28 13 33 16-0077)*		

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0085	EA	Up To 4" Read Range, 5-12 Volt DC, AWID Proximity Card Reader, Wiegand Output Access Controls (AWID SR 2400)	284.34	79.17
		Note: For mullion mounting.		
28 13 33 16-0086	EA	Up To 8" Read Range, 5-12 Volt DC, AWID Proximity Card Reader, Wiegand Output Access Controls (AWID MM 6800)	385.14	79.17
		Note: For mullion mounting.		
28 13 33 16-0087	EA	Up To 8" Read Range, 5-12 Volt DC, AWID Proximity Card Reader, Wiegand Output Access Controls (AWID MM 6820)	385.14	79.17
		Note: For single gang electrical box mounting.		
28 13 33 16-0088	EA	Up To 24" Read Range, 5-12 Volt DC, AWID Proximity Card Reader, Wiegand Output Access Controls (AWID MR 1824)	613.34	79.17
		Note: Includes 12 VDC regulated power supply.		
28 13 33 16-0089	EA	Up To 11' Read Range, 12 Volt DC, AWID Proximity Card Reader, Wiegand Output Access Controls (AWID LR 2000)	3,351.74	79.17
		Note: Includes mounting bracket and 12 VDC regulated power supply.		
28 13 33 16-0090		**HID, Proximity Card Controls, Wiegand Output Access Controls** *(28 13 33 16-0064)*		
28 13 33 16-0091		**HID, Proximity Cards** *(28 13 33 16-0090)*		
28 13 33 16-0092	EA	Clamshell Type, HID Proximity Card (HID ProxCard II)	8.81	
28 13 33 16-0093	EA	ISO Compliant Graphics Card, HID Proximity Card (HID ISOProx II)	11.33	
28 13 33 16-0094	EA	HID Proximity Key Fob (HID ProxKey II)	11.61	
28 13 33 16-0095		**HID, Proximity Card Readers, Wiegand Output Access Controls** *(28 13 33 16-0090)*		
28 13 33 16-0096	EA	Up To 3" Read Range, 5-16 Volt DC, HID Proximity Card Reader, Wiegand Output Access Controls (HID ProxPoint Plus)	281.08	79.17
		Note: For mullion mounting. (HID P/N 6005).		
28 13 33 16-0097	EA	Up To 5" Read Range, 5-16 Volt DC, HID Proximity Card Reader, Wiegand Output Access Controls (HID ThinLine II)	330.68	79.17
		Note: For single gang electrical box mounting. (HID P/N 5395).		
28 13 33 16-0098	EA	Up To 5" Read Range, 5-16 Volt DC, HID Proximity Card Reader, Wiegand Output Access Controls (HID MiniProx)	367.87	79.17
		Note: For mullion mounting. (HID P/N 5365).		
28 13 33 16-0099	EA	EntryProx Single-Door Proximity Access Control	468.30	79.17
		Note: (HID P/N 4045) Stores up to 2,000 users and 1,000 time-stamped transactions 12 position keypad for Pin entry or programming optional use with card/key fob, code only or card plus pin code Wiegand output mode. Continental Instrument CICR2358P.		
28 13 33 16-0100		**Contactless Smart Card Controls, Wiegand Output Access Controls** *(28 13 33 16-0063)*		
28 13 33 16-0101		**HID, Contactless Smart Cards** *(28 13 33 16-0100)*		
28 13 33 16-0102	EA	2K Bits, Clamshell Type, HID iClass, Contactless Smart Card	6.16	
28 13 33 16-0103	EA	16K Bits, ISO Compliant Graphics Card, HID iClass, Contactless Smart Card	6.72	
28 13 33 16-0104	EA	16K Bits, Contactless Smartcard Key Fob, HID iClass, Contactless Smart Card	8.80	
28 13 33 16-0105	EA	16K Bits, Contactless Smartcard Tag, HID iClass, Contactless Smart Card	4.76	
		Note: Battery powered tag to boost signal.		
28 13 33 16-0106		**HID, Contactless Smart Card Readers, Wiegand Output Access Controls** *(28 13 33 16-0100)*		
28 13 33 16-0107	EA	Up To 3-1/4" Read Range, 5-16 Volt DC, HID iClass Contactless Smart Card Reader, Wiegand Output Access Controls (HID R10)	269.44	79.17
		Note: For mullion mounting.		
28 13 33 16-0108	EA	Up To 4-1/4" Read Range, 5-12 Volt DC, HID iClass Contactless Smart Card Reader, Wiegand Output Access Controls (HID R40)	361.84	79.17
		Note: For mullion mounting.		
28 13 33 16-0109	EA	Up To 4-1/4" Read Range, 5-12 Volt DC, HID iClass Contactless Smart Card Reader With Keypad, Wiegand Output Access Controls (HID RK40)	569.74	79.17
		Note: For mullion mounting.		
28 13 33 16-0110		**HID, Contactless Smart Card Programmer, Wiegand Output Access Controls** *(28 13 33 16-0100)*		
28 13 33 16-0111	EA	HID iClass Contactless Smart Card Programmer, Wiegand Output Access Controls (HID CP400)	1,739.04	79.17
		Note: For mullion mounting.		
28 13 33 16-0112		**Call Station Controls, Wiegand Output Access Controls** *(28 13 33 16-0063)*		
		Note: Includes intercom sub-station. Excludes additional receiving intercoms.		
28 13 33 16-0113	EA	Call Station With Entry Keypad, Exterior Wiegand Output Access Controls	698.34	79.17
		Note: For mullion mounting.		
28 13 33 16-0114	EA	Call Station With Proximity Card Reader, Exterior Wiegand Output Access Controls	585.84	79.17
		Note: For mullion mounting.		
28 13 33 16-0115		**Biometrics Readers, Wiegand Output Access Controls** *(28 13 33 16-0063)*		
28 13 33 16-0116	EA	Palm Reader Recognition System, Biometrics Readers, Wiegand Output Access Controls	3,052.62	63.34
28 13 33 16-0117	EA	CCD Camera, Face Image, Biometrics Readers, Wiegand Output Access Controls	3,724.97	63.34
28 13 33 16-0118	EA	Video Grabber Card For DFR Reader, Biometrics Readers, Wiegand Output Access Controls	1,478.15	63.34
28 13 33 16-0119	EA	Fingerprint Reader, Biometrics Readers, Wiegand Output Access Controls (Bioscrypt V-Pass)	891.17	63.34

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0120	EA	Fingerprint Reader With HID Card Reader, Biometrics Readers, Wiegand Output Access Controls (Bioscrypt V-Prox)	990.17	63.34
28 13 33 16-0121	EA	Fingerprint Reader With Contactless Smart Card Reader, Biometrics Readers, Wiegand Output Access Controls (Bioscrypt V-Smart)	891.17	63.34
28 13 33 16-0122		**Exterior Mounting Posts For Gate Operator Access Controls** *(28 13 33 16)*		
		Note: Includes mounting plate for access controls, baked on enamel finish and mounting bolt covers. Excludes concrete pads and electrical connections.		
28 13 33 16-0123		**2" x 2" Steel, Exterior Mounting Posts For Gate Operator Access Controls** *(28 13 33 16-0122)*		
28 13 33 16-0124	EA	44" Tall, Gooseneck Style, Single Mount, 2" x 2" Steel, Exterior Mounting Post For Gate Operator Access Controls	194.18	16.83
		Note: Includes a 5" x 5" base plate.		
28 13 33 16-0125	EA	73" Tall, Gooseneck Style, Dual Mount, 2" x 2" Steel, Exterior Mounting Post For Gate Operator Access Controls	371.18	16.83
		Note: Includes an 8" x 8" base plate.		
28 13 33 16-0126	EA	Anchor Post For 2" x 2" Steel, Exterior Mounting Post For Gate Operator Access Controls	176.18	16.83
		Note: Includes a 24" in-ground post with matching base plate, conduit access and mounting hardware.		
28 13 33 16-0127		**4" x 4" Steel, Exterior Mounting Posts For Gate Operator Access Controls** *(28 13 33 16-0122)*		
28 13 33 16-0128	EA	59" Tall, Straight Style, Single Mount, 4" x 4" Steel, Exterior Mounting Post For Vehicular Gate Operator Access Controls	342.68	16.83
		Note: Includes an 8" x 8" base plate.		
28 13 33 16-0129	EA	49" Tall, Offset Style, Single Mount, 4" x 4" Steel, Exterior Mounting Post For Vehicular Gate Operator Access Controls	408.68	16.83
		Note: Includes an 8" x 8" base plate and a 14" offset from back of post.		
28 13 33 16-0130	EA	Anchor Post For 4" x 4" Steel, Exterior Mounting Post For Vehicular Gate Operator Access Controls	251.18	16.83
		Note: Includes a 24" in-ground post with matching base plate, conduit access and mounting hardware.		
28 13 33 16-0131		**4" x 8" Steel, Exterior Mounting Posts For Gate Operator Access Controls** *(28 13 33 16-0122)*		
28 13 33 16-0132	EA	59" Tall, Straight Style, Single Mount, 4" x 8" Steel, Exterior Mounting Post For Gate Operator Access Controls	1,106.18	16.83
		Note: Includes a 11" x 13" base plate.		
28 13 33 16-0133	EA	50" Tall, Offset Style, Single Mount, 4" x 8" Steel, Exterior Mounting Post For Gate Operator Access Controls	1,158.68	16.83
		Note: Includes a 10" x 14" base plate and a 14" offset from back of post.		
28 13 33 16-0134	EA	Anchor Post For 4" x 8" Steel, Exterior Mounting Post For Gate Operator Access Controls	476.18	16.83
		Note: Includes a 24" in-ground post with matching base plate, conduit access and mounting hardware.		
28 13 33 16-0135	EA	48" Light Tower For 4" x 8" Steel, Exterior Mounting Post For Gate Operator Access Controls	761.18	16.83
28 13 33 16-0136		**Access Control Accessories** *(28 13 33 16)*		
28 13 33 16-0137	EA	Modem: Multitech, Mt2834L	1,256.88	
28 13 33 16-0138	EA	6 Volt DC, 12 Volt DC, Or 24 Volt DC, @ 4 Amps, Power Supply/Charger (Altronix SMP-5)	326.43	
28 13 33 16-0139	EA	12 Volt, 7 Amp, Battery	42.86	
28 13 33 16-0140	EA	12 Volt, 18 Amp, Battery	95.53	
28 13 33 16-0141	EA	Door Personality Module (Sensormatic RM-4)	355.46	15.84
28 13 33 16-0142	EA	Mini-Alert Door Ajar Sounder (System Sensor PA400)	144.84	31.67
28 13 33 16-0143	EA	Recessed Contact For Steel Doors, Door Monitor Switch (Sentrol 1078C)	49.12	19.00
28 13 33 16-0144	EA	Access Control Systems Power Supply (Altronix AL400ULACMCB)	390.95	12.67
28 13 33 16-0145	EA	Surge Suppressor (Tripp-Lite IBAR4)	59.02	3.18
28 13 33 16-0146	EA	Door Strike Relay (Altronix RBSN-TTL)	41.59	12.67
28 13 33 16-0147		**Access Controllers** *(28 13 33 16)*		
28 13 33 16-0148		**Microterm Controller** *(28 13 33 16-0147)*		
28 13 33 16-0149	EA	Microterm Stand Alone One Or Two Door Processing Panel (Continental Instruments CICP1100)	920.64	79.17
		Note: Up to 1,000 card capacity. Includes 2 alarm inputs, tamper alarm, and 3 relay outputs.		
28 13 33 16-0150	EA	Microterm PC Board (Continental Instruments CICP1100PCB)	665.93	47.50
28 13 33 16-0151	EA	Battery Standby For Microterm (Continental Instruments CICP1100BAT-2)	317.27	
		Note: Input 120VAC, output 12VDC to temporarily power the Microterm only.		
28 13 33 16-0152		**Miniterm Controller** *(28 13 33 16-0147)*		
28 13 33 16-0153	EA	Miniterm Two Reader Processing Panel (Continental Instrument CICP1200)	1,443.99	79.17
		Note: Up to 3,000 card capacity. Includes 8 EOL Class A supervised alarm inputs, temper alarm, and 5 relay outputs. Complete in a lockable steel enclosure with battery standby for memory and system operation.		
28 13 33 16-0154	EA	Miniterm PC Board (Continental Instrument CICP1200PCB)	1,093.69	47.50
28 13 33 16-0155		**Super-2 Controller** *(28 13 33 16-0147)*		
28 13 33 16-0156	EA	Super-Two - Two Reader Processing Panel (Continental Instruments CICP1300)	1,067.72	79.17
		Note: For use with CA3000 V2.0.25 and above. Up to a 125,000 card capacity, 8 EOL supervised alarm inputs, tamper, 5 relay outputs. Support for on-board LAN adapter, 57,600 baud rate, 6 access groups per card-holder and compressed data mode. Complete in a lockable steel enclosure with battery standby for memory and system operation.		
28 13 33 16-0157	EA	Super-Two - PC Board (Continental Instruments CICP1300BD)	734.08	47.50
28 13 33 16-0158	EA	Network Interface Board For Super-2 (Continental Instruments CICP1300NETBD)	201.34	47.50
		Note: Optional on-board adapter allows for communication over TCP/IP.		

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0159		**Smarterm Controller** *(28 13 33 16-0147)*		
28 13 33 16-0160	EA	Smarterm Four Reader Processing Panel (Continental Instrument CICP1400) Note: Card capacity up to 2,500. Includes 16 alarm inputs, tamper alarm, and 9 relay outputs. Complete in a lockable steel enclosure with battery standby for memory and system operation.	3,036.99	95.00
28 13 33 16-0161	EA	Smarterm PC Board (Continental Instrument CICP1400PCB)	2,340.54	47.50
28 13 33 16-0162	EA	Smarterm Memory Board - 256K (Continental Instrument CICP1400MB256-1) Note: Up to 10,000 cardholders.	909.15	47.50
28 13 33 16-0163	EA	Smarterm Memory Board - 2MB (Continental Instrument CICP1400MB2-1) Note: Up to 50,000 cardholders.	1,293.62	47.50
28 13 33 16-0164	EA	Smarterm Relay Expander Board (Continental Instrument CICP1400RB) Note: 16 Output relays, 8 alarm inputs.	1,005.52	47.50
28 13 33 16-0165	EA	Smarterm Alarm Expander Board (Continental Instrument CICP1400RB) Note: (Supervised) 16 alarm inputs.	1,005.52	47.50
28 13 33 16-0166		**Superterm-4 Controller** *(28 13 33 16-0147)*		
28 13 33 16-0167	EA	Superterm-4 - Four Reader Processing Panel (Continental Instrument CICP1400UL) Note: 20,000 card capacity, 12 supervised alarm inputs, tamper alarm, and 9 relay outputs. Complete in a painted steel enclosure with 7 AH battery standby for system operation.	2,802.37	95.00
28 13 33 16-0168	EA	Superterm-4 PC Board (Continental Instrument CICP1400ULPCB)	2,301.10	47.50
28 13 33 16-0169		**Superterm-8 Controller** *(28 13 33 16-0147)*		
28 13 33 16-0170	EA	Superterm-8 - Eight Reader Processing Panel (Continental Instrument CICP1800) Note: Up to 20,000 card capacity, 24 supervised alarm inputs, tamper alarm, and 17 relay outputs. Complete in a steel enclosure including 7 AH battery standby for memory and system operation.	3,727.54	158.34
28 13 33 16-0171	EA	Superterm-8 - Eight Reader Processing Panel, Expanded Power (Continental Instrument CICP1800EXP) Note: With expanded power supply. (required if more than 1 relay expander board is used.) Up to 20,000 card capacity, 24 supervised alarm inputs, tamper alarm, and 17 relay outputs. Complete in a steel enclosure including 7 AH battery standby for memory and system operation.	4,047.94	158.34
28 13 33 16-0172	EA	Superterm-8 PC Board (Continental Instrument CICP1800PCB)	3,099.60	47.50
28 13 33 16-0173		**Turbo Superterm-4 Controller** *(28 13 33 16-0147)*		
28 13 33 16-0174	EA	Turbo Superterm-4 - Four Reader Processing Panel (Continental Instrument CICP1400ULT) Note: 20,000 Card capacity, 12 supervised alarm inputs, tamper alarm, and 9 relay outputs. Complete in a painted steel enclosure with 7 AH battery standby for system operation.	2,802.37	95.00
28 13 33 16-0175	EA	Turbo Superterm-4 PC Board (Continental Instrument CICP1400ULTPCB)	2,301.10	47.50
28 13 33 16-0176		**Turbo Superterm-8 Controller** *(28 13 33 16-0147)*		
28 13 33 16-0177	EA	Turbo Superterm-8 - Eight Reader Processing Panel (Continental Instrument CICP1800T) Note: For use with CA3000 V2.0.25 and above. Up to 40,000 card capacity, 24 supervised alarm inputs, tamper alarm, and 17 relay outputs. Complete in a steel enclosure including a 7 AH battery standby for memory and system operation.	3,727.54	158.34
28 13 33 16-0178	EA	Turbo Superterm-8 -Eight Reader Processing Panel, Expanded Power (Continental Instrument CICP1800TEXP) Note: Required if more than one relay expander board is used. Up to 40,000 card capacity, 24 supervised alarm inputs, tamper alarm, and 17 relay outputs. Complete in a steel enclosure including a 7 AH battery standby for memory and system operation.	4,047.94	158.34
28 13 33 16-0179	EA	Turbo Superterm-8 PC Board (Continental Instrument CICP1800TPCB)	3,099.60	47.50
28 13 33 16-0180	EA	Superterm Memory Board - 2MB (Continental Instrument CICP1800MB2) Note: Up to 140,000 cardholders.	1,293.62	47.50
28 13 33 16-0181	EA	Turbo/Superterm-8 Memory Board - 2MB (Continental Instrument CICP1800MB2X2) Note: Up to 140,000 cardholders.	1,088.56	47.50
28 13 33 16-0182	EA	Turbo Superterm-8 Relay Expander Board (Continental Instrument CICP1800RB) Note: 16 Output relays, 8 alarm inputs.	1,006.56	47.50
28 13 33 16-0183	EA	Turbo Superterm-8 Alarm Expander Board (Continental Instrument CICP1800RB) Note: (Supervised) 16 Alarm inputs.	1,006.56	47.50
28 13 33 16-0184	EA	Expanded Power Supply For Superterm Or Turbo Superterm (Continental Instrument CICPEXPPWS)	410.97	
28 13 33 16-0185		**Access Control Bundled System** *(28 13 33 16)*		
28 13 33 16-0186	EA	CA 3000 Bundled System, Supports 25 Users (Continental Instrument CA3B250P4O3V0R0) Note: System includes PC, monitor, keyboard, mouse, OS, Card Access 3000 file server software, MS SQL 2000, 1 SQL host license, and security key.	20,342.55	
28 13 33 16-0187		**Magnetic Locks** *(28 13 33 16)* Note: Excludes access controls.		
28 13 33 16-0188		**Magnetic Door Locks** *(28 13 33 16-0187)*		
28 13 33 16-0189		**300 LB Magnetic Door Locks** *(28 13 33 16-0188)*		
28 13 33 16-0190	EA	Single Door, Surface Mount, 300 LB Magnetic Door Lock	305.17	63.34
28 13 33 16-0191		**600 LB Magnetic Door Locks** *(28 13 33 16-0188)*		
28 13 33 16-0192	EA	Single Door, Surface Mount, 600 LB Magnetic Door Lock	428.92	63.34
		For LED Status Indicator And Signal Relay, Add	*37.78*	
		For LED Status Indicator, Signal Relay And Built-In Delay Timer, Add	*75.56*	
		For Mortise Mount, Deduct	*-60.45*	

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 33 16-0193	EA	Dual Doors, Surface Mount, 600 LB Magnetic Door Lock	632.17	63.34
		For LED Status Indicator And Signal Relay, Add	*63.19*	
		For LED Status Indicator, Signal Relay And Built-In Delay Timer, Add	*126.38*	
28 13 33 16-0194		**1,200 LB Magnetic Door Locks** *(28 13 33 16-0188)*		
28 13 33 16-0195	EA	Single Door, Surface Mount, 1,200 LB Magnetic Door Lock	447.67	63.34
		For LED Status Indicator And Signal Relay, Add	*73.83*	
		For LED Status Indicator, Signal Relay And Built-In Delay Timer, Add	*96.30*	
28 13 33 16-0196	EA	Dual Doors, Surface Mount, 1,200 LB Magnetic Door Lock	672.67	63.34
		For LED Status Indicator And Signal Relay, Add	*125.58*	
		For LED Status Indicator, Signal Relay And Built-In Delay Timer, Add	*163.80*	
28 13 33 16-0197		**2,000 LB Shear Lock, Magnetic And Mechanical Locks** *(28 13 33 16-0188)*		
		Note: Includes LED status indicator and built-in signal relay.		
28 13 33 16-0198	EA	Single Door, Mortise Mount, 2,000 LB Shear Lock, Magnetic And Mechanical Door Lock	467.92	63.34
28 13 33 16-0199		**Magnetic Gate Locks** *(28 13 33 16-0187)*		
28 13 33 16-0200		**600 LB Magnetic Gate Locks** *(28 13 33 16-0199)*		
28 13 33 16-0201	EA	600 LB Magnetic Gate Lock	354.67	63.34
28 13 33 16-0202		**1,200 LB Magnetic Gate Locks** *(28 13 33 16-0199)*		
28 13 33 16-0203	EA	1,200 LB Magnetic Gate Lock	422.92	63.34
		For LED Status Indicator And Signal Relay, Add	*37.03*	
		For LED Status Indicator, Signal Relay And Built-In Delay Timer, Add	*74.06*	
		For Mortise Mount, Deduct	*-59.25*	
28 13 33 16-0204		**Magnetic Lock Power Supply And Chargers** *(28 13 33 16-0187)*		
		Note: Includes lockable metal enclosure, batteries, battery charger and electronically regulated outputs.		
28 13 33 16-0205	EA	12/24 Volt DC At 1 Amp, Magnetic Lock Backup Power Supply And Charger	267.35	63.34
28 13 33 16-0206	EA	12/24 Volt DC At 2-1/2 Amp, Magnetic Lock Backup Power Supply And Charger	335.35	63.34
28 13 33 16-0207	EA	12 Volt DC At 4 Amp And 24 Volt DC At 3 Amp, Magnetic Lock Backup Power Supply And Charger	375.35	63.34
28 13 33 16-0208	EA	12/24 Volt DC At 6 Amp, Magnetic Lock Backup Power Supply And Charger	467.35	63.34
28 13 33 16-0209		**Master Door Buzzer Stations** *(28 13 33 16)*		
28 13 33 16-0210		**Master Stations** *(28 13 33 16-0209)*		
28 13 33 16-0211	EA	Master Stations, 5 Station Intercommunication Equipment	593.84	98.80
28 13 33 16-0212	EA	Master Stations, 10 Station Intercommunication Equipment	892.83	191.27
28 13 33 16-0213	EA	Master Station, Desk Style Remote Intercommunication Equipment	255.31	49.40
28 13 33 16-0214	EA	Master Station, Flush Wall Remote Intercommunication Equipment	326.98	82.34
28 13 33 16-0215	EA	Sound System Outlet, Protector	84.08	32.23
28 13 33 16-0216	EA	Sound System Microphone Outlet	147.19	65.99
28 13 33 16-0217	EA	Sound System Speaker Ceiling Or Wall	112.39	32.23
28 13 33 16-0218	EA	Sound System Monitor Panel	328.00	65.99
28 13 33 16-0219	EA	Sound System Volume Control	97.14	32.23
28 13 33 16-0220	EA	Sound System Amplifier 250 W	1,516.95	263.92
28 13 33 16-0221	EA	Sound System Cabinet	887.22	263.92
28 13 33 16-0222		**Master Door Stations** *(28 13 33 16-0209)*		
28 13 33 16-0223	EA	Master Door Stations, Button Buzzer Type, 25 Station	1,310.66	
		For Intercom Type Master Door Station, Add	*108.76*	
28 13 33 16-0224	EA	Master Door Stations, Button Buzzer Type, 50 Station	2,170.68	
		For Intercom Type Master Door Station, Add	*176.19*	
28 13 33 16-0225	EA	Master Door Stations, Button Buzzer Type, 75 Station	2,978.92	
		For Intercom Type Master Door Station, Add	*228.39*	
28 13 33 16-0226	EA	Master Door Stations, Button Buzzer Type, 100 Station	3,405.12	
		For Intercom Type Master Door Station, Add	*267.54*	
28 13 33 16-0227	EA	Master Door Stations, Button Buzzer Type, 150 Station	4,132.57	
		For Intercom Type Master Door Station, Add	*391.53*	
28 13 33 16-0228	EA	Master Door Stations, Button Buzzer Type, 200 Station	4,848.89	
		For Intercom Type Master Door Station, Add	*504.64*	
28 13 33 16-0229	EA	Master Door Stations, Button Buzzer Type, 250 Station	6,104.15	
		For Intercom Type Master Door Station, Add	*652.55*	
28 13 33 16-0230	EA	Master Door Stations, Button Buzzer Type, 300 Station	7,292.31	
		For Intercom Type Master Door Station, Add	*748.25*	
28 13 33 16-0231	EA	Transformer	91.62	
28 13 33 16-0232	EA	Door Opener	135.59	
28 13 33 16-0233	EA	Buzzer With Door Release And Plate	167.27	
28 13 33 16-0234	EA	Amplifier For Intercom Type Unit	274.07	
28 13 33 16-0235	EA	Speaker With Door Release	115.18	

28 13 53 Security Access Detection *(28 13)*

28 13 53 13 Security Access Metal Detectors *(28 13 53)*

MINOR CSI	UOM	DESCRIPTION	TOTAL DIRECT UNIT COST	DEMOLITION UNIT COST
28 13 53 13-0001		**Metal Detectors** *(28 13 53 13)*		
28 13 53 13-0002	EA	Hand-Held Metal Detector	203.33	15.84
28 13 53 13-0003	EA	Walk-Through Metal Detector, Complete Unit	4,839.62	253.34

28 20 Electronic Surveillance *(28)*

Note: Includes testing of new devices and certification.

28 23 Video Surveillance *(28 20)*

28 23 00 00-0001		**Closed Circuit Television And Surveillance Systems** *(28 23)* Note: Includes programming of equipment, testing of new devices and certification.		
28 23 00 00-0002		**Cameras And Accessories** *(28 23 00 00-0001)*		
28 23 00 00-0003		**Cameras** *(28 23 00 00-0002)*		
28 23 00 00-0004		**General Use Video Camera** *(28 23 00 00-0003)*		
28 23 00 00-0005	EA	Video Dome Spectra III, CIR/BW 23x Heavy Duty, Pendant Note: Environmental clear bubble.	3,953.57	124.60
28 23 00 00-0006	EA	Ipak Enclosed Dust Tight Color Camera, Standard Resolution Lens Note: 3.5-8mm AI shields, wall mount.	657.16	62.38
28 23 00 00-0007	EA	Esprit Image Pak PTZ Camera	3,096.70	124.76
28 23 00 00-0008	EA	UF-LED 30 Degree, 850mm (252 LEDs) Includes Power Supply, 120 Volt AC	1,304.70	62.38
28 23 00 00-0009		**Camera Power Supply** *(28 23 00 00-0003)*		
28 23 00 00-0010	EA	100 VA Outdoor Power Supply	226.61	31.19
28 23 00 00-0011	EA	Surge Protector, Isolated Coax Protector For CCTV	102.21	15.40
28 23 00 00-0012	EA	Altronics Power Supply With 8 Fused Outputs	479.84	62.38
28 23 00 00-0013		**Miscellaneous Accessories** *(28 23 00 00-0002)*		
28 23 00 00-0014	EA	8 Channel DVR NTSC/PAL 250 GB With CD-RW	7,153.69	111.37
28 23 00 00-0015	EA	High Resolution Ethernet Video Server, Encoder, 12 Volt DC	1,075.47	124.76
28 23 00 00-0016	EA	High Resolution Ethernet Video Server, With Audio, Encoder, 12 Volt DC	1,222.96	124.76
28 23 00 00-0017	EA	High Resolution Ethernet Video Server, Decoder, 12 Volt DC	886.67	124.76
28 23 00 00-0018	EA	High Resolution Ethernet Video Server, With Audio, Decoder, 12 Volt DC	998.77	124.76
28 23 00 00-0019	EA	Outdoor Multi-Band Wireless Ethernet Bridge, 4 Inputs Note: 5.3 or 5.8 GHz.	2,007.61	124.76
28 23 00 00-0020	EA	24 dBi Gain, 5.25-5.85 GHz Band, 9 Degree Beamwidth, Patch Antenna	898.48	124.76
28 23 00 00-0021	EA	Extreme IR Illuminator, ZXLED850.20	2,837.51	124.76
28 23 00 00-0022	EA	Extreme IR Illuminator, UFLED850.30	1,304.70	62.38
28 23 00 00-0023	EA	Extreme IR Illuminator, EX26LED850M	714.73	62.38
28 23 00 00-0024	EA	Smart Sight Wireless Link	3,546.58	62.38
28 23 00 00-0025	EA	S1000 System Including Transmitter And Receiver	4,261.30	124.60
28 23 00 00-0026	EA	S1600e-R Video Decoder	1,038.81	62.38
28 23 00 00-0027	EA	Pole Mount Adapter	189.44	62.38
28 23 00 00-0028		**Camera Mounting** *(28 23 00 00-0002)*		
28 23 00 00-0029		**Camera Wall Mounts** *(28 23 00 00-0028)*		
28 23 00 00-0030	EA	Parapet Camera Wall Mount, 1.5" Diameter Pipe	501.39	62.30
28 23 00 00-0031	EA	Spectra Wall Mount, Gray	114.75	31.19
28 23 00 00-0032	EA	Spectra Wall Mount Pole Adapter For SWM-GY	93.53	31.19
28 23 00 00-0033	EA	Wall Mount Bracket For Exterior CCTV	372.26	62.38
28 23 00 00-0034		**Control Panels** *(28 23 00 00-0002)*		
28 23 00 00-0035	EA	CCTV Control Panel With Keyboard And Battery Backup, Up To 7 Cameras	18,740.00	
28 23 00 00-0036	EA	CCTV Control Panel With Keyboard And Battery Backup, 7 To 14 Cameras	22,488.00	
28 23 00 00-0037	EA	CCTV Control Panel With Keyboard And Battery Backup, 15 To 20 Cameras	26,236.00	
28 23 00 00-0038	EA	CCTV Control Panel With Keyboard And Battery Backup, >21 Cameras	29,984.00	
28 23 00 00-0039		**Closed Circuit Television And Surveillance Systems (Vicon)** *(28 23)* Note: Includes a 3 year manufacturer's warranty. Use Vicon replacement models, "or equal", when the listed models are superseded.		
28 23 00 00-0040		**Vicon CCTV Factory Project Management Program** *(28 23 00 00-0039)* Note: For first time installations at a facility.		
28 23 00 00-0041	EA	Factory Project Management Program For 1 To 20 Camera System Vicon CCTV Installation Support Note: Includes two site visits by a Vicon technical representative. First site visit to generate punch list and 2nd site visit for final inspection and training.	3,499.80	
28 23 00 00-0042	EA	Factory Project Management Program For 21 To 40 Camera System Vicon CCTV Installation Support Note: Includes two site visits by a Vicon technical representative. First site visit to generate punch list and 2nd site visit for final inspection and training.	4,374.75	
28 23 00 00-0043	EA	Factory Project Management Program For >40 Camera System Vicon CCTV Installation Support Note: Includes three site visits by a Vicon technical representative. First site visit during installation commencement, 2nd to generate punch list, and 3rd site visit for final inspection and training.	5,249.70	

Building knowledge

Job Order Contract Technical Specifications

Sample

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SECTION 28 13 33 16 - PERIMETER SECURITY

1.1 GENERAL

A. Description Of Work
1. This specification covers the furnishing and installation of materials for perimeter security. Products shall be as follows or as directed by the Owner. Installation procedures shall be in accordance with the product manufacturer's recommendations. Demolition and removal of materials shall be as required to support the work.

B. Summary
1. Section Includes:
a. Perimeter detection and alarm system.
b. Integration of other electronic and electrical systems and equipment.

C. Definitions
1. CCTV: Closed-circuit television.
2. EMI: Electromagnetic interference.
3. PIR: Passive infrared.
4. RFI: Radio-frequency interference.
5. UPS: Uninterruptible power supply.
6. Control Unit: System component that monitors inputs and controls outputs through various circuits.
7. Master Control Unit: System component that accepts inputs from other control units and may also perform control-unit functions. The unit has limited capacity for the number of protected zones and is installed at an unattended location or at a location where it is not the attendant's primary function to monitor the security system.
8. Monitoring Station: Facility that receives signals and has personnel in attendance at all times to respond to signals. A central station is a monitoring station that is listed.
9. Protected Zone: A protected premises or an area within a protected premise that is provided with means to prevent an unwanted event.
10. Standard Intruder: A person who weighs 100 lb (45 kg) or less and whose height is 60 inches (1525 mm) or less; dressed in a long-sleeved shirt, slacks, and shoes unless environmental conditions at the site require protective clothing.
11. Standard-Intruder Movement: Any movement, such as walking, running, crawling, rolling, or jumping, of a "standard intruder" in a protected zone.
12. Systems Integration: The bringing together of components of several systems containing interacting components to achieve indicated functional operation of combined systems.
13. Zone. A defined area within a protected premise. It is a space or area for which an intrusion must be detected and uniquely identified. The sensor or group of sensors must then be assigned to perform the detection, and any interface equipment between sensors and communication must link to master control unit.

D. Action Submittals
1. Product Data: Components for sensing, detecting, systems integration, and control, including dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
2. Shop Drawings: Detail assemblies of standard components that are custom assembled for specific application on this Project.
a. Functional Block Diagram: Show single-line interconnections between components including interconnections between components specified in this Section and those furnished under other Sections. Indicate methods used to achieve systems integration. Indicate control, signal, and data communication paths and identify programmable logic

controllers **OR** networks, **as directed,** and control interface devices and media to be used. Describe characteristics of network and other data communication lines.
1) Indicate methods used to achieve systems integration.
2) Indicate control, signal, and data communication paths and identify PLCs, networks, control interface devices, and media to be used.
3) Describe characteristics of network and other data communication lines.
4) Describe methods used to protect against power outages and transient voltages including types and ratings of isolation and surge suppression devices used in data, communication, signal, control, and ac and dc power circuits.

b. Raceway Riser Diagrams: Detail raceway runs required for perimeter security and for systems integration. Include designation of devices connected by raceway, raceway type, and size, and type and size of wire and cable fill for each raceway run.
c. UPS: Sizing calculations.
d. Site and Floor Plans: Indicate final outlet and device locations, routing of raceways, and cables inside and outside the building. Include room layout for central-station control-unit console, terminal cabinet, racks, and UPS.
e. Master Control Unit Console Layout: Show required artwork and device identification.
f. Device Address List: Coordinate with final system programming.
g. System Wiring Diagrams: Include system diagrams unique to Project. Show connections for all devices, components, and auxiliary equipment. Include diagrams for equipment and for system with all terminals and interconnections identified.
h. Details of surge-protection devices and their installation.
i. Sensor detection patterns and adjustment ranges.

3. Equipment and System Operation Description: Include method of operation and supervision of each component and each type of circuit. Show sequence of operations for manually and automatically initiated system or equipment inputs. Description must cover this specific Project; manufacturer's standard descriptions for generic systems are not acceptable.
4. Samples for Initial Selection: For units with factory-applied color finishes.
5. Samples for Verification: For each type of exposed finish required.

E. Informational Submittals
1. Qualification Data: For Installer, security systems integrator, and testing agency.
2. Field quality-control test reports.
3. Warranty: Sample of special warranty.
4. Other Information Submittals:
a. Test Plan and Schedule: Test plan defining all tests required to ensure that system meets technical, operational, and performance specifications within 60 days of date of Contract award.
b. Examination reports documenting inspections of substrates, areas, and conditions.
c. Anchor inspection reports documenting inspections of built-in and cast-in anchors.

F. Closeout Submittals
1. Operation and Maintenance Data: For perimeter security system to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation And Maintenance Data", include the following:
a. Data for each type of product, including features and operating sequences, both automatic and manual.
b. Master control-unit hardware and software data.

G. Maintenance Material Submittals
1. One spare control-unit board(s) for strain-sensitive cable system and one cable repair and splice kit(s).
2. One of each type of microwave sensor and one of each type of power supply for microwave perimeter security system.

3. One of each spare sensor and PIR unit and one alignment telescope(s) for long-range PIR system.
4. One spare control-unit board(s) for electrostatic-field system.
5. One spare control-unit board(s) for buried, ported coaxial cable system, 10 feet (3 m) of cable; and one cable repair and splice kit(s).
6. Fuses: Three of each kind and size.
7. Tool Kit: Provide six sets of tools for use with security fasteners, each packaged in a compartmented kit configured for easy handling and storage.
8. Security Fasteners: Furnish no fewer than 1 box for every 50 boxes or fraction thereof, of each type and size of security fastener installed.

H. Quality Assurance
1. Installer Qualifications:
   a. An employer of workers, at least one of whom is a technician certified by the National Burglar & Fire Alarm Association.
   b. Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
2. Security Systems Integrator Qualifications: An experienced perimeter security equipment supplier and Installer who has completed systems integration work for installations similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
3. Testing Agency Qualifications: Member company of NETA or an NRTL.
   a. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.
4. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
5. FMG Compliance: FMG-approved and -labeled perimeter security devices and equipment.
6. Comply with NFPA 70.

I. Project Conditions
1. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
   a. Altitude: Sea level to 4000 feet (1220 m).
   b. Master Control Unit: Rated for continuous operation in an ambient of 60 to 85 deg F (16 to 29 deg C) and a relative humidity of 20 to 80 percent, noncondensing.
   c. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambients of minus 30 to plus 122 deg F (minus 34 to plus 50 deg C) dry bulb and 20 to 90 percent relative humidity, condensing. Comply with UL 294 and UL 639 for outdoor-use equipment. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph (137 km/h) and snow cover up to 24 inches (610 mm) thick.
   d. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings shall be rated, listed, and installed according to NFPA 70.

J. Warranty:
1. Special Warranty: Manufacturer's standard form in which manufacturer and Installer agree to repair or replace components of perimeter security devices and equipment that fail in materials or workmanship within specified warranty period.
   a. Warranty Period: Two years from date of Final Completion.

1.2 PRODUCTS

A. Functional Description Of System

1. Description: Perimeter protection system with fence-mounted systems **OR** buried sensors **OR** volumetric detectors, **as directed,** integrated into a single perimeter detection and alarm system.
2. Supervision: System components shall be continuously monitored for normal, alarm, supervisory and trouble conditions. Indicate deviations from normal conditions at any location in system. Indication includes identification of device or circuit in which deviation has occurred and whether deviation is an alarm or malfunction.
   a. Alarm Signal: Display at central-station control unit and actuate audible and visual alarm devices.
   b. Trouble Condition Signal: Distinct from other signals, indicating that system is not fully functional. Trouble signal shall indicate system problems such as battery failure, open or shorted transmission line conductors, or controller failure.
   c. Supervisory Condition Signal: Distinct from other signals, indicating an abnormal condition as specified for the particular device or controller.
3. System Control: Central-station control unit shall directly monitor gate detection devices, perimeter detection units, and connecting wiring.
   OR
   System Control: One or more remote, addressable controllers operate under control of a central-station control-unit microcomputer in a multiplexed distributed control system or as part of a network. Controllers shall receive programming by multiplexed signal transmission from a central-station control-unit microprocessor or microcomputer and hold data in nonvolatile memory. System shall automatically reboot program without error or loss of status or alarm data after any system disturbance, **as directed**.
4. Operator Commands:
   a. Help with System Operation: Display all commands available to operator. Help command, followed by a specific command, shall produce a short explanation of the purpose, use, and system reaction to that command.
   b. Acknowledge Alarm: To indicate that alarm message has been observed by operator.
   c. Place Protected Zone in Access: Disable all intrusion-alarm circuits of a specific protected zone. Tamper circuits may not be disabled by operator.
   d. Place Protected Zone in Secure: Activate all intrusion-alarm circuits of a protected zone.
   e. Protected Zone Test: Initiate operational test of a specific protected zone.
   f. System Test: Initiate system-wide operational test.
   g. Print Reports.
5. Timed Control at Central-Station Control Unit: Allow automatically timed "secure" and "access" functions of selected protected zones.
6. Automatic Control of Related Systems: Alarm or supervisory signals from certain perimeter security devices control the following functions in related systems:
   a. Switch selected lights.
   b. Open a signal path between certain intercommunication stations.
   c. Shift sound system to "listening mode" and open a signal path to certain system speakers.
   d. Switch signal to selected monitor from closed-circuit television camera in vicinity of sensor signaling an alarm.
7. Printed Record of Events: Print a record of alarm, supervisory, and trouble events on system printer. Sort and report by protected zone, device, and function. When central-station control unit receives a signal, print a report of alarm, supervisory, or trouble condition. Report type of signal (alarm, supervisory, or trouble), protected zone description, date, and time of occurrence. Differentiate alarm signals from other indications. When system is reset, report reset event with the same information concerning device, location, date, and time. Commands shall initiate the reporting of a list of current alarm, supervisory, and trouble conditions in system or a log of past events.
8. Response Time: Two seconds between actuation of any alarm and its indication at central-station control unit.
9. Circuit Supervision: Supervise all signal and data transmission lines, links with other systems, controllers, and sensors from central-station control unit. Indicate circuit and detection device

faults with both protected zone and trouble signals, sound a distinctive audible tone, and illuminate an LED. Maximum permissible elapsed time between occurrence of a trouble condition and indication at central-station control unit is 20 seconds. Initiate an alarm in response to opening, closing, shorting, or grounding of a signal or data transmission line.

10. Programmed Secure-Access Control: System shall be programmable to automatically change status of various combinations of protected zones between secure and access conditions at scheduled times. Status changes may be preset for repetitive, daily, and weekly; specially scheduled operations may be preset up to a year in advance. Manual secure-access control stations shall override programmed settings.
11. Manual Secure-Access Control: Coded entries at manual stations shall change status of associated protected zone between secure and access conditions.

B. System Component Requirements
1. Compatibility: Detection devices and their communication features, connecting wiring, and master control unit shall be selected and configured with accessories for full compatibility with the existing equipment.
2. Perimeter Security Units: Listed and labeled by a qualified testing agency for compliance with UL 639.
3. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor entry connection to components.
   a. Minimum Protection for Power Lines 120 V and More: Auxiliary panel suppressors complying with requirements in Division 26 Section "Transient-voltage Suppression For Low-voltage Electrical Power Circuits".
   b. Minimum Protection for Communication, Signal, Control, and Low-Voltage Power Lines: Comply with requirements in Division 26 Section "Transient-voltage Suppression For Low-voltage Electrical Power Circuits" as recommended by manufacturer for type of line being protected.
4. Interference Protection: Components shall be unaffected by radiated RFI and electrical induction of 15 V/m over a frequency range of 10 to 10,000 MHz and conducted interference signals up to 0.25-V RMS injected into power supply lines at 10 to 10,000 MHz.
5. Tamper Protection: Tamper switches on detection devices, controllers, annunciators, pull boxes, junction boxes, cabinets, and other system components shall initiate a tamper-alarm signal when unit is opened or partially disassembled and when entering conductors are cut or disconnected. Central-station control-unit alarm display shall identify tamper alarms and indicate locations.
6. Self-Testing Devices: Automatically test themselves periodically, but not less than once per hour, to verify normal device functioning and alarm initiation capability. Devices transmit test failure to central-station control unit.
7. Antimasking Devices: Automatically check operation continuously or at intervals of a minute or less, and use signal-processing logic to detect blocking, masking, jamming, tampering, or other operational dysfunction. Devices transmit detection of operational dysfunction to central-station control unit as an alarm signal.
8. Addressable Devices: Transmitter and receivers shall communicate unique device identification and status reports to central-station control unit.
9. Remote-Controlled Devices: Individually and remotely adjustable for sensitivity and individually monitored at central-station control unit for calibration, sensitivity, and alarm condition.

C. Enclosures
1. Interior Sensors: Enclosures that protect against dust, falling dirt, and dripping noncorrosive liquids.
2. Interior Electronics: NEMA 250, Type 12.
3. Exterior Electronics: NEMA 250, Type 4X fiberglass **OR** stainless steel, **as directed**.
4. Corrosion Resistant: NEMA 250, Type 4X PVC **OR** stainless steel, **as directed**.
5. Terminal cabinets in handholes and manholes shall be NEMA 250, Type 6 **OR** 6P, **as directed**.

6. Screw Covers: Where enclosures are accessible to inmates, secure with security fasteners of type appropriate for enclosure.

D. Secure And Access Devices
   1. Keypad and Display Module: Arranged for entering and executing commands for system-status changes and for displaying system-status and command-related data.
   2. Key-Operated Switch: Change protected zone between secure and access conditions.

E. Strain-Sensitive Cable
   1. Description: Strain-sensitive, coaxial transducer cable shall monitor chain-link-type and welded-mesh-type fence and generate an alarm when a standard intruder attempts to climb over, cut through, or lift fence fabric.
   2. Environment: Suitable for exterior installation and the following conditions:
      a. Ambient Temperatures: Ranging from minus 22 to plus 158 deg F (minus 30 to plus 70 deg C).
   3. Transducer Cable:
      a. Ultraviolet-resistant cable furnished by system manufacturer.
      b. Suitable for up to 1000 feet (300 m) of sensor cable per single-zone controller and up to 2000 feet (600 m) of sensor cable per dual-zone processor.
      c. Sensitivity shall be uniform throughout its entire length, requiring only one variable sensitivity adjustment throughout its entire length.
   4. Control Unit:
      a. Field mounted, with tamper switch at controller board.
      b. Electronic circuitry shall discriminate between acceptable fence movement and intrusion-related disturbances.
      c. Sensitivity, count control, and climb-over processors shall be adjustable with a minimum of five individual count-control and climb-over adjustments.
      d. Controller output shall have adjustable pulse width to adjust the time the alarm relay will activate per detected intrusion attempt.
   5. System Performance:
      a. Immune to RFI and EMI environments; interference shall have no effect on normal operational characteristics.
      b. Trouble and Tamper: Entire sensor system shall be fully supervised with individually monitored tamper and supervision alarms. Disconnecting, cutting, or shorting of strain-sensitive cable results in supervisory alarm.
      c. Intrusion Simulation: Each zone shall have a self-test feature that, when activated by a signal from central-station control unit, will produce an intrusion alarm and verify operation of sensor.

F. Microwave Intrusion Detectors
   1. Description: Volumetric microwave detection system.
   2. Device Performance: Microwave transmitter establishes an electromagnetic field in an adjustable detection pattern and detects intrusion by monitoring changes in that pattern.
      a. Movement Sensitivity: Adjustable, able to detect standard-intruder movement within sensor's detection pattern at any speed between 0.1 to 50 fps (0.03 to 15.2 m/s). Sensor sensitivity adjustments shall be accessible only when sensor housing is removed, and sensors shall comply with 47 CFR 15.
      b. Detection range: 15 to 600 feet (5 to 180 m).
      c. Range Sensitivity: Adjustable for setting area of protection between 15 to 500 feet (5 to 152 m) in range and from 2 to 40 feet (0.6 to 12 m) in beam diameter.
      d. Trouble and Tamper: Fully supervised with individually monitored tamper and supervision alarms. System failure shall result in tamper alarm. System jamming or wrong modulation shall result in supervisory alarm.

e. Activation Indicator: LED indicator shall not be visible during normal operation. Indicator shall light when sensor detects a standard intruder. Locate test-enabling switch under sensor housing cover.
f. Remote Test: When initiated by central-station control unit, start a test sequence for each detector element that simulates standard-intruder movement within sensor's detection patterns, causing an alarm.

3. Environment: Suitable for exterior installation and the following conditions:
a. Ambient Temperatures: Ranging from minus 30 to plus 158 deg F (minus 34 to plus 70 deg C) and in rainfall up to 4 inches (100 mm).

G. Electrostatic Field
1. Description: Electronically balanced phase electrostatic-field detection system consisting of a field generator that generates an electrical field in one or more field wires and that has two or more sensing wires, a sense filter, amplifier, and a controller. Detection fields shall have a minimum of four different frequencies so adjacent zones cannot interfere with each other.
2. Environment: Suitable for exterior installation and the following conditions:
a. Ambient Temperatures: Ranging from minus 22 to plus 158 deg F (minus 30 to plus 70 deg C).
3. System Performance:
a. Detect, via sense wires, a compound signal form consisting of amplitude change, rate of change, and pre-set time disturbance that forms a "signature" of human movement. Generate an alarm when all exist simultaneously. Provide detection fields of not less than four different frequencies so adjacent zones do not interfere with each other.
b. Control Units: Single or multiple zone, with sense filter. Front panel with calibration meter, status of alarm transmitter, sensitivity selector, test point selector, power indicator, and power control. Control unit shall reject signals due to wind and small objects striking the wires.
c. Motion Detection: Sense standard-intruder movement at rates from 0.15 to 26 fps (0.045 to 8.0 m/s).
d. Zone Length: Not to exceed 500 feet (152 m) **OR** 325 feet (100 m), **as directed**.
e. Supervision: Generate trouble signal if field or sense wires are cut or shorted to ground or to each other. Generate supervisory alarm if received signal is substantially reduced.
4. Insulators, Wire-Tensioning Devices, and Brackets: Manufacturer's standard for mounting and tensioning of wires.
5. Field and Sensing Wires: Stainless steel.

H. Buried, Ported Coaxial Cable
1. Description: Buried electrostatic-field detection system consisting of parallel, ported coaxial cables that generate a detection field between cables.
2. Environment: Suitable for exterior installation and the following conditions:
a. Ambient Temperatures: Ranging from minus 22 to plus 158 deg F (minus 30 to plus 70 deg C).
3. System Performance: One of two parallel cables receives a continuous wave signal from a transmitter module. Second cable, connected to a sensor module, detects, preamplifies, and analyzes variations in signal. When system senses "signature" of a standard intruder in the detection zone, based on mass, motion, and time of day, it generates an alarm.
a. Transmitter: Locate at one end of zone, with standby battery.
b. Preamplifier-Sensor: Locate at opposite end from transmitter, with standby battery.
c. Front panel with sensitivity calibration meter, calibrated self-test potentiometer, power switch, and LED normal and malfunction indicators.
d. Electromagnetic Radiation: Less than 50 mV per meter at 30 m.
e. Motion Detection: Sense standard-intruder movement at rates from 0.17 to 26 fps (0.05 to 8.0 m/s).
f. Zone Length: Not to exceed 500 feet (152 m) **OR** 325 feet (100 m), **as directed**.
g. Zone Width: Not to exceed 15 feet (4.6 m), with an average width of 12 feet (3.7 m).

h. Zone Height: Approximately 3.3 feet (1.0 m), depending on sensitivity setting.
i. Supervision: Generate trouble signal if cable is cut or shorted to ground. Generate supervisory alarm if cabinets are tampered with.

4. Enclosures: Hinged cover with tamper switch and security fasteners.
5. Buried, Ported Coaxial Cable: Approximately 1/2-inch (1.3-mm) diameter, minimum 10 AWG center conductor, foam polyethylene dielectric, braided copper outer conductor, and polyethylene jacket.

I. Long-Range PIR Detectors
1. Description: Volumetric passive infrared detection system.
2. Listed and labeled by a qualified testing agency for compliance with SIA PIR-01.
3. Environment: Suitable for exterior installation and the following conditions:
a. Ambient Temperatures: Ranging from minus 30 to plus 150 deg F (minus 34 to plus 65 deg C).
4. System Performance: Detect an interruption of dual-infrared light beams that link transmitters and receivers. Generate an alarm when signal is interrupted due to presence of an object that interrupts both beams.
a. Sensitivity: Field adjustable to allow adjustment of range from 25 to 500 feet (7.6 to 152 m), generating an alarm within 20 to 50 ms when both beams are interrupted.
b. Detection system shall adjust automatically to compensate for weather, including fog, rain, snow, blowing dust, and rapid temperature changes.
c. Motion Detection: Detect standard-intruder movement at rates from 0.1 to 50 fps (0.03 to 15.2 m/s).
d. Supervision: Generate supervisory alarm if any portion of system is tampered with.
e. Remote Test: When initiated by central-station control unit, start a test sequence for each detector element that simulates standard-intruder movement within sensor's detection patterns, causing an alarm.

J. Geophone Fence Detection
1. Description: Fence-mounted system to detect attempts to cut or climb the protected fence, using geophone sensors that respond to specific shock or vibrations.
2. Environment: Suitable for exterior installation and the following conditions:
a. Ambient Temperatures: Ranging from minus 30 to plus 150 deg F (minus 34 to plus 65 deg C).
3. System Performance:
a. Controller: 10 zone capacity for processing geophone generated analog signals. Each zone shall consist of not more than 10 sensors.
1) Adjustments: For each zone provide stepped gain control for sensitivity, and switches for geophone signal filters to minimize nuisance alarms. System shall adjust automatically to compensate for weather, including fog, rain, snow, blowing dust, and rapid temperature changes.
2) Trouble Condition Signal: Generate when any zone fails.
3) Supervisory Condition Signal: Generate on interference with controller operation or when detecting a break-in into a enclosure housing electronics.
b. Sensors: Fence mounted 20 feet (6 m) o.c.
c. Cable for Interconnection of System Components: Shielded, PVC jacketed and armored, as supplied by system manufacturer.
d. Test each zone simulating an alarm condition. Test by command from central-station control **OR** test switch at controller inside the enclosure, **as directed**.

K. Video Motion Sensor
1. Description: Video-surveillance based detection system.
2. Device Performance: Detect changes in video signal within a user-defined protected zone. Provide an alarm output for each video input.

a. Detect movement within protected zone of standard intruders wearing clothing with a reflectivity that differs from that of background scene by a factor of 2. Reject all other changes in video signal.
b. Modular design that allows for expansion or modification of number of inputs.
c. Adjustable Controls:
1) Number of detection zones.
2) Size of detection zones.
3) Sensitivity of detection of each protected zone.
d. Mounting: Standard 19-inch (480-mm) rack as described in EIA 310.
3. Environment: Suitable for installation in interior air-conditioned spaces.

L. Gate Units
1. Description: Fence mounted gate-movement detector, blanced-magnetic type, UL listed for outdoor locations. Units shall be designed for mounting on single- or double-leaf swinging or rolling gates and have armored jumper cables between switch and stationary junction box for wiring to central-station control unit and tamper switches in junction box.
2. Device Performance: Bias magnet and at least three encapsulated-reed switches that resist compromise from introduction of foreign magnetic fields, with integral overcurrent protective device to limit current to 80 percent of switch capacity.
3. Remote Test: Simulate movement of actuating magnet from central-station control unit.

M. Field-Mounted Control Units
1. Field-mounted control units shall include the power supply and detector specific functions, and provide for communications with the master control unit. Control unit shall include read-only resident software needed for startup, a time clock, and all automatic operations. Software shall be downloaded from the master control unit.
2. Battery Backup: UPS, providing 6 hours of run time during a power outage, with 2-rate automatic battery charger to fully recharge batteries within 12 hours after normal power is restored.
a. Batteries: Rechargeable, valve-regulated, recombinant, sealed, lead-acid type with nominal 10-year life expectancy.
b. Battery Charger: Solid-state, fully automatic, variable-charging-rate type. Charger shall recharge fully discharged battery within 24 hours.
3. Annunciation: Indicate a change in system condition and switching of system or component to backup power.

N. Master Control Unit
1. Description: Supervise sensors and detection subsystems and their connecting communication links, status control (secure or access) of sensors and detector subsystems, activation of alarms and supervisory and trouble signals, and other indicated functions.
a. System software and programs shall be held in flash electrically erasable programmable read-only memory (EEPROM), retaining the information through failure of primary and secondary power supplies.
b. Include a real-time clock for time annotation of events on the event recorder and printer.
c. Addressable initiation devices that communicate device identity and status.
d. Control circuits for operation of mechanical equipment in response to an alarm.
2. Construction: Freestanding equipment rack **OR** Desk-mounted console, **as directed,** modular, with separate and independent alarm and supervisory system modules. Alarm-initiating protected zone boards shall be plug-in cards. Arrangements that require removal of field wiring for module replacement are unacceptable.
3. Comply with UL 609 **OR** UL 681 **OR** UL 1076, **as directed**.
4. Console Controls and Displays: Arranged for interface between human operator at master control unit and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.

a. Annunciator and Display: LCD type, one **OR** two **OR** three line(s) of 40 **OR** 80 characters, minimum, **as directed**.
b. Keypad: Arranged to permit entry and execution of programming, display, and control commands
c. Control-Unit Network: Automatic communication of alarm, status changes, commands, and other communications required for system operation. Communication shall return to normal after partial or total network interruption such as power loss or transient event. Total or partial signaling network failures shall identify the failure and record the failure at the annunciator display and at the system printer.
d. Field Device Network: Communicate between the control unit and field devices of the system. Communications shall consist of alarm, network status, and status and control of field-mounted processors. Each field-mounted device shall be interrogated during each interrogation cycle.
e. Operator Controls: Manual switches and push-to-test buttons that do not require a key to operate. Prevent resetting of alarm, supervisory, or trouble signals while alarm or trouble condition persists. Include the following:
    1) Acknowledge alarm.
    2) Silence alarm.
    3) System reset.
    4) LED test.
f. Timing Unit: Solid state, programmable, 365 days.
g. Confirmation: Relays, contactors, and other control devices shall have auxiliary contacts that provide confirmation signals to system for their on or off status. Software shall interpret such signals, display equipment status, and initiate failure signals.
h. Alarm Indication: An audible signal sounds and an LED lights at master control unit identifying the protected zone **OR** addressable detector, **as directed,** originating the alarm. Annunciator panel displays a common alarm light and sounds an audible tone.
i. Alarm Indication: An audible signal sounds and a plain-language identification of the protected zone **OR** addressable detector, **as directed** originating the alarm appears on LED or LCDdisplay at master control unit. Annunciator panel displays a common alarm light and sounds an audible tone.
j. Alarm Indication: An audible signal sounds and a plain-language identification of the protected zone **OR** addressable detector, **as directed** originating the alarm appears on LED, LCD or cathode-ray-tube display, **as directed** at master control unit. Annunciator panel alarm light and audible tone identify protected zone signaling an alarm.
k. Alarm activation sounds a bell **OR** siren **OR** strobe **OR** bell or siren and strobe, **as directed**.

5. Protected Zones: Quantity of alarm and supervisory zones as indicated, with capacity for expanding number of protected zones by a minimum of 25 percent.
6. Power Supply Circuits: Master control units shall provide power for remote power-consuming detection devices. Circuit capacity shall be adequate for at least a 25 percent increase in load.
7. UPS: Comply with Division 26 Section "Static Uninterruptible Power Supply". UPS shall be sized to provide a minimum of six hours of master control-unit operation.
8. Cabinet: Lockable, steel enclosure arranged so operations required for testing, normal operation, and maintenance are performed from front of enclosure. If more than a single cabinet is required to form a complete control unit, provide exactly matching modular enclosures. Accommodate all components and allow ample gutter space for field wiring. Identify each enclosure by an engraved, laminated, phenolic-resin nameplate. Lettering on enclosure nameplate shall not be less than 1 inch (25 mm) high. Identify, with permanent labels, individual components and modules within cabinets.
9. Transmission to Monitoring Station: A communications device to automatically transmit alarm, supervisory, and trouble signals to the monitoring station, operating over a standard voice grade telephone leased line. Comply with UL 1635.

10. Printout of Events: On receipt of signal, print alarm, supervisory, and trouble events. Identify zone, device, and function. Include type of signal (alarm, supervisory, or trouble) and date and time of occurrence. Differentiate alarm signals from all other printed indications. Also print system reset event, including same information for device, location, date, and time. Commands initiate the printing of a list of existing alarm, supervisory, and trouble conditions in the system and a historical log of events.

O. Audible And Visual Alarm Devices
1. Bell: UL listed, 10 inches (254 mm) in diameter, rated to produce a minimum sound output of 84 dB at 10 feet (3 m) from central-station control unit.
a. Enclosure: Weather-resistant steel box equipped with tamper switches on cover and on back of box.
2. Klaxon Weatherproof Motor-Driven Hooter: UL listed, rated to produce a minimum sound output of 120 dB at 3 feet (1 m), plus or minus 3 dB, at a frequency of 470 Hz. Rated for intermittent use - two minutes on, five minutes off.
a. Designed for use in industrial areas and in high noise, severe weather marine environments.
3. Siren: 30-W speaker with siren driver, rated to produce a minimum sound output of 103 dB at 10 feet (3 m) from central-station control unit.
a. Enclosure: Weather-resistant steel box with tamper switches on cover and on back of box.
4. Strobe: Xenon light complying with UL 1638, with a clear polycarbonate lens.
a. Light Output: 115 cd, minimum.
b. Flash Rate: 60 per minute.

P. Security Fasteners
1. Operable only by tools produced for use on specific type of fastener by fastener manufacturer or other licensed fabricator. Drive system type, head style, material, and protective coating as required for assembly, installation, and strength.
2. Drive System Types: Pinned Torx-Plus, pinned Torx, or pinned hex (Allen).
3. Socket Flat Countersunk Head Fasteners:
a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.
4. Socket Button Head Fasteners:
a. Heat-treated alloy steel, ASTM F 835 (ASTM F 835M).
b. Stainless steel, ASTM F 879 (ASTM F 879M), Group 1 CW.
5. Socket Head Cap Fasteners:
a. Heat-treated alloy steel, ASTM A 574 (ASTM A 574M).
b. Stainless steel, ASTM F 837 (ASTM F 837M), Group 1 CW.
6. Protective Coatings for Heat-Treated Alloy Steel:
a. Zinc chromate, ASTM F 1135, Grade 3 or 4; for exterior applications and interior applications where indicated.
b. Zinc phosphate with oil, ASTM F 1137, Grade I, or black oxide, unless otherwise indicated.

Q. Source Quality Control
1. Electrostatic-Field and Buried, Ported Coaxial Cable Systems Electronics: Precondition at factory by subjecting modules to at least 4 days' operational burn-in at temperatures not less than 140 deg F (60 deg C).

1.3 EXECUTION

A. Examination
1. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of perimeter security.

2. Examine roughing-in for embedded and built-in anchors to verify actual locations of perimeter security connections before perimeter security installation.
3. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of perimeter security.
4. Inspect built-in and cast-in anchor installations, before installing perimeter security, to verify that anchor installations comply with requirements. Prepare inspection reports.
   a. Remove and replace anchors where inspections indicate that they do not comply with requirements. Reinspect after repairs or replacements are made.
   b. Perform additional inspections to determine compliance of replaced or additional anchor installations. Prepare inspection reports.
5. For material whose orientation is critical for its performance as a ballistic barrier, verify installation orientation.
6. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Systems Integration
1. Integrate perimeter security system with the following systems and equipment:
   a. Electronic door hardware.
   b. Elevators.
   c. Network lighting controls.
   d. Intercommunications and program systems.
   e. Public address and mass notification systems.
   f. Access control.
   g. Fire-alarm system.
   h. Intrusion detection system.
   i. Video surveillance.

C. System Installation
1. Comply with UL 681 and NFPA 731.
2. Equipment Mounting: Install master control unit on finished floor with tops of cabinets not more than 72 inches (1830 mm) above the finished floor.
   a. Comply with requirements for seismic-restraint devices specified in Division 26 Section "Vibration And Seismic Controls For Electrical Systems".
3. Install wall-mounted equipment, with tops of cabinets not more than 72 inches (1830 mm) above the finished floor.
   a. Comply with requirements for seismic-restraint devices specified in Division 26 Section "Vibration And Seismic Controls For Electrical Systems".
4. Connecting to Existing Equipment: Verify that existing perimeter security system is operational before making changes or connections.
   a. Connect new equipment to existing control panel in existing part of the building.
   b. Connect new equipment to existing monitoring equipment at the Supervising Station.
   c. Expand, modify, and supplement existing **control** or **monitoring** equipment as necessary to extend existing **control** or **monitoring**] functions to the new points. New components shall be capable of merging with existing configuration without degrading the performance of either system.
5. Security Fasteners: Where accessible to inmates, install perimeter security components using security fasteners with head style appropriate for fabrication requirements, strength, and finish of adjacent materials except that a maximum of two different sets of tools shall be required to operate security fasteners for Project. Provide stainless-steel security fasteners in stainless-steel materials.
6. Wiring Method: Install power, signal, and data transmission wire and cable in raceways according to Division 26 Section(s) "Underground Ducts And Raceways For Electrical Systems" AND "Raceway And Boxes For Electrical Systems". Minimum conduit size shall be 1/2 inch (13 mm). Control and data transmission wiring shall not share raceways with any other system.

City of Shoreline

JOC Program Development and Implementation Schedule

Proposal for Consultant Services for Job Order Contracting (JOC) System

- Meeting
- Gordian Task
- City Task

Senior Project Manager	Project Manager	JOC Front End Documents	Construction Task Catalog	Technical Specifications	Marketing of JOC System	Software Development/Test	Procurement Support	JOC Training	Contractor Training	City Procurement	City Legal	City Staff	TASKS	DAYS
✓	✓									✓	✓	✓	**Orientation Kick Off Meeting**	●
✓	✓	✓								✓	✓	✓	**JOC Front End Documents Kick-off Meeting**	●
		✓								✓	✓	✓	City Compiles Draft Documents for Gordian Review	2-10
		✓								✓	✓	✓	City Delivers Draft Documents to Gordian	●
		✓								✓	✓	✓	Meeting to Discuss Method for Customizing Documents	●
		✓											Gordian Customizes City Documents for JOC	12-22
	✓	✓											Gordian Submits Draft Documents for City Review	●
		✓								✓	✓	✓	City Reviews Draft Documents & Comments	23-31
	✓	✓								✓	✓	✓	Meeting to Discuss City Comments	●
	✓	✓											Gordian Revises Draft Documents	34-42
	✓	✓											Gordian Delivers 2nd Draft for City Review	●
		✓								✓	✓	✓	City Reviews & Approves Contract Documents	44-50
	✓	✓											Gordian Publishes Contract Documents	51
✓	✓		✓							✓		✓	**Construction Task Catalog (CTC) Kick-off Meeting**	●
	✓		✓										Gordian Provides Sample CTC for City Review	●
			✓									✓	City Reviews CTC and Prepares Comments	1st Round Comments 2-10 / 2nd Round Comments 12-31
			✓									✓	City Collects Sample Drawings for Gordian Review	
			✓									✓	City Delivers Sample Drawings to Gordian	●
			✓									✓	Gordian Compares Drawings to CTC to Identify Additions	12-31
	✓		✓									✓	Meeting to Discuss Changes to the CTC	●
	✓		✓										Gordian Customizes CTC (Create New Work Tasks, Delete Extisting Tasks)	34-53
	✓		✓										Gordian Provides 2nd Draft CTC for City Review	●
			✓									✓	City Reviews Current Draft CTC & Comments	55-61
	✓		✓									✓	Meeting to Discuss Final Changes to the CTC	●
	✓		✓										Gordian Customizes CTC with Final Changes	63-72
	✓		✓									✓	Gordian Provides Final CTC to City	●
			✓							✓		✓	City Reviews and Approves Final CTC	74-84
	✓		✓										Gordian Publishes City CTC	85
✓	✓			✓						✓		✓	**Technical Specifications Kick-off Meeting**	●
				✓								✓	City Compiles Specifications for Gordian Review	2-10
				✓								✓	City Delivers Specifications to Gordian	●
	✓			✓									Gordian Customizes JOC Specifications	12-48
	✓			✓									Gordian Provides Draft Specs for City Review	●
				✓								✓	City Reviews Current Draft Specs & Comments	50-61
	✓			✓								✓	Meeting to Discuss Final Changes to the Specs	●
	✓			✓									Gordian Customizes Specs with Final Changes	63-72
	✓			✓									Gordian Cross ReferenCity Specs with CTC	
	✓			✓									Gordian Provides Final Specifications to City	●
				✓						✓		✓	City Reviews and Approves Final Specifications	74-84
	✓			✓									Gordian Publishes Technical Specifications	85
	✓									✓		✓	**Organize Workshops for Execution Concepts**	20-25
	✓												Gordian Develops Draft Internal Execution Procedures	26-32
	✓									✓		✓	Meeting to Discuss Draft Execution Procedures	●
										✓		✓	City Reviews & Approves Execution Procedures	34-49
	✓												Gordian Finalizes Execution Procedures	50-54
			✓										**Internal and External Marketing Presentations**	
	✓		✓										Gordian Conducts Internal Presentations for City Personnel	● ●
	✓		✓										Gordian Conducts External Presentation for Contracting Community	●
	✓			✓								✓	**JOC Software System**	
	✓			✓								✓	Gordian Configures JOC Software System	70-108
	✓			✓									Gordian Loads CTC into JOC Software	109
	✓			✓									Gordian Tests JOC Software	110-112
	✓			✓								✓	Gordian Conducts Client JOC Software Training	●
													Gordian Conducts Contractor JOC Software Training - After Contract Award	
✓	✓				✓					✓		✓	**Procurement Support for Job Order Contracts**	
	✓				✓					✓		✓	Gordian Provides Bidding Related Support	87-120
	✓				✓					✓		✓	Gordian Prepares Contract Advertisements	87-90
					✓					✓		✓	City Advertises Job Order Contracts	●
	✓				✓					✓		✓	Gordian Conducts Pre-Bid Conference	●
	✓				✓					✓		✓	Gordian Assists City with Bid Opening/Analysis	86-120
	✓							✓				✓	**Develop JOC Training Program & Reference Manual**	117-120
	✓							✓		✓		✓	Gordian Conducts Client JOC Training - After Contract Award	
	✓							✓	✓	✓		✓	Gordian Conducts Contractor JOC Training - After Contract Award	
	✓							✓		✓		✓	Gordian Prepares Initial Project Package - After Contract Award	

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30 Patewood Drive, Suite 350
Greenville, South Carolina 29615

GORDIAN®

July 2, 2020

Ammon T. Lesher
The Gordian Group
30 Patewood Drive, Suite 350
Greenville, SC 29615

Subject: Notice of Intent to Award; Consultant Contract 9596
Job Order Contracting (JOC) Consulting Services

Dear Ammon Lesher,

This is written notice that the City of Shoreline (Shoreline) has completed the Solicitation and Selection Process for the subject contract. Shoreline is issuing this formal written Notice of Intent to Award for the Solicitation and Selection Process and intends to begin contract negotiations with The Gordian Group for the Contract 9596, Job Order Contracting Consulting Services.

Shoreline thanks you for your interest and participation in the solicitation and selection process.

If you have questions regarding this Notice, the Solicitation and Selection Process, or would like to review the project selection file, please contact me directly at 206-801-2322 or jbulman@shorelinewa.gov to schedule an appointment.

Sincerely,

Janet Bulman
City of Shoreline

Cc: Purchasing Office, City of Shoreline
To File

GORDIAN®

PROFESSIONAL SERVICES AND LICENSE AGREEMENT

This Agreement is made this 16th day of September, 2020 by and between The City of Shoreline, whose address is 17500 Midvale Ave. N., Shoreline, Washington 98133 ("Owner"), and The Gordian Group, Inc., whose address is 30 Patewood Drive, Suite 350, Greenville, South Carolina 29615 ("Gordian").

WITNESSETH

WHEREAS, Owner desires to engage the services of a firm to perform services related to the development, implementation and support of a Job Order Contracting ("JOC") program (the "Services") in accordance with the terms and conditions set forth herein, and

WHEREAS, Gordian has the necessary skills and expertise required to perform the Services and is willing and able to provide the Services to Owner.

NOW, THEREFORE, in consideration of the covenants and agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I
TERM

Owner hereby retains Gordian as Owner's JOC Services provider for the term commencing on the date of this Agreement and expiring sixty (60) months thereafter, unless terminated or extended as provided for herein.

ARTICLE II
JOC SYSTEM LICENSE

Gordian hereby grants to Owner, and Owner hereby accepts from Gordian for the term of this Agreement, a non-exclusive right, privilege and license to Gordian's Job Order Contracting System and other related proprietary materials (collectively referred to as "Proprietary Information") to be used for the sole purpose of operating Owner's Job Order Contracting program. The parties hereby agree that Proprietary Information shall include, but is not limited to Gordian's JOC Information Management System (as defined below), and support documentation, Construction Task Catalog® (also commonly referred to as a unit price book), construction cost data, training materials and other proprietary materials provided by Gordian. In the event this Agreement expires or terminates as provided herein, this JOC System License shall terminate and Owner shall return to Gordian all Proprietary Information in Owner's possession.

Owner acknowledges that disclosure of Proprietary Information will result in irreparable harm to Gordian for which monetary damages would be an inadequate remedy and agrees that no such disclosure shall be made to anyone without first receiving the written consent of Gordian. Owner further acknowledges and agrees to respect the copyrights, registrations, trade secrets and other proprietary rights of Gordian in the Proprietary Information during and after the term of this Agreement and shall at all times maintain complete confidentiality with regard to the Proprietary Information provided to Owner, subject to federal and state laws related to public records disclosure.

Upon expiration or termination of this Agreement as provided herein, Gordian shall provide to Owner all project data generated by Owner in a form accessible by a standard database program, such as Microsoft® Access®.

Gordian agrees to grant a license to each contractor that is awarded a JOC contract by Owner, provided the JOC contractor agrees to pay Gordian's contractor license fee in effect when Owner awards the contract, and provided Owner includes licensing language in the JOC contract similar in form to this JOC System License.

In the event of a conflict in terms and conditions between this JOC System License and any other terms and conditions of this Agreement or any purchase order or similar purchasing document issued by Owner, this JOC System License shall take precedence.

ARTICLE III
GORDIAN DUTIES AND RESPONSIBILITIES

Gordian will perform the following duties and responsibilities to complete the Services:

1. **Program Development, Implementation and Support:** Gordian shall be responsible for the development, implementation and on-going support of the Owner's customized JOC program.

2. **Contract Documents:** Gordian shall be responsible for preparing the JOC documents that will be used by the Owner to procure the JOC construction contractors including:

    a) **Unit Price Book(s):** Gordian shall prepare one or more customized Unit Price Books (also known as a Construction Task Catalog®) containing prices covering material, equipment and labor costs for various units of construction, and adjusting these costs to current market conditions. Only local prevailing wages and local material and equipment costs (obtained directly from local, contractors, subcontractors and suppliers) to price the Unit Price Books shall be used. The use of generic factors to localize prices is not acceptable. Unit prices for demolition shall be provided for each construction task. Therefore, every cost to install an item or unit shall be accompanied by a corresponding cost to remove the same item or unit. Tasks may also have several modifiers which adjust the price for variations in materials or for quantity discounts; and

    b) **Technical Specifications:** Gordian shall prepare and publish Technical Specifications describing the materials, performance and installation requirements for each of the construction tasks listed in the unit price book. Where available, the Owner standard specifications shall be incorporated into the Technical Specifications; and

    c) **Contractual Terms and Conditions and Bid Forms:** Gordian shall prepare, in conjunction with Owner staff, contractual terms and conditions and bid forms which incorporate JOC language and forms with all appropriate Owner contract language and forms.

3. **Information Management System:** Gordian shall be responsible for providing the Owner with a comprehensive web-based JOC Information Management System (hereinafter referred to as "IMS") for an unlimited number of Owner users. The JOC IMS must be capable of providing full project tracking, developing cost proposals, preparing independent Owner estimates, generating all project documentation, providing project scheduling, budgeting and cost control, tracking MBE participation, and generating customized reports. Gordian must incorporate any current Owner forms and documentation into the IMS; and

4. **Procurement Support:** Gordian shall be responsible for providing Owner with procurement support to market the Owner JOC Program to potential JOC Contractor's. If required by the Owner, Gordian

shall conduct a bidder prequalification process to determine a qualified list of bidders. Gordian shall be required to organize and conduct pre-bid meetings with the interested bidders as well as make presentations on behalf of the Owner with various business and Construction organizations. Gordian's staff assigned to perform procurement support must have JOC procurement experience; and

5. **Training Programs:** Gordian shall be responsible for developing and conducting all training programs for the Owner and JOC Contractor staff to ensure that the JOC program functions properly. The training programs must include specialized training courses that will involve all Owner staff and JOC contractors utilizing and administering the JOC program. The training programs must include extensive training on the use of the JOC IMS. All training must be "hands on" with user competency as the objective. Actual Owner projects that the Owner plans to perform through JOC may be included in the training programs; and

6. **Job Order Development:** Gordian shall be responsible for providing the following Job Order Development services:

    a) **Project Identification:** When a project is identified and requested by Owner, Gordian will contact Owner and assist with determining whether the project is appropriate for JOC.

    b) **Contractor Identification:** In the event Owner has multiple JOC Contractors, Gordian will assist the Owner in identifying the appropriate JOC Contactor for the project based on factors which include, but are not limited to, the type of work involved and the location of the project.

    c) **Joint Scope Meeting:** The Gordian's project manager will schedule a Joint Scope Meeting at the project site to help Owner and the JOC Contractor agree on the details of the work that the JOC Contractor will perform. The purpose of the scoping process is to allow the JOC Contractor an opportunity to inspect the site and ask questions before submitting a Price Proposal. The goals of this process are to foster open communication, reduce misunderstandings and mistakes that lead to change orders, and provide results that are more cost-effective and collaborative.

    d) **Develop Detailed Scope of Work:** Gordian will assist in preparing a Detailed Scope of Work that describes the work the JOC Contractor will perform. Gordian will also assist with resolving issues when project plans and actual conditions vary.

    e) **Request for Price Proposal:** After all parties are in agreement that the Detailed Scope of Work properly reflects the work to be performed, Gordian's project manager will send the Detailed Scope of Work and a Request for Proposal to the JOC Contractor.

    f) **Request Price Proposal:** As the next step in the process, the JOC Contractor prepares and submits a Price Proposal by selecting the appropriate tasks from the Unit Price Book. Gordian's IMS will automatically multiply the unit price of the task by the required quantities by the JOC Contractor's competitively bid Adjustment Factor. Gordian shall also request the JOC Contractor's preparation of any additional Owner required information (e.g., construction schedule, list of proposed local subcontractors, etc.).

    g) **Price Proposal Review:** Gordian's project manager will review the Price Proposal to make sure the JOC Contractor has selected the appropriate tasks and quantities and will ask the JOC Contractor to make any required changes. Gordian will also obtain and review any Owner required information submitted by the JOC Contractor such as a construction schedule and list

of proposed subcontractors. Gordian's project manager will submit the Price Proposal and related documents to Owner.

h) **Issue Job Order:** Once Owner approves the Price Proposal and related documents, and decides to move forward with the project, Owner is then responsible for the issuance of a job order (which may be in the form of a purchase order) to the selected JOC Contractor.

i) **Construction Management:** During construction, Owner's project managers will follow its standard internal policies and procedures for construction management and site inspections, including coordinating any required code inspections. When unforeseen conditions arise or Owner desires to change the Detailed Scope of Work, a supplemental Job Order is developed in the same manner as the original Job Order.

7. **On-Going Technical Support:** Gordian shall be responsible for providing extensive on-going technical support to the Owner during normal business hours, excluding holidays. On-going technical support shall include providing updated contract documents, assisting with the procurement of additional JOC Contractors, providing Owner with access to all applicable updates and revisions to the IMS, and providing training for new Owner staff and JOC Contractors during the term of the Agreement. Providing on-going technical support is considered a vital component to ensuring a successful Owner JOC program.

8. **Optional Project Management Services**: On a project-by-project basis, Gordian shall provide project management services to Owner, to be requested by Owner in its sole discretion. The project management services shall include the following:

a) **Preconstruction** – Gordian's project manager will assist Owner in determining whether professional design services are required and conduct a pre-construction meeting with the Owner's representative(s), the JOC contractor and, if applicable, the architect or engineer to review the basic project parameters and funding. Where design services are required, the project manager will work with the architects or engineers to coordinate necessary studies and design standards, and deliver plans and specifications that maximize the benefits of JOC for each Owner project. Next, the project manager will coordinate and share any preconstruction information with Owner, the JOC contractor and other appropriate parties, and will assist in the coordination of the JOC contractor obtaining the necessary permits.

b) **Site Visit** – During construction, Gordian's project manager will monitor the JOC contractor's work in-progress, manage the JOC contractor's compliance with the approved safety plan and complete a report for each site visit.

c) **Communication** – Gordian's project manager will provide weekly construction status reports to Owner, conduct project progress meetings with the JOC contractor and staff on a periodic basis, and coordinate any required technical and code inspections.

d) **Supplemental Job Orders** – In the event there are unforeseen conditions or Owner requests changes to the Detailed Scope of Work after construction has begun, Gordian's project manager will analyze and process a supplemental Job Order by utilizing the procedures to develop the initial Job Order.

e) **Approvals** – Gordian's project manager will review and recommend for approval, or direct necessary revisions to, the JOC contractor's applications for payment and obtain Owner's

approval of the work. Final acceptance of the work will be the responsibility of Owner. Technical and code inspections will be the responsibility of the appropriate inspection agencies.

f) **Project Close-out** – As the final step in the process, Gordian's project manager will enter all Job Order related information into the IMS and collect any required as-builts, warranties and OEMs from the JOC contractor.

ARTICLE IV
ADDITIONAL SERVICES

Owner may, from time to time, request changes in the services to be performed by Gordian ("Additional Services"). No such change, including any increase or decrease in the compensation amount, which shall be mutually agreed upon by Owner and Gordian, shall be effective and enforceable until and unless a written amendment to this Agreement has been executed by the parties and attached hereto.

ARTICLE V
OWNER DUTIES AND RESPONSIBILITIES

Owner will assume the following duties and responsibilities:

1. Owner shall review all documentation and requests for information submitted by Gordian in a timely manner.

2. Owner shall provide full information regarding requirements for the JOC program, including but not limited to, facilities lists, current Owner procedures, programs, technical specifications and bidding information.

3. Owner shall designate, in writing, a representative who shall render or obtain decisions pertaining to the JOC program in a timely manner.

4. Owner shall provide work space and access to the Internet, copiers, printers, facsimile machines, and local telephone service for use by Gordian's on-site staff.

5. Owner shall be responsible for reproduction of the Construction Task Catalog®, Technical Specifications, Contract and General Conditions, Instructions to Bidders and Bid Forms, including the bid packages distributed to construction contractors.

ARTICLE VI
INDEMNIFICATION

Gordian agrees to indemnify and hold harmless Owner and its officers, agents and employees from any and all claims against Owner or its officers, agents, or employees that arise out of any negligent act of Gordian or its officers, agents, employees or subcontractors.

Owner agrees to indemnify and hold harmless Gordian and its officers, agents, employees and subcontractors from any and all claims against Gordian or its officers, agents, employees or subcontractors that arise out of any negligent act of Owner or its officers, agents or employees.

ARTICLE VII
INSURANCE

Gordian shall maintain general liability insurance coverage of $1,000,000 per occurrence, automobile liability insurance of $1,000,000 per occurrence, employers' liability insurance of $1,000,000 and workers' compensation insurance as required by law during the entire term of this Agreement. Gordian shall maintain Technology Errors or Omissions insurance with limits of liability not less than $1,000,000 per claim and $1,000,000 policy aggregate limit. Gordian shall maintain Cyber Liability insurance with limits of liability not less than $1,000,000 per occurrence. Coverage shall include both first and third party coverage, covering claims involving privacy violations, information theft, damage to or destruction of electronic information, intentional and/or unintentional release of private information, alteration of electronic information and network security Gordian shall furnish to Owner a certificate of insurance evidencing the required coverage, naming Owner as an additional insured and providing that the insurance will not be cancelled without thirty (30) days written notice to Owner.

ARTICLE VIII
FEES

In consideration of the Services provided pursuant to Article III, Paragraphs 1 – 7, and the JOC System License granted in Article II above, Gordian shall be paid a JOC System License Fee ("License Fee") and Job Order Development Fee according to the following schedule:

JOC System License Fee – Owner shall pay Gordian a License Fee equal to one and ninety-five hundredths percent (1.95%) of the value of the work ordered; and

Job Order Development Fee – Owner shall pay Gordian a Job Order Development Fee of three and five hundredths percent (3.05%) of the value of work ordered.

The JOC System License Fee and Job Order Development Fee shall be payable when a Job Order is issued to the JOC contractor.

In consideration of the option project management services set forth in Article III, Paragraph 8, to be provided on a project-by-project basis and only upon request by Owner, Gordian shall, in addition to the applicable fees set forth above, be paid a Project Management Fee according to the following schedule:

Project Management Fee – Owner shall pay Gordian a Project Management Fee equal to five and ninety-five hundredths percent (5.95%) of the value of work ordered.

The Project Management Fee shall be payable upon completion and acceptance of the work by Owner, except at Gordian's election Job Orders requiring more than sixty (60) days to complete may be invoiced monthly on a percentage of completion basis.

It is understood that Gordian shall charge participating construction contractors a Contractor Licensing Fee ("CLF") of one percent (1%) of the value of the work ordered for the JOC contractors' access to the Gordian's proprietary construction data and JOC applications. Gordian shall be responsible for all administrative duties relating to the invoicing and collections of the CLF.

ARTICLE IX
PAYMENT

Gordian shall submit invoices for the Services to Owner monthly. Invoices for Fees shall include a description of all work ordered through the JOC program during the month. Invoices for Additional Services shall include a detailed description of the Additional Services provided during the month.

Owner shall pay Gordian's invoices within thirty (30) calendar days from the invoice date. Any invoice not disputed by Owner in writing within fourteen (14) calendar days from the invoice date shall be deemed proper. In the event of a dispute, Owner shall pay all undisputed invoice amounts within thirty (30) days of the original invoice date.

ARTICLE X
TERMINATION

Owner may terminate this Agreement for any reason by providing written notice to Gordian specifying the termination date, which shall be a minimum of thirty (30) days after the date such notice is given. In the event Owner exercises such termination right, Owner shall pay Gordian, within thirty (30) days, the Fees for all work ordered prior to the effective date of termination.

Gordian may terminate this Agreement for cause if Owner shall fail to fulfill its obligation under this Agreement, or if Owner shall violate any of the material provisions of this Agreement, by providing written notice to Owner specifying the cause for such termination and the termination date, which shall be a minimum of seven (7) days after the date such notice is given. In the event Gordian exercises such termination right, Owner shall pay Gordian, within thirty (30) days, the Fees for all work ordered prior to the effective date of termination.

ARTICLE XI
EQUAL EMPLOYMENT OPPORTUNITY

Gordian shall not discriminate against any employee or applicant for employment because of race, color, creed, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital/domestic partner status or disability, except where any of the above is a bona fide occupational qualification or need. Gordian has an affirmative action program to ensure that applicants are employed, and employees are treated during employment without regard to race, color, creed, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital/domestic partner status or disability. Such action includes, but is not limited to, hiring, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

ARTICLE XII
FORCE MAJEURE

Neither party shall be held responsible for failure to perform the duties and responsibilities imposed by this Agreement if such failure is due to fires, riots, rebellions, natural disasters, wars or an act of God beyond the control of the parties and outside the scope of the parties' respective disaster plans that make performance of the obligations impossible.

ARTICLE XIII
INDEPENDENT CONTRACTOR

Gordian is an independent contractor, and neither Gordian nor its employees or subcontractors will, under any circumstances, be considered employees, servants or agents of Owner. Owner will not be legally responsible for any negligence or other wrongdoing by Gordian, its employees, servants or agents. Owner will not withhold

from payments to Gordian any federal, state or unemployment taxes, federal or state income taxes, Social Security tax, or any other amounts for benefits to Gordian or its employees, servants or agents. Furthermore, Owner will not provide to Gordian any insurance coverage or other benefits, including workers' compensation, normally provided by Owner for its employees.

ARTICLE XIV
ASSIGNMENT

Gordian shall not assign, transfer, convey or otherwise dispose of its rights, obligations or interests under this Agreement without the prior written consent of Owner, such consent not to be unreasonably withheld.

ARTICLE XV
APPLICABLE LAW

This Agreement and the work performed hereunder shall be governed in all respects by the laws of the State of Washington. The jurisdiction, venue and forum for any litigation with respect hereto shall be in the courts of the King County, WA, and in no other court.

ARTICLE XVI
WAIVER

The failure of either party to exercise in any respect a right provided for in this Agreement shall not be deemed to be a subsequent waiver of the same right, or any other right.

ARTICLE XVII
NOTICES

Unless otherwise provided for herein, all notices and other communications required by this Agreement shall be deemed to have been given when made in writing and either (a) delivered in person, (b) delivered to an agent, such as an overnight or similar delivery service, or (c) deposited in the United States mail, postage prepaid, certified or registered, addressed as follows:

To the Owner:

City of Shoreline
Attn: Janet Bulman
17500 Midvale Ave N.
Shoreline, WA 98133
Phone: 206-801-2322
Email: jbulman@shorelilnewa.gov

To Gordian

The Gordian Group, Inc.
Attn: Ammon T. Lesher
30 Patewood Drive, Suite 350
Greenville, SC 29615
Phone: (800) 874-2291
Email: a.lesher@thegordiangroup.com

ARTICLE XVIII
SEVERABILITY

The sections, paragraphs, sentences, clauses and phrases of this Agreement are severable, and if any phrase, clause, sentence, paragraph or section of this Agreement shall be declared invalid by a court of competent jurisdiction, such invalidity shall not affect any of the remaining clauses, phrases, sentences, paragraphs or sections of this Agreement.

ARTICLE XIX
ENTIRE AGREEMENT

This Agreement represents the entire and integrated agreement between Owner and Gordian and may be amended only by written instrument approved by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

Owner

By: _____
Authorized Signature
John Norris, Acting City Manager

The Gordian Group, Inc.

By: _____
Corporate Officer