SPECIFICATION NO. ES22-0242F

LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS

Project No. ENV-03031-01
CITY OF TACOMA
ENVIRONMENTAL SERVICES DEPARTMENT

REQUEST FOR BIDS, SPECIAL PROVISIONS, BID PROPOSAL AND CONTRACT

FOR

SPECIFICATION NO.
ES22-0242F

LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS

PROJECT NO. ENV-03031-01

Erik J. Ward, P.E.
Science & Engineering Division
Environmental Services Department

326 East D Street
Tacoma, Washington 98421-1801
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NOTE: ALL BIDDERS MUST HAVE A COPY OF THE SPECIFICATIONS AND THE BID SUBMITTAL PACKAGE

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Environmental Services / Science and Engineering

REQUEST FOR BIDS
ES22-0242F
Leach Creek Stormwater Holding Basin Modifications

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, April 18, 2023
Submittals must be received by the City’s Procurement and Payables Division prior to 11:00 a.m. Pacific Time.
For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email, bids@cityoftacoma.org, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals.

Submittal Delivery: Sealed submittals will be received as follows:

By Email:
bids@cityoftacoma.org
Maximum file size: 35 MB. Multiple emails may be sent for each submittal

Bid Opening: Sealed submittals in response to a RFB will be opened Tuesday’s at 11AM by a purchasing representative and read aloud during a public bid opening held at the Tacoma Public Utilities Administrative Building North, 3628 S. 35th Street, Tacoma, WA 98409, conference room M-1, located on the main floor. They will also be held virtually Tuesday’s at 11AM. Attend via this link or call 1 (253) 215 8782. Submittals in response to an RFP, RFQ or RFI will be recorded as received. As soon as possible, after 1:00 PM, on the day of submittal deadline, preliminary results will be posted to www.TacomaPurchasing.org.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained at the City’s plan distribution service provider, ARC, 632 Broadway, Tacoma, WA, or by going to http://www.e-arc.com/location/tacoma. Prospective bidders will be required to pay reproduction costs. A list of vendors registered for this solicitation is also available at their website.

Pre-Proposal Meeting: A pre-proposal meeting will be held at 10:00 AM on Monday April 10, 2023 in the Commencement Bay Conference Room 101 South located and the Center For Urban Waters, 326 East D Street, Tacoma WA 98421. The Leach Creek Stormwater Holding Basin is a secured facility, therefore immediately after the pre-proposal meeting there will be a walk-through at the site and all bidders are urged to attend this walk-through.

Project Scope: This work consists of constructing a stormwater channel through a forested wetland to connect the existing pump station forebay with the outfall and spillway structures, construction of an access ramp to the proposed stormwater channel, removal and replacement of an existing overflow riser structure, and the installation of a flexible check valve. Work also includes construction dewatering along with water quality treatment systems, bypass pumping, erosion and pollution control, and site restoration.

Estimate: $2.7 Million

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave as set forth in Title 18 of the Tacoma Municipal Code. For more information, visit our Minimum Employment Standards Paid Sick Leave webpage.

Americans with Disabilities Act (ADA Information: The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and
activities. Specification materials can be made available in an alternate format by emailing Gail Himes at ghimes@cityoftacoma.org, or by calling her collect at 253-591-5785.

**Title VI Information:** “The City of Tacoma” in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

**Additional Information:** Requests for information regarding the specifications may be obtained by contacting Dawn DeJarlais, Senior Buyer by email to ddejarlais@cityoftacoma.org

**Protest Policy:** City of Tacoma protest policy, located at www.tacomapurchasing.org, specifies procedures for protests submitted prior to and after submittal deadline.

Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.
SPECIAL REMINDER TO ALL BIDDERS

HEALTH & SAFETY: Be sure to comply with all City of Tacoma health and safety requirements.

PLEASE NOTE: Be sure you have complied with all specifications and requirements and have signed all required documents.

YOUR ATTENTION IS PARTICULARLY CALLED to the following forms, which must be executed in full and submitted with your bid response:

1. **BID PROPOSAL**: The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.

2. **SIGNATURE PAGE**: To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

3. **BID BOND**: The Bid Bond must be executed by the person legally authorized to sign the bid, and must be properly signed by the representatives of the surety company unless the bid is accompanied by a certified check. If Bid Bond is furnished, the form furnished by the City must be followed; no variations from the language thereof will be accepted. The amount of the Bid Bond must be not less than 5% of the total amount bid.

4. **CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES**: Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2017).

5. **STATE RESPONSIBILITY AND RECIPROCAL BID PREFERENCE INFORMATION**: Bidder shall complete this form in its entirety to ensure compliance with state legislation (SHB 2010).

6. **LIST OF SUBCONTRACTOR CATEGORIES OF WORK**: Bidder shall list all subcontractor(s) proposed to perform the work of heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW and electrical as described in Chapter 19.28 RCW. Bidder shall also list all subcontractor(s) proposed to perform the work of structural steel installation and/or rebar installation.

**FAILURE TO LIST SUBCONTRACTORS WILL RESULT IN THE BID BEING NON-RESPONSIVE AND THEREFORE VOID.**

7. **STATEMENT OF QUALIFICATIONS**: The Contractor or subcontractor shall fill out this form in its entirety proving they meet the requirements as outlined in these specifications. It shall be the sole determination of the Engineer to determine if the Contractor/subcontractor does in fact meet the requirements. This is a condition of award of the Contract.
8. **EQUITY IN CONTRACTING (EIC) UTILIZATION FORM**

Bidders shall complete the Equity in Contracting Utilization Form in accordance with the City of Tacoma Equity in Contracting Regulations Manual and Chapter 1.07 of the City of Tacoma Municipal Code (TMC). This form shall be fully and accurately completed and returned with submission of the Bid and will be used to determine if the Bidder is in compliance with the EIC regulations and the TMC.

As part of the City of Tacoma’s ongoing work to address past disparities and to increase the City’s contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women’s Business Enterprise and approved by the Equity in Contracting Program (“Certified Businesses”). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma. The EIC Program requirements are contained in Tacoma Municipal Code Chapter 1.07.

See City of Tacoma – Equity In Contracting Program section for additional information.

**POST AWARD FORMS EXECUTED UPON AWARD:**

A. **CONTRACT:** Must be executed by the successful bidder.

B. **PAYMENT BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.

C. **PERFORMANCE BOND TO THE CITY OF TACOMA:** Must be executed by the successful bidder and his/her surety company.

D. **CERTIFICATE OF INSURANCE:** Shall be submitted with all required endorsements.

E. **LEAP UTILIZATION PLAN:** Shall be submitted at the Pre-Construction Meeting.

F. **GENERAL RELEASE.**

G. **LANDSCAPE WARRANTY AND DEFECT BOND TO CITY OF TACOMA**

**CODE OF ETHICS:** The successful bidder agrees that its violation of the City’s Code of Ethics contained in TMC Chapter 1.46 shall constitute a breach of the contract subjecting the contract to termination.

**LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP):**

The Local Employment and Apprenticeship Training Program (LEAP) has been adopted to counteract economic and social ills, which accompany high rates of unemployment within the City of Tacoma. The Tacoma City Council established the mandatory LEAP program for public works contracts pursuant to Ordinance No. 28520. The primary goal is to provide an
opportunity for City of Tacoma residents and Tacoma Public Utilities ratepayers to enter apprenticeship programs, acquire skills, and perform work that will provide living wages.

LEAP Goals:

1. Local Employment Utilization Goal – Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by residents of the City of Tacoma or local economically distressed areas, whether or not such person is an Apprentice.

2. Apprentice Utilization Goal - Prime contractor is required to ensure that 15 percent of the labor hours worked on the project are performed by Apprentices who reside in the Tacoma Public Utilities service area.

NOTE: If both goals are assigned to this project, the two goals can be satisfied concurrently if the prime contractor utilizes individuals who simultaneously meet the requirements of both goals, such as an apprentice who resides in the City of Tacoma or in a local economically distressed area.

See City of Tacoma – Local Employment and Apprenticeship Training Program section for additional information.
CITY OF TACOMA  
FINANCE/PURCHASING DIVISION  
SPECIAL NOTICE TO BIDDERS

Public works and improvement projects for the City of Tacoma are subject to Washington state law and Tacoma Municipal Code, including, but not limited to the following:

I.  STATE OF WASHINGTON

A.  RESPONSIBILITY CRITERIA – STATE OF WASHINGTON

In order to be considered a responsible bidder the bidder must meet the following mandatory state responsibility criteria contained in RCW 39.04.350:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable:
   a. Have Industrial Insurance (workers’ compensation) coverage for the bidder’s employees working in Washington, as required in Title 51 RCW;
   b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
   c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
5. Have received training on the requirements related to public works and prevailing wage under this chapter and chapter 39.12 RCW and must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection.

B.  RECIPROCAL PREFERENCE FOR RESIDENT CONTRACTORS:

Effective March 30, 2012, RCW 39.04.380 imposes a reciprocal preference for resident contractors. Any bid received from a non-resident contractor from a state that provides an in-state percentage bidding preference is subject application of a comparable percentage disadvantage.

A non-resident contractor from a state that provides an in-state percentage bidding preference means a contractor that:

1. Is from a state that provides a percentage bid preference to its resident contractors bidding on public works projects, and
2. Does not have a physical office located in Washington at the time of bidding on the City of Tacoma public works project.

The state of residence for a non-resident contractor is the state in which the contractor was incorporated, or if not a corporation, the state in which the contractor’s business entity was formed.
The City of Tacoma will evaluate all non-resident contractors for an out of state bidder preference. If the state of the non-resident contractor provides an in state contractor preference, a comparable percentage disadvantage will be applied to the non-resident contractor’s bid prior to contract award. The responsive and lowest and best responsible bidder after application of any non-resident disadvantage will be awarded the contract.

The reciprocal preference evaluation does not apply to public works procured pursuant to RCW 39.04.155, RCW 39.04.280, federally funded competitive solicitations where such agencies prohibit the application of bid preferences, or any other procurement exempt from competitive bidding.

Bidders must provide the City of Tacoma with their state of incorporation or the state in which the business entity was formed and include whether the bidder has a physical office located in Washington.

The bidder shall submit documentation demonstrating compliance with above criteria on the enclosed State Responsibility and Reciprocal Bidder Information form.

C. SUBCONTRACTOR RESPONSIBILITY

1. The Contractor shall include the language of this subcontractor responsibility section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.

2. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

   a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;

   b. Have a current Washington Unified Business Identifier (UBI) number;

   c. If applicable, have:

      a. Have Industrial Insurance (workers’ compensation) coverage for the bidder’s employees working in Washington, as required in Title 51 RCW;
      b. A Washington Employment Security Department number, as required in Title 50 RCW;
      c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
      d. An electrical contractor license, if required by Chapter 19.28 RCW;
      e. An elevator contractor license, if required by Chapter 70.87 RCW and;

3. Not be disqualified from bidding on any public works contract under RCW 39.06.010 (unlicensed or unregistered contractors) or 39.12.065(3) (prevailing wage).
II. CITY OF TACOMA

A. SUPPLEMENTAL RESPONSIBILITY CRITERIA – CITY OF TACOMA:

In order to be considered a responsible bidder, the prospective bidder shall have all of the following qualifications set forth in Tacoma Municipal Code 1.06.262:

1. Adequate financial resources or the ability to secure such resources;
2. The necessary experience, stability, organization and technical qualifications to perform the proposed contract;
3. The ability to comply with the required performance schedule, taking into consideration all existing business commitments;
4. A satisfactory record of performance, integrity, judgment and skills; and
5. Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

In addition to the mandatory bidder responsibility criteria listed immediately above, the City may, in addition to price, consider any or all of the following criteria contained in Tacoma Municipal Code Chapter 1.06.262 in determining bidder responsibility:

1. The ability, capacity, experience, stability, technical qualifications and skill of the respondent to perform the contract;
2. Whether the respondent can perform the contract within the time specified, without delay or interference;
3. Integrity, reputation, character, judgment, experience, and efficiency of the respondents, including past compliance with the City’s Ethics Code;
4. Quality of performance of previous contracts;
5. Previous and existing compliance with laws and ordinances relating to contracts or services;
6. Sufficiency of the respondent’s financial resources;
7. Quality, availability, and adaptability of the supplies, purchased services or public works to the particular use required;
8. Ability of the respondent to provide future maintenance and service on a timely basis;
9. Payment terms and prompt pay discounts;
10. The number and scope of conditions attached to the submittal;
11. Compliance with all applicable City requirements, including but not limited to the City’s Ethics Code and its Equity in Contracting and Local Employment and Apprenticeship Training programs;
12. Other qualification criteria set forth in the specification or advertisement that the appropriate department or division head determines to be in the best interests of the City.

The City may require bidders to furnish information, sworn or certified to be true, to demonstrate compliance with the City responsibility criteria set forth above. If the city manager or director of utilities is not satisfied with the sufficiency of the information provided, or if the prospective respondent does not substantially meet all responsibility requirements, any submittal from such respondent must be disregarded.
B. ADDITIONAL SUPPLEMENTAL CRITERIA – NOT APPLICABLE

C. MODIFICATIONS TO SUPPLEMENTAL CRITERIA

Potential bidders may request modifications to the City’s supplemental criteria by submitting a written request to the Purchasing Division via email to bids@cityoftacoma.org no later than 5:00 p.m. Pacific Time, three days prior to the submittal deadline. Please include the Specification No. and Title when submitting such requests. Requests must include justification for why certain criteria should be modified. Requests received after this date and time will not be considered.

The City will respond to a timely submitted request prior to the bid opening date. Changes to the supplemental criteria, if warranted, will be issued by addendum to the solicitation documents and posted to the City’s website for the attention of all prospective bidders.

D. DETERMINATION OF BIDDER RESPONSIBILITY

If the City determines the bidder does not meet the criteria above and is therefore not a responsible bidder, the City shall notify the bidder in writing with the reasons for its determination. If the bidder disagrees, the bidder may appeal the determination in a manner consistent with the City’s Protest Policy. Appeals are coordinated by the Purchasing Division heard by the Procurement and Payables Division manager for contracts less than or equal to $500,000 and by Contracts and Awards Board for contracts greater than $500,000.
CITY OF TACOMA
Tacoma Leach Creek Specifications

PROFESSIONAL OF RECORD CERTIFICATIONS

Signing as the Professional of Record for the sections listed below:

RUTH HOLLINGSWORTH
Division: 01; All Sections
Division: 15; Section: 15121

AMANDA LAWLER
Division: 02; All Sections
Division: 03; Section: 03510

ADE BRIGHT
Division: 03; Section: 03252
Division: 05; Section: 05500
PART I

BID PROPOSAL AND CONTRACT FORMS
The undersigned hereby certifies that he/she has examined the location and construction details of work as outlined on the Plans and Specifications for Project No. ENV-03031-01 and has read and thoroughly understands the Plans and Specifications and contract governing the work embraced in this improvement and the method by which payment will be made for said work, and hereby proposes to undertake and complete the work embraced in this improvement in accordance with said Plans, Specifications and contract and at the following schedule of rates and prices:

NOTE: 1. Unit prices of all items, all extensions and total amount of bid should be shown. Show unit prices in figures only.

2. The notations below the item numbers refer to the specification section where information may be found regarding each contract item. These notations are intended only as a guide and are not warranted to refer to all specification sections where information may be found.

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<td>Temporary Dewatering and Water Treatment</td>
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<td>$___________</td>
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Base Bid (Subtotal Items Nos. 1 - 9) $_____________________

10.3% Sales Tax (Items Nos. 1 - 9) $_____________________
SIGNATURE PAGE
CITY OF TACOMA
ENVIRONMENTAL SERVICES SCIENCE AND ENGINEERING

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of
the bidding/proposing entity, and received and time stamped as directed in the Request for Bids page
near the beginning of the specification. If the bidder/proposer is a subsidiary or doing business on
behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

REQUEST FOR BIDS SPECIFICATION NO. ES22-0242F
Leach Creek Stormwater Holding Basin Modifications

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all
materials, labor, tools, equipment and all other facilities and services in accordance with these
specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event
any litigation should arise concerning the submission of bids/proposals or the award of contract under
this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of
such action or litigation shall be in the Superior Court of the State of Washington, in and for the County
of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is
genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or
entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited
any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to
refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by
collusion to secure to itself an advantage over any other contractor(s) or person(s).

Bidder/Proposer’s Registered Name

Signature of Person Authorized to Enter into Contracts for Bidder/Proposer

Address

Printed Name and Title

City, State, Zip

(Area Code) Telephone Number / Fax Number

Authorized Signatory E-Mail Address

State Business License Number
in WA, also known as UBI (Unified Business Identifier) Number

E.I.No. / Federal Social Security Number Used on Quarterly
Federal Tax Return, U.S. Treasury Dept. Form 941

State Contractor’s License Number
(See Ch. 18.27, R.C.W.)

E-Mail Address for Communications

Addendum acknowledgement #1_____ #2_____ #3_____ #4_____ #5_____
Herewith find deposit in the form of a cashier’s check in the amount of $__________________ which amount is not less than 5-percent of the total bid.

SIGN HERE__________________________________

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, ______________________________________________________________, as Principal, and ______________________________________________________________, as Surety, are held and firmly bound unto the City of Tacoma, as Obligee, in the penal sum of _______________________________ dollars, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this obligation is such that if the Obligee shall make any award to the Principal for according to the terms of the proposal or bid made by the Principal therefor, and the Principal shall duly make and enter into a contract with the Obligee in accordance with the terms of said proposal or bid and award and shall give bond for faithful performance thereof, with Surety or Sureties approved by the Obligee; or if the Principal shall, in case of failure to do so, pay and forfeit to the Obligee the penal amount of the deposit specified in the call for bids, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect and the Surety shall forthwith pay and forfeit to the Obligee, as penalty and liquidated damages, the amount of this bond.

SIGNED, SEALED AND DATED THIS _______________ DAY OF __________________, 20______.

PRINCIPAL:                                                                 SURETY:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

___________________________, 20_____

Received return of deposit in the sum of $ ____________________________________
Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (04/04/2023), that the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the state of Washington that the foregoing is true and correct.

Bidder

Signature of Authorized Official*

Printed Name

Title

Date

City

State

Check One:

Individual ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

State of Incorporation, or if not a corporation, the state where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.
State Responsibility and Reciprocal Bid Preference Information

Certificate of registration as a contractor (Must be in effect at the time of bid submittal):

Number: ________________________
Effective Date: __________________
Expiration Date: __________________

Current Washington Unified Business Identifier (UBI) Number:

Number: ________________________

Do you have industrial insurance (workers' compensation) Coverage nor your employees working in Washington?

☐ Yes    ☐ No
☐ Not Applicable

Washington Employment Security Department Number

Number: ________________________
☐ Not Applicable

Washington Department of Revenue state excise tax Registration number:

Number: ________________________
☐ Not Applicable

Have you been disqualified from bidding any public works contracts under RCW 39.06.010 or 39.12.065(3)?

☐ Yes    ☐ No

If yes, provide an explanation of your disqualification on a separate page.

Do you have a physical office located in the state of Washington?

☐ Yes    ☐ No

If incorporated, in what state were you incorporated?

State: ________________ ☐ Not Incorporated

If not incorporated, in what state was your business entity formed?

State: ________________

Have you completed the training required by RCW 39.04.350, or are you on the list of exempt businesses maintained by the Department of Labor and Industries?

☐ Yes    ☐ No
List of Subcontractor Categories of Work

Project Name

Subcontractor(s) that are proposed to perform the work of heating, ventilation and air conditioning, and/or plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. **This information must be submitted with the bid proposal or within one hour of the published bid submittal time via email to bids@cityoftacoma.org.**

Subcontractor(s) that are proposed to perform the work of structural steel installation and/or rebar installation must be listed below. **This information must be submitted with the bid proposal or within forty-eight hours of the published bid submittal time via email to bids@cityoftacoma.org.**

Failure to list subcontractors or naming more than one subcontractor to perform the same work will result in your bid being non-responsive. Contractors self-performing must list themselves below. The work to be performed is to be listed below the subcontractor(s) name.

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STATEMENT OF QUALIFICATIONS FOR
LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS

This form shall be completed in its entirety and submitted with the bid package.

Failure to submit and meet the requirements of the Specifications shall be grounds for rejection of the Bid. The City of Tacoma shall be the sole judge in determining if the prospective bidder meets the minimum experience requirements.

Prime Contractor

Prime Contractor shall have successfully performed a minimum of three (3) projects of a similar nature to the proposed including the management of construction activities under Individual Permits issued by the Army Corps of Engineers, 401 Water Quality Certification, and other permits issued for work that discharges to sensitive water bodies such as wetlands, natural streams, or creeks within the last seven (7) years. The three projects shall have a cumulative total value over $1 Million.

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List at least three (3) Projects

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Superintendent

Superintendent shall have successfully performed a minimum of three (3) projects in the last seven (7) years working in or around wetlands or other sensitive water bodies. Superintendent shall have managed dewatering systems, bypass systems, and water quality treatment systems for projects of similar nature to the proposed. The three projects shall have a cumulative total value over $1 Million.

Superintendent Name:  ____________________________________________
Phone Number:  ____________________________________________

List at least three (3) Projects

Project Name:  ____________________________________________
Contractor:  ____________________________________________
Owner:  ____________________________________________
Amount:  ____________________________________________

Project Name:  ____________________________________________
Contractor:  ____________________________________________
Owner:  ____________________________________________
Amount:  ____________________________________________

Project Name:  ____________________________________________
Contractor:  ____________________________________________
Owner:  ____________________________________________
Amount:  ____________________________________________

Project Name:  ____________________________________________
Contractor:  ____________________________________________
Owner:  ____________________________________________
Amount:  ____________________________________________
EIC REQUIREMENT FORM

EQUITY IN CONTRACTING REQUIREMENTS & PROCEDURES:

All bidders must complete and submit with their bid the following solicitation form contained in the bid submittal package:

City of Tacoma – EIC Utilization Form

IMPORTANT NOTE:

It is the bidder’s responsibility to ensure that the subcontractor(s) listed on the EIC Utilization Form are currently certified by the State of Washington’s Office of Minority and Women Business Enterprises (OMWBE) at the time of bid opening. This may be verified by contacting the EIC Office at 253-591-5075 between 8 AM and 5 PM, Monday through Friday or the OMWBE Office at (866) 208-1064. Please refer to the City of Tacoma EIC code.

EQUITY IN CONTRACTING REQUIREMENTS

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A list of EIC-eligible companies is available on the following web site addresses:

www.omwbe.diversitycompliance.com*

MATERIAL MISSTATEMENTS CONCERNING COMPLETED ACTIONS BY THE BIDDER IN ANY SWORN STATEMENT OR FAILURE TO MEET COMMITMENTS AS INDICATED ON THE EIC UTILIZATION FORM MAY RENDER THE BIDDER IN DEFAULT OF CITY ORDINANCE 1.07

CCD/SBE: ENV-03031-01-01
Date of Record: 03/20/2023
Project Spec#: ES22-0242F
Project Title: Leach Creek Stormwater Holding Basin Modification

*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office if you have any questions.
This form is to document only the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- Prime contractors are required to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) [www.omwbe.wa.gov] as a MBE, WBE, and SBE to be known as "Certified Business".
- It is the Prime contractor’s responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

Bidder’s Name: ____________________________________________

Address: __________________________________________________

City/State/Zip: ____________________________________________

Spec. No. _________________ Base Bid * $ _________________

Complete business names and phone numbers are required to verify your usage of Certified Businesses

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<tr>
<th>Business Name and Certification Number(s)</th>
<th>MBE, WBE, or SBE (Write all that apply)</th>
<th>NAICS code(s)</th>
<th>Contractor Bid Amount (100%)</th>
<th>Material Supplier Bid Amount (20%)</th>
<th>Estimated MBE Usage Dollar Amount</th>
<th>Estimated WBE Usage Dollar Amount</th>
<th>Estimated SBE Usage Dollar Amount</th>
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i. MBE Utilization %  
j. WBE Utilization %  
k. SBE Utilization %

By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

Type or Print Name of Responsible Officer / Title  Signature of Responsible Officer  Date

CDD/EIC/BID DOCS revised March 4, 2022
INSTRUCTIONS FOR COMPLETING EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor’s bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.

2. Column “a” – List all Certified Business(s) that you will be awarding a contract to if you are the successful bidder.

3. Column "b" – Identify if the Certified Business(s) is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).

4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each Certified Business.

5. Column “d” – The bid amount must be indicated for all listed Certified Businesses that you plan on doing business with. This quote is the price that you and the Certified Businesses have negotiated prior to bid opening.

6. Column “e” – The bid amount must be indicated for all listed Certified Businesses that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.

7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

8. Column “g” – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

9. Column “h” – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

10. Block “i” – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column “f”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “f” divided by Base Bid (*) x 100 = MBE usage as a percentage of the Base Bid.)

11. Block “j” – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column “g”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “g” divided by Base Bid (*) x 100 = WBE usage as a percentage of the Base Bid.)
12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “h” divided by Base Bid (*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor's responsibility to check the status of Certified Businesses prior to bid opening. Call the EIC Office at 253-591-5826 or email at EICOffice@cityoftacoma.org for additional information.
This Contract is made and entered into effective as of [Month], [Day], [Year] ("Effective Date") by and between the City of Tacoma, a Municipal Corporation of the State of Washington ("City"), and [supplier name as it appears in Ariba, including dbas or trade names] ("Contractor").

That in consideration of the mutual promises and obligations hereinafter set forth the Parties hereto agree as follows:

I. Contractor shall fully execute and diligently and completely perform all work and provide all services and deliverables described herein and in the items listed below each of which are fully incorporated herein and which collectively are referred to as "Contract Documents":

1. Specification No. [Spec Number] [Spec Title] together with all authorized addenda.
2. Contractor's submittal [or specifically described portions thereof] dated [Enter Submittal Date] submitted in response to Specification No. [Spec Number] [Spec Title].
3. Describe with specific detail and list separately any other documents that will make up the contract (fee schedule, work schedule, authorized personnel, etc.) or any other additional items mutually intended to be binding upon the parties.

II. If federal funds will be used to fund, pay or reimburse all or a portion of the services provided under the Contract, the terms and conditions set forth at this Appendix A are incorporated into and made part of this Contract and CONTRACTOR will comply with all applicable provisions of Appendix A and with all applicable federal laws, regulations, executive orders, policies, procedures, and directives in the performance of this Contract.

If CONTRACTOR's receipt of federal funds under this Contract is as a sub-recipient, a fully completed Appendix B, “Sub-recipient Information and Requirements” is incorporated into and made part of this Contract.

III. In the event of a conflict or inconsistency between the terms and conditions contained in this document entitled Contract and any terms and conditions contained the above referenced Contract Documents the following order of precedence applies with the first listed item being the most controlling and the last listed item the least controlling:

1. Contract, inclusive of Appendices A and B.
2. List remaining Contract Documents in applicable controlling order.

IV. The Contract terminates on xxxxx, and may be renewed for xxxxxxxx

V. The total price to be paid by City for Contractor's full and complete performance hereunder, including during any authorized renewal terms, may not exceed: $[Dollar Amount], plus any applicable taxes.

VI. Contractor agrees to accept as full payment hereunder the amounts specified herein and in Contract Documents, and the City agrees to make payments at the times and in the manner and upon the terms and conditions specified. Except as may be otherwise provided herein or in Contract Documents Contractor shall provide and bear the expense of all equipment, work and labor of any sort whatsoever that may be required for the transfer of materials and for constructing and completing the work and providing the services and deliverables required by this Contract.

VII. The City’s preferred method of payment is by ePayables (Payment Plus), followed by credit card (aka procurement card), then Electronic Funds Transfer (EFT) by Automated Clearing House (ACH), then check or other cash equivalent. CONTRACTOR may be required to have the capability of accepting the City’s ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used. The City, in its sole discretion, will determine the method of payment for this Contract.
VIII. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with the insurance requirements contained in the Contract Documents shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

IX. Contractor and for its heirs, executors, administrators, successors, and assigns, does hereby agree to the full performance of all the requirements contained herein and in Contract Documents.

It is further provided that no liability shall attach to City by reason of entering into this Contract, except as expressly provided herein.

IN WITNESS WHEREOF, the Parties hereto have accepted and executed this Contract, as of the Effective Date stated above, which shall be Effective Date for bonding purposes as applicable.

CITY OF TACOMA:
Signature: ____________________________
Name: ________________________________
Title: ________________________________

CONTRACTOR:
Signature: ____________________________
Name: ________________________________
Title: ________________________________

(City of Tacoma use only - blank lines are intentional)

Director of Finance: ____________________________
Deputy/City Attorney (approved as to form): ____________________________
Approved By: ____________________________
Approved By: ____________________________
Approved By: ____________________________
Approved By: ____________________________
Approved By: ____________________________

APPENDIX A
FEDERAL FUNDING
1. Termination for Breach

CITY may terminate this Contract in the event of any material breach of any of the terms and conditions of this Contract if CONTRACTOR’s breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach.

2. Prevailing Wages

1. If federal, state, local, or any applicable law requires CONTRACTOR to pay prevailing wages in connection with this Contract, and CONTRACTOR is so notified by the CITY, then CONTRACTOR shall pay applicable prevailing wages and otherwise comply with the Washington State Prevailing Wage Act (RCW 39.12) in the performance of this Contract.

2. If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is made of part of the Contract by this reference. If prevailing wages apply to the Contract, CONTRACTOR and its subcontractors shall:
   i. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week.
   ii. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid.
   iii. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by CONTRACTOR and its subcontractors to the CITY, in the manner requested by the CITY, prior to any payment by the CITY hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the CITY prior to final Contract payment.

3. COPELAND ANTI-KICKBACK ACT

For Contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

A. CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this Contract.

B. CONTRACTOR or subcontractor shall insert in any subcontracts the clause above and such other clauses federal agencies may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.
The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these Contract clauses.

C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

4. EQUAL EMPLOYMENT OPPORTUNITY
During the performance of this Contract, CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. If the CONTRACTOR does over $10,000 in business a year that is funded, paid or reimbursed with federal funds, CONTRACTOR will take specific and affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

A. Employment, 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. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

B. CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

C. CONTRACTOR will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

D. CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

E. CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

F. In the event of CONTRACTOR's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further federally funded contracts in accordance with procedures.
authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

G. CONTRACTOR will include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

5. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

A. Overtime requirements. Neither CONTRACTOR or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

B. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (3)(A) of this section the CONTRACTOR and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such CONTRACTOR and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (3)(A) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (3)(A) of this section.

C. Withholding for unpaid wages and liquidated damages. The CITY shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the CONTRACTOR or subcontractor under any such contract or any other Federal
contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such CONTRACTOR or sub-contractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (3)(B) of this section.

D. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (3)(A) through (D) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime CONTRACTOR shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (3)(A) through (D) of this section.

6. CLEAN AIR ACT
   A. CONTRACTOR agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

   B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

CONTRACTOR agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with federal funds.

7. FEDERAL WATER POLLUTION CONTROL ACT
   A. CONTRACTOR agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

   B. CONTRACTOR agrees to report each violation to the CITY and understands and agrees that the CITY will, in turn, report each violation as required to assure notification to the appropriate federal agency.

   C. CONTRACTOR agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with federal funding.

8. DEBARMENT AND SUSPENSION
   A. This Contract is a Covered Transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor’s principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

   B. CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier Covered Transaction it enters into.
C. This certification is a material representation of fact relied upon by the CITY. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to CITY, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

D. CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C throughout the period of this Contract and to include a provision requiring such compliance in its lower tier covered transactions.

9. BYRD ANTI-LOBBYING AMENDMENT

A. Contractors who apply or bid for an award of $100,000 or more shall file the required certification with CITY. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the CITY.

B. If applicable, CONTRACTOR must sign and submit to the CITY the certification required by Appendix A to 44 CFR Part 18 contained at Appendix A-1 to this Contract.

10. PROCUREMENT OF RECOVERED MATERIALS

A. In the performance of this Contract, CONTRACTOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

i. Competitively within a timeframe providing for compliance with the contract performance schedule;

ii. Meeting contract performance requirements; or

iii. At a reasonable price.

B. Information about this requirement, along with the list of EPA-designated items, is available at EPA’s Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

C. CONTRACTOR also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.
The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, __________, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

___________________________________
Signature of Contractor’s Authorized Official

___________________________________
Name and Title of Contractor’s Authorized Official

_________________________ Date
## APPENDIX B—Sub-recipient information and requirements

Pursuant to 2 CFR 200.332(a)(1) Federal Award Identification

<table>
<thead>
<tr>
<th>(i) Agency Name (must match the name associated with its unique entity identifier)</th>
<th>(ii) Unique Entity Identifier (i.e., DUNS)</th>
<th>City of Tacoma Number for This Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

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<tr>
<th>(iii) Federal Award Identification Number (FAIN)</th>
<th>(iv) Federal Award Date</th>
<th>(v) Federal Period of Performance Start and End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

<table>
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<tr>
<th>(vii) Amount of Federal Funds Obligated to the agency by this action:</th>
<th>(viii) Total Amount of Federal Funds Obligated to the agency</th>
<th>(ix) Total Amount of the Federal Award Committed to the agency</th>
</tr>
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<tbody>
<tr>
<td>$</td>
<td>$</td>
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<table>
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<tr>
<th>x) Federal Award Project Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORONAVIRUS STATE AND LOCAL FISCAL RECOVERY FUNDS— City of Tacoma</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(xi) Federal Awarding Agency:</th>
<th>Pass-Through Entity:</th>
<th>Awarding Official Name and Contact Information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPARTMENT OF THE TREASURY</td>
<td>City of Tacoma</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(xii) Assistance Listing Number and Name (the pass-through entity must identify the dollar amount made available under each Federal award and the Assistance Listing number at time of disbursement)</th>
<th>(xiii) Identification of Whether the Award is R&amp;D</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>(xiv) Indirect Cost Rate for the Federal Award</th>
<th>Award Payment Method (lump sum payment or reimbursement)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>REIMBURSEMENT</td>
</tr>
</tbody>
</table>
PAYMENT BOND
TO THE CITY OF TACOMA

Resolution No.
Bond No.

That we, the undersigned, as principal, and as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of, $__________________________, for the payment whereof Contractor and Surety bind themselves, their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

| Specification No. |
| Specification Title: |
| Contract No. |

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28, including all workers, laborers, mechanics, subcontractors, and materialmen, and all person who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Titles 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract shall in any way affect its obligation on this bond, and waives notice of any changes, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

No suit or action shall be commenced hereunder by any claimant unless claimant shall have given the written notices to the City, and where required, the Contractor, in accordance with RCW 39.08.030.

The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of claims which may be properly filed in accordance with RCW 39.08 whether or not suit is commenced under and against this bond.

If any claimant shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgment and attorney fees as provided by RCW 39.08.030, shall also pay such costs and attorney fees as may be incurred by the City as a result of such suit. Venue for any action arising out of or in connection with this bond shall be in Pierce County, WA.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.
One original bond shall be executed, and be signed by the parties’ duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: Enter Vendor Legal Name

________________________________________________________________________

By: _____________________________________________________________________

Surety:

________________________________________________________________________

By: _____________________________________________________________________

By: _____________________________________________________________________

Agent’s Name: _____________________________________________________________________

Agent’s Address: _____________________________________________________________________
That we, the undersigned, as principal, and as a surety, are jointly and severally held and firmly bound to the CITY OF TACOMA, in the penal sum of $ , for the payment whereof Contractor and Surety bind themselves, their executors, administrators, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

This obligation is entered into in pursuance of the statutes of the State of Washington, the Ordinances of the City of Tacoma.

WHEREAS, under and pursuant to the City Charter and general ordinances of the City of Tacoma, the said City has or is about to enter with the above bounden principal, a contract, providing for

### Specification No.
### Specification Title:
### Contract No.

(which contract is referenced to herein and is made a part hereof as though attached hereto), and

WHEREAS, the said principal has accepted, the said contract, and undertake to perform the work therein provided for in the manner and within the time set forth.

This statutory performance bond shall become null and void, if and when the principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal’s obligations under the Contract and fulfill all terms and conditions of all duly authorized modifications, additions and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in force and effect.

The Surety for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract, or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increase.

If the City shall commence suit and obtain judgment against the Surety for recovery hereunder, then the Surety, in addition to such judgement, shall pay all costs and attorney’s fees incurred by the City in enforcement of its rights hereunder. Venue for any action arising out of or in connection with this bond shall be in Pierce County, Washington.

Surety companies executing bonds must be authorized to transact business in the State of Washington as surety and named in the current list of “Surety Companies Acceptable in Federal Bonds” as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Department of the Treasury.

One original bond shall be executed, and signed by the parties’ duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed power of attorney for the office executing on behalf of the surety.

Principal: Enter Vendor Legal Name

By: ____________________________

Surety:

By: ____________________________

Agent’s Name: ____________________________

Agent’s Address: ____________________________

Form No. SPEC-100A 04/09/2020
GENERAL RELEASE TO THE CITY OF TACOMA

The undersigned, named as the contractor for ____________________________ Project / Spec. # between ____________________________ and the City of Tacoma, (Themselves or Itself) dated ____________________________, 20___, hereby releases the City of Tacoma, its departmental officers and agents from any and all claim or claims whatsoever in any manner whatsoever at any time whatsoever arising out of and/or in connection with and/or relating to said contract, excepting only the equity of the undersigned in the amount now retained by the City of Tacoma under said contract, to-wit the sum of $______________________.

Signed at Tacoma, Washington this _____ day of ______, 20__.

__________________________________________
Contractor

By ______________________

Title _______________________
LANDSCAPING WARRANTY AND DEFECT BOND
TO CITY OF TACOMA

NAME OF PROJECT: ________________________ BOND NO: ________________

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, ____________________________ as Principal, and a Corporation organized and existing under the laws of the State of Washington, as a Surety Corporation, and qualified under the laws of the State of Washington to become Surety upon bonds of Contractors with Municipal Corporations, as Surety, are jointly and severally held and firmly bound to the CITY OF TACOMA in the penal sum of $_______________, representing the sum of 50% of the bid item “Stormwater Holding Basin Modifications”, together with any adjustments, up or down because of changes in the contract work, for the payment of which sum on demand we bind ourselves and our successors, heirs, administrators or personal representatives, as the case may be.

WHEREAS, the Principal has completed the project in the CITY OF TACOMA, and the Principal has constructed certain improvements in connection with said project and intends to secure the successful operation of said improvements pursuant to RCW 58.17 and the CITY OF TACOMA Code.

As part of acceptance of the contract work, Contractor has provided the City the attached one-year warranty and defect bond in the amount specified above and in a form acceptable to the City. The Principal shall perform Plant Establishment as specified in the Contract and as identified in the approved Plant Establishment Plan for one (1) year from the date of acceptance of the Contract work by the City of Tacoma. When plants are replaced, the warranty for that plant shall extend for one (1) year from the date such replacement is complete and accepted by the City. The Principal shall begin to correct any defects within seven (7) calendar days of its receipt of notice from the City of the defect. If the Principal does not complete the corrections within a reasonable time as determined by the City, the City may complete the corrections and the Principal shall pay all costs incurred by the City in order to accomplish the correction.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their separate seals. The name and corporate seal (if required by law) of each corporate party is hereto affixed and duly signed by its undersigned representatives pursuant to authority of its governing body.
GENERAL PROVISIONS
(Revised December 15, 2020)

SECTION I - BIDDING REQUIREMENTS
SECTION I REQUIREMENTS ARE BINDING ON ALL RESPONDENTS.

1.01 USE AND COMPLETION OF CITY PROPOSAL SHEETS

A. Respondent’s Proposal

Each Respondent must bid exactly as specified on the Proposal sheets. All proposals must remain open for acceptance by the City for a period of at least 60 calendar days from the date of opening of the bids.

B. Alterations of Proposals Not Allowed

Proposals that are incomplete or conditioned in any way contain alternatives or items not called for in the General Provisions and Specifications, or not in conformity with law may be rejected as being nonresponsive. The City cannot legally accept any proposal containing a substantial deviation from these Specifications.

C. Filling Out City Proposal Sheets

All proposals must be completed using the proposal sheets and forms included with this specification, and the prices must be stated in figures either written in ink or typewritten. No proposal having erasures or interlineations will be accepted unless initialed by the Respondent in ink.

1.02 CLARIFICATION OF PROPOSAL FOR RESPONDENT

If a prospective Respondent has any questions concerning any part of the Proposal, he/she may submit a written request for answer of his/her questions. Any interpretation of the Proposal will be made by an Addendum duly issued and mailed or delivered to each prospective Respondent. Such addendum must be acknowledged in the proposal. The City of Tacoma will not be responsible for any other explanation or interpretation of the bid documents.

1.03 RESPONDENT’S BOND OR CERTIFIED CHECK

Each bid for construction must be accompanied either by a certified or cashier’s check for 5 percent of the total amount bid, including tax, payable to the City Treasurer, or an approved bid bond, by a surety company authorized to do business in the State of Washington, for 5 percent of the total amount bid. The person legally authorized to sign the bid must sign all bid bonds. The approved bid bond form attached to these Specifications should be used: no substantial variations from the language thereof will be accepted.

If a bid bond is used, the 5 percent may be shown either in dollars and cents, or the bid bond may be filled in as follows, “5 percent of the total amount of the accompanying proposal.”

The check of the successful Respondent will be returned after award of the Contract, acceptance of the Payment and Performance Bond and City's receipt of the signed Contract. The checks of all other Respondents will be returned immediately upon the award of the Contract. Bid bonds will not be returned.

If submitting your bid electronically, a scanned version of the original bid bond or cashier’s check shall accompany your electronic bid submittal. The original bid bond or cashier's check shall be sent to the Contracting Agency and received by the Contracting Agency within 7 calendar days of the bid opening or the bidder may be deemed non-responsive.

Original bid bonds or cashier’s check will be delivered to:
City of Tacoma
Procurement & Payables Division
Tacoma Public Utilities
3628 S 35th St
Tacoma, WA 98409

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1.04 DELIVERY OF PROPOSALS TO THE CITY’S PURCHASING OFFICE

A. Proposal packages must be received by the City’s Procurement and Payables Division in SAP Ariba (unless another form of delivery is stated), prior to the scheduled time and date stated in the Solicitation.

B. Supplier is solely responsible for timely delivery of its Submittal.
C. Submittals received after the time stated in the solicitation will not be accepted.

D. For purposes of determining whether a Submittal has been timely received in SAP Ariba, the City's Procurement and Payables Division will rely on the submittal clock in SAP Ariba.

1.05 LICENSES/PERMITS

A. Suppliers, if applicable, must have a Washington state business license at the time of Submittal and throughout the term of the Contract. Failure to include a Washington state business license may be grounds for rejection of the Submittal or cancellation of contract award. Information regarding Washington state business licenses may be obtained at http://bls.dor.wa.gov.

B. Upon award, it is the responsibility of the Supplier to register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, 253-591-5252. https://www.cityoftacoma.org/government/city_departments/finance/tax_and_license/. Supplier shall obtain a business license as is required by Tacoma Municipal Code Subtitle 6C.20.

C. During the term of the Contract, Supplier, at its expense, shall obtain and keep in force any and all necessary licenses and permits.

1.06 CONTRACTOR'S STATE REGISTRATION NUMBER

Contractors for construction or public works construction are required to be licensed by the state. If the provisions of Chapter 18.27 of the Revised Code of Washington apply to the Respondent, then the Respondent's Washington State Contractor's Registration No. must accompany the bid.

1.07 BID IS NONCOLLUSIVE

The Respondent represents by the submission of the Proposal that the prices in this Bid are neither directly nor indirectly the result of any formal or informal agreement with another Respondent.

1.08 EVALUATION OF BID

A. Price, Experience, Delivery Time and Responsibility

In the evaluation of bids, the Respondent's experience, delivery time, quality of performance or product, conformance to the specifications and responsibility in performing other contracts (including satisfying all safety requirements) may be considered in addition to price. In addition, the bid evaluation factors set forth in City Code Section 1.06.262 may be considered by the City. Respondents who are inexperienced or who fail to properly perform other contracts may have their bids rejected for such cause.

B. Prequalified Electrical Contractor

Certain types of electrical construction require special expertise, experience, and prequalification of the Contractor (or subcontractor) by the City. In such cases, the Respondent must be prequalified or the Respondent must subcontract with a City prequalified electrical contractor for the specialty work.

C. Insertions of Material Conflicting with Specifications

Only material inserted by the Respondent to meet requirements of the Specifications will be considered. Any other material inserted by the Respondent will be disregarded as being nonresponsive and may be grounds for rejection of the Respondent's Proposal.

D. Correction of Ambiguities and Obvious Errors

The City reserves the right to correct obvious errors in the Respondent's proposal. In this regard, if the unit price does not compute to the extended total price, the unit price shall govern.

1.09 WITHDRAWAL OF BID

A. Prior to Bid Opening

Any Respondent may withdraw his/her Proposal prior to the scheduled bid opening time by delivering a written notice to the City’s Procurement and Payables Office. The notice may be submitted in person or by mail; however, it must be received by the City’s Procurement and Payables Office prior to the time of bid opening.

B. After Bid Opening

No Respondent will be permitted to withdraw his/her Proposal after the time of bid opening, as set forth in the Call for Bids, and before the actual award of the Contract, unless the award of Contract is delayed more than sixty (60) calendar days after the date set for bid opening. If a delay of more than 60 calendar days does occur, then the Respondent must submit written notice withdrawing his/her Proposal to the Purchasing Manager.
1.10 OPENING OF BIDS
At the time and place set for the opening of bids, all Proposals, unless previously withdrawn, will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Proposal.

1.11 CITY COUNCIL/PUBLIC UTILITY BOARD FINAL DETERMINATION
The City Council or Public Utility Board of the City of Tacoma shall be the final judge as to which is the lowest and best bid in the interest of the City of Tacoma. The City reserves the right to reject any and all bids, waive minor deviations or informalities, and if necessary, call for new bids.

1.12 RESPONDENT’S REFUSAL TO ENTER INTO CONTRACT
Any Respondent who refuses to enter into a Contract after it has been awarded to the Respondent will be in breach of the agreement to enter the Contract and the Respondent's certified or cashier’s check or bid bond shall be forfeited.

1.13 TAXES
A. Include In Proposal All Taxes
Respondent shall include in his/her Proposal all applicable local, city, state, and federal taxes. It is the Respondent's obligation to state on his/her Proposal sheet the correct percentage and total applicable Washington State and local sales tax. The total cost to the City including all applicable taxes may be the basis for determining the low Respondent.

B. Federal Excise Tax
The City of Tacoma is exempt from federal excise tax. Where applicable, the City shall furnish a Federal Excise Tax Exemption certificate.

C. City of Tacoma Business and Occupation Tax
Sub-Title 6A of the City of Tacoma Municipal Code (TMC) provides that transactions with the City of Tacoma, may be subject to the City of Tacoma's Business and Occupation Tax. It is the responsibility of the Respondent awarded the Contract to register with the City of Tacoma's Department of Tax and License, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, telephone 253-591-5252. The City's Business and Occupation Tax amount shall not be shown separately but shall be included in the unit and/or lump sum prices bid.

1.14 FIRM PRICES/ESCALATION
Except as specifically allowed by the Special Provisions, only firm prices will be accepted.

1.15 AWARD
A. Construction and/or Labor Contracts
Unless specifically noted in the Special Provisions or Proposal sheets, all construction and/or labor contracts will be awarded to only one Respondent.

B. Supply/Equipment Contracts
The City reserves the right to award an equipment or supply contract for any or all items to one or more Respondents as the interests of the City will be best satisfied.

1.16 INCREASE OR DECREASE IN QUANTITIES
The City of Tacoma reserves the right to increase or decrease the quantities of any items under this Contract and pay according to the unit prices quoted in the Proposal (with no adjustments for anticipated profit).

1.17 EXTENSION OF CONTRACT
Contracts resulting from this specification shall be subject to extension by mutual agreement per the same prices, terms and conditions.
1.18 PAYMENT TERMS

A. Prices will be considered as net 30 calendar days if no cash discount is shown. Payment discount periods of twenty (20) calendar days or more if offered in the submittal, will be considered in determining the apparent lowest responsible submittal. Discounts will be analyzed in context of their overall cumulative effect. Invoices will not be processed for payment nor will the period of cash discount commence until receipt of a properly completed invoice and until all invoiced items are received and satisfactory performance of the Contractor has been attained. If an adjustment in payment is necessary due to damage or dispute, the cash discount period shall commence on the date final approval for payment is authorized.

B. ePayable/Credit Card Acceptance. Submittals offering ePayable/Credit card acceptance may be compared against submittals offering a prompt payment discount to evaluate the overall cumulative effect of the discount against the advantage to the City of the ePayable/Credit card acceptance, and may be considered in determining the apparent lowest responsible submittal.

1.19 PAYMENT METHOD – EPAYABLES – CREDIT CARD ACCEPTANCE – EFT/ACH ACCEPTANCE

A. Payment methods include:

- EPayables (Payment Plus). This is payment made via a virtual, single use VISA card number provided by the City’s commercial card provider. Suppliers accepting this option will receive “due immediately” payment terms. Two options for acceptance are available to suppliers. Both are accompanied by an emailed advice containing complete payment details:
  - Straight-through processing (buyer initiated). Immediate, exact payments directly deposited to supplier accounts by the City’s provider bank; the supplier does not need to know card account details.
  - Supplier retrieves card account through the secure, on-line portal provided via email notifications sent by the City’s commercial card provider.

- Credit card. Tacoma’s VISA procurement card program is supported by standard bank credit suppliers and requires that merchants abide by the VISA merchant operating rules. It provides “due immediately” payment terms.
  - Suppliers must be PCI-DSS compliant (secure card data management) and federal FACTA (sensitive card data display) compliant.
  - Suppliers must be set up by their card processing equipment provider (merchant acquirer) as a minimum of a Level II merchant with the ability to pass along tax, shipping and merchant references information.

- Electronic Funds Transfer (EFT) by Automated Clearing House (ACH). Standard terms are net 30 for this payment method.

- Check or other cash equivalent. Standard terms are net 30 for this payment method.

B. The City’s preferred method of payment is by ePayables (Payment Plus) followed by creditcard (aka procurement card). Suppliers may be required to have the capability of accepting the City’s ePayables or credit card methods of payment. The City of Tacoma will not accept price changes or pay additional fees when ePayables (Payment Plus) or credit card is used.

C. The City, in its sole discretion, will determine the method of payment for goods and/or services as part of the Contract.

1.20 COOPERATIVE PURCHASING

The Washington State Interlocal Cooperative Act RCW 39.34 provides that other governmental agencies may purchase goods and services on this solicitation or contract in accordance with the terms and prices indicated therein if all parties are agreeable.

1.21 PUBLIC DISCLOSURE: PROPRIETARY OR CONFIDENTIAL INFORMATION

A. Respondent’s Submittals, all documents and records comprising any Contract awarded to Respondent, and all other documents and records provided to the City by Respondent are deemed public records subject to disclosure under the Washington State Public Records Act, Chapter 42.56 RCW (Public Records Act). Thus, City may be required, upon request, to disclose the Contract and documents or records related to it unless an exemption under the Public Records Act or other laws applies. In the event CITY receives a request for such disclosure, determines in its legal judgment that no applicable exemption to disclosure applies; and Respondent has complied with the requirements to Respondent has complied with the requirements to mark records considered confidential or proprietary.
as such requirements are stated below, City agrees to provide Respondent 10 days written notice of impending release. Should legal action thereafter be initiated by Respondent to enjoin or otherwise prevent such release, all expense of any such litigation shall be borne by Respondent, including any damages, attorneys' fees or costs awarded by reason of having opposed disclosure. City shall not be liable for any release where notice was provided and Respondent took no action to oppose the release of information.

B. If Respondent provides City with records or information that Respondent considers confidential or proprietary, Respondent must mark all applicable pages or sections of said record(s) as “Confidential” or “Proprietary.” Further, in the case of records or information submitted in response to a Request for Proposals, an index must be provided indicating the affected pages or sections and locations of all such material identified Confidential or Proprietary. Information not included in the required index will not be reviewed for confidentiality or as proprietary before release. If Supplier fails to so mark or index Submittals and related records, then the City, upon request, may release said record(s) without the need to satisfy the requirements of subsection A above; and Respondent expressly waives its right to allege any kind of civil action or claim against the City pertaining to the release of said record(s). Submission of materials in response to City's Solicitation shall constitute assent by Respondent to the foregoing procedure and Respondent shall have no claim against the City on account of actions taken pursuant to such procedure.

1.22 FEDERAL AID PROJECTS

The City of Tacoma 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 insure 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.

SECTION II - CONTRACT REQUIREMENTS

2.01 CONTRACTOR'S RESPONSIBILITY

A. Contract Documents

The Respondent to whom the Contract is awarded, hereinafter called the Contractor, shall enter into a Contract with the City of Tacoma, within 10 days after receipt from the City of Tacoma of a properly prepared Contract. In addition, the Contractor will do all things required to promptly perform this Contract pursuant to the terms of this Contract. Certain contracts for supplies, goods or equipment may use the City Purchase Order in place of a formal contract document.

B. Surety Bonds

Except as modified by the Special Provisions, the Respondent to whom the Contract is awarded shall provide a payment and performance bond, including power of attorney, for 100 percent of the amount of his/her bid (including sales taxes), to insure complete performance of the Contract including the guarantee. The bonds must be executed by a surety company licensed to do business in the State of Washington. For a supply-type contract, a cashier’s check or cash may be substituted for the bonds; however, this cash or cashier’s check must remain with the City through the guarantee period and any interest on said amount shall accrue to the City.

C. Independent Contractor

Contractor is an independent contractor; no personnel furnished by the Contractor shall be deemed under any circumstances to be the agent or servant of the City. Contractor shall be fully responsible for all acts or omissions of Subcontractors and its and their suppliers and of persons employed by them, and shall be specifically responsible for sufficient and competent supervision and inspection to assure compliance in every respect with the Contract. There shall be no contractual relationship between any Subcontractors or supplier and the City arising out of or by virtue of this agreement. No provision of the Contract is intended or is to be construed to be for the benefit of any third party.
2.02 CONFLICTS IN SPECIFICATIONS

Anything mentioned in the Specifications and not shown on the Drawings and anything on the Drawings and not mentioned in the Specifications shall be of like effect and shall be understood to be shown and/or mentioned in both. In case of differences between Drawings and Specifications, the Specifications shall govern. In addition, in the event of any conflict between these General Provisions, the Special Provisions, the Technical Provisions and/or the Proposal pages, the following order of precedence shall control:

1. Proposal pages prevail if they conflict with the General, Special or Technical Provisions.
3. Technical Provisions prevail if they are in conflict with the General Provisions.

In case of discrepancy of figures between Drawings, Specifications or both, the matter shall immediately be submitted to the Engineer for determination. Failure to submit the discrepancy issue to the Engineer shall result in the Contractor's actions being at his/her own risk and expense. The Engineer shall furnish from time to time such detailed drawings and other information as he/she may consider necessary.

2.03 INSPECTION

A. Of the Work

All materials furnished and work done shall be subject to inspection.

The Inspector administering the Contract shall at all times have access to the work wherever it is in progress or being performed, and the Contractor shall provide proper facilities for such access and inspection. Such inspection shall not relieve the Contractor of the responsibility of performing the work correctly, utilizing the best labor and materials in strict accordance with the Specifications of this Contract. All material or work approved and later found to be defective shall be replaced without cost to the City of Tacoma.

B. Inspector's Authority

The inspector shall have power to reject materials or workmanship which do not fulfill the requirements of these Specifications, but in case of dispute the Contractor may appeal to the Director or Superintendent, whose decision shall be final. The word "Director" means the Director of the City of Tacoma General Government department that is administering the contract. The word "Superintendent" means the Superintendent of the City of Tacoma, Department of Public Utilities Division that is administering the contract.

The Contract shall be carried out under the general control of the representative of the particular City Department or Division administering the Contract, who may exercise such control over the conduct of the work as may be necessary, in his or her opinion, to safeguard the interest of the City of Tacoma. The Contractor shall comply with all orders and instructions given by the representative of the particular Department or Division administering the Contract in accordance with the terms of the Contract.

Provided, that for the purposes of construction contracts, such control shall only apply (a) to the extent necessary to ensure compliance with the provisions of this contract, and (b) to the extent necessary to fulfill any nondelegable duty of the City for the benefit of third parties not engaged in promoting the activity of this contract.

Nothing herein contained, however, shall be taken to relieve the Contractor of his/her obligations or responsibilities under the Contract.

2.04 FEDERAL, STATE AND MUNICIPAL REGULATIONS

All federal, state, municipal and/or local regulations shall be satisfied in the performance of all portions of this Contract. The Contractor shall be solely responsible for all violations of the law from any cause in connection with work performed under this Contract.
2.05 INDEMNIFICATION

A. Indemnification

Contractor acknowledges that pursuant to the terms of this agreement, Contractor is solely and totally responsible for the safety of all persons and property in the performance of this Contract. To the greatest extent allowed by law, Contractor assumes the risk of all damages, loss, cost, penalties and expense and agrees to indemnify, defend and hold harmless the City of Tacoma, from and against any and all liability which may accrue to or be sustained by the City of Tacoma on account of any claim, suit or legal action made or brought against the City of Tacoma for the death of or injury to persons (including Contractor's or subcontractor's employees) or damage to property involving Contractor, or subcontractor(s) and their employees or agents, arising out of and in connection with or incident to the performance of the Contract including if the City is found to have a nondelegable duty to see that work is performed with requisite care, except for injuries or damages caused by the sole negligence of the City. In this regard, Contractor recognizes that Contractor is waiving immunity under industrial Insurance Law, Title 51 RCW. This indemnification extends to the officials, officers and employees of the City and also includes attorney's fees and the cost of establishing the right to indemnification hereunder in favor of the City of Tacoma. In addition, within the context of competitive bidding laws, it is agreed that this indemnification has been mutually negotiated. Provided however, this provision is intended to be applicable to the parties to this agreement and it shall not be interpreted to allow a Contractor's employee to have a claim or cause of action against Contractor.

B. Limitation of Liability for Primarily Supply-Type Contracts

In all contracts where the total cost of the supply of materials and/or equipment constitute at least 70 percent of the total contract price (as determined by the City), the City agrees that it will not hold the contractor, supplier or manufacturer liable for consequential damages for that part of the contract related to the manufacture and/or design of the equipment, materials or supplies.

2.06 CONTRACTOR'S INSURANCE

A. During the course and performance of a Contract, Contractor will provide proof and maintain the insurance coverage in the amounts and in the manner specified in the City of Tacoma Insurance Requirements as is applicable to the services, products, and deliverables provided under the Contract. The City of Tacoma Insurance Requirements document, if issued, is fully incorporated into the Contract by reference.

B. Failure by City to identify a deficiency in the insurance documentation provided by Contractor or failure of City to demand verification of coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

2.07 ASSIGNMENT AND SUBLETTING OF CONTRACT

C. Assignment

The Contract shall not be assigned except with the consent of the Superintendent or his/her designee.

Requests for assignment of this contract must be in writing with the written consent of the surety, and the request must show the proposed person or organization to which the contract is assigned is capable, experienced and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his/her experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of assignment.

D. Subletting

The Contract shall not be sublet except with the written consent of the Superintendent or his/her designee. In the event that a prequalified electrical contractor is necessary to perform certain portions of the work, such work may be subcontracted with a City prequalified electrical contractor for the type of work involved.

Requests for subletting of this Contract must be in writing with the written consent of the Surety, and the request must show the proposed person or organization to which the Contract is sublet is capable, experienced, and equipped to perform such work. The proposed substitute person or organization may be required to submit to the City information as to his experience, financial ability and give statements covering tools, equipment, organization, plans and methods to fulfill any portion of the Contract prior to approval of subletting.
The written consent approving the subletting of the Contract shall not be construed to relieve the Contractor of his/her responsibility for the fulfillment of the Contract. The Subcontractor shall be considered to be the agent of the Contractor and the Contractor agrees to be responsible for all the materials, work and indebtedness incurred by the agent.

A subcontractor shall not sublet any portion of a subcontract for work with the City without the written consent of the City.

2.08 DELAY

E. Extension of Time

With the written approval of the Superintendent or his/her designee, the Contractor may be granted additional time for completion of the work required under this Contract, if, in the Superintendent's opinion the additional time requested arises from unavoidable delay.

F. Unavoidable Delay

Unavoidable delays in the prosecution of the work shall include only delays from causes beyond the control of the Contractor and which he/she could not have avoided by the exercise of due care, prudence, foresight and diligence. Delay caused by persons other than the Contractor, Subcontractors or their employees will be considered unavoidable delays insofar as they necessarily interfere with the Contractor's completion of the work, and such delays are not part of this Contract.

Unavoidable delay will not include delays caused by weather conditions, surveys, measurements, inspections and submitting plans to the Engineer of the particular Division involved in administering this Contract.

2.09 GUARANTEE

A. Guarantee for Construction, Labor or Services Contract

Neither the final certificate of payment or any provision in the Contract Documents, nor partial or entire occupancy of the premises by the City, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from the date of final acceptance of the work unless a longer period is specified. The City will give notice of observed defects with reasonable promptness.

If it has been discovered, before payment is required under the terms of the Contract, that there is a failure to comply with any of the terms and provisions of this Contract, the City has the right and may withhold payment.

In case of a failure of any part of the work, materials, labor and equipment furnished by the Contract or to fully meet all of the requirements of the Contract, the Contractor shall make such changes as may be necessary to fully meet all of the specifications and requirements of this Contract. Such changes shall be made at the Contractor's sole cost and expense without delay and with the least practicable inconvenience to the City of Tacoma. Rejected material and equipment shall be removed from the City's property by and at the expense of the Contractor.

B. Guarantee for Supply Contracts

Unless a longer period is specified, the supplier and/or manufacturer of the supplies, materials and/or equipment furnished pursuant to this Contract agrees to correct any defect or failure of the supplies, materials and/or equipment which occurs within one year from the date of: (1) test energization if electrical or mechanical equipment; (2) commencement of use if supplies or materials, provided, however, said guarantee period shall not extend beyond eighteen months after date of receipt by the City. All of the costs (including shipping, dismantling and reinstallation) of repairs and/or corrections of defective or failed equipment, supplies and/or material is the responsibility of the supplier and/or manufacturer.

When the supplier is not the manufacturer of the item of equipment, supplier agrees to be responsible for this guarantee and supplier is not relieved by a manufacturer's guarantee.
C. Guarantee Period Extension

The Contract guarantee period shall be suspended from the time a significant defect is first documented by the City until the work or equipment is repaired or replaced by Contractor and accepted by the City. In addition, in the event less than ninety (90) days remain on the guarantee period (after recalculating), the guarantee period shall be extended to allow for at least ninety (90) days from the date the work or equipment is repaired or replaced and accepted by the City.

2.10 DEDUCTIONS FOR UNCORRECTED WORK

If the City of Tacoma deems it expedient to correct work not done in accordance with the terms of this Contract, an equitable deduction from the Contract price shall be made.

2.11 CITY OF TACOMA’S RIGHT TO TERMINATE CONTRACT

A. Termination for Convenience

1. Supplies. The City may terminate a Contract for supplies at any time upon prior written notice to Contractor. Upon the effective date of termination specified in such notice, and payment by the City, all conforming supplies, materials, or equipment previously furnished hereunder shall become its property.

2. Services. The City may terminate a Contract for services at any time, with or without cause, by giving 10-business day’s written notice to Supplier. In the event of termination, all finished and unfinished work prepared by Supplier pursuant to the Contract shall be provided to the City. In the event City terminates the Contract due to the City’s own reasons and without cause due to Supplier’s actions or omissions, the City shall pay Supplier the amount due for actual work and services necessarily performed under the Contract up to the effective date of termination, not to exceed the total compensation set forth in the Contract.

B. Termination for Cause

1. The City may terminate a Contract for either services or supplies in the event of any material breach of any of the terms and conditions of the Contract if the Contractor’s breach continues in effect after written notice of breach and 30 days to cure such breach and fails to cure such breach

2. Bankruptcy. If the Contractor should be adjudged as bankrupt, or makes a general assignment for the benefit of creditors, or a receiver should be appointed on account of his/her insolvency, or if he/she or any of his/her subcontractors should violate any of the provisions of the Contract, or if the work is not being properly and diligently performed, the City of Tacoma may serve written notice upon the Contractor and Surety, executing the Payment and Performance Bond, of its intention to terminate the Contract; such notice will contain the reasons for termination of the Contract, and unless within 10 days after the serving of such notice, such violation shall cease and an arrangement satisfactory to the City of Tacoma for correction thereof shall be made, the Contract shall, upon the expiration of said 10 days, cease and terminate and all rights of the Contractor hereunder shall be forfeited. In the event the Contract is terminated for cause, Contractor shall not be entitled to any lost profits resulting therefrom.

3. Notice. In the event of any such termination for cause, the City of Tacoma shall immediately send (by regular mail or other method) written notice thereof to the Surety and the Contractor. Upon such termination the Surety shall have the right to take over and perform the Contract, provided however, the Surety must provide written notice to the City of its intent to complete the work within 15 calendar days of its receipt of the original written notice (from the City) of the intent to terminate. Upon termination and if the Surety does not perform the work, the City of Tacoma may take over the work and prosecute the same to completion by any method it may deem advisable, for the account of and at the expense of the Contractor, and the Contractor and the Surety shall be liable to the City of Tacoma for all cost occasioned to the City of Tacoma thereby. The City of Tacoma may without liability for doing so, take possession of and utilize in completing the work, such materials, equipment, plant and other property belonging to the Contractor as may be on the site of the work and necessary therefore.
2.12 LIENS

In the event that there are any liens on file against the City of Tacoma, the City of Tacoma shall be entitled to withhold final or progress payments to the extent deemed necessary by the City of Tacoma to properly protect the outstanding lien claimants until proper releases have been filed with the City Clerk.

2.13 LEGAL DISPUTES

A. General

Washington law shall govern the interpretation of the Contract. The state or federal courts located in Pierce County Washington shall be the sole venue of any mediation, arbitration, or litigation arising out of the Contract.

Respondents providing submittals from outside the legal jurisdiction of the United States of America will be subject to Tacoma’s City Attorney’s Office (CAO) opinion as to the viability of possible litigation pursuant to a contract resulting from this Specification. If it is the opinion of the CAO that any possible litigation would be beyond reasonable cost and/or enforcement, the submittal may be excluded from evaluation.

B. Attorney Fees

For contracts up to $250,000, which become the subject of litigation or arbitration, the substantially prevailing party may be entitled to reasonable attorney fees, as provided in RCW 39.04.240. Provided, however, the attorney fee hourly rate for the City of Tacoma's assistant city attorneys is agreed to be $150 per hour or the same as the hourly rate for Contractor's legal counsel, whichever is greater.

2.14 DELIVERY

Prices must be quoted F.O.B. destination, freight prepaid and allowed with risk of loss during transit remaining with Contractor/Supplier (unless otherwise stated in these Specifications) to the designated address set forth in these Specifications.

Deliveries shall be between 9:00 a.m. and 3:30 p.m.; Monday through Friday only (except legal holidays of the City of Tacoma).

Legal holidays of the City of Tacoma are:

- New Year's Day: January 1
- Martin Luther King's Birthday: 3rd Monday in January
- Washington's Birthday: 3rd Monday in February
- Memorial Day: Last Monday in May
- Independence Day: July 4
- Labor Day: 1st Monday in September
- Veteran's Day: November 11
- Thanksgiving Day: 4th Thursday of November
- Day after Thanksgiving: 4th Friday of November
- Christmas Day: December 25

When any of these holidays occur on Saturday or Sunday, the preceding Friday or the following Monday, respectively, is a legal holiday for the City of Tacoma.

2.15 PACKING SLIPS AND INVOICES

A. Packing slips and shipping notices shall be sent to the specific City Division or Department receiving the item(s) at the address stated in City's Solicitation or as otherwise stated in the Contract and include complete description of items, contents of items if crated or cased, quantity, shipping point, carrier, bill of lading number and City of Tacoma purchase order.

B. Each invoice shall show City of Tacoma purchase order number, release number if applicable, quantity, unit of measure, item description, unit price and extended price for each line if applicable, services and deliverables provided if applicable. Line totals shall be summed to give a grand total to which sales tax shall be added, if applicable.

1. For transactions conducted in SAP Ariba, invoices shall be submitted through Ariba.
2. For invoices paid by ACH or by check, unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to accounts payable@cityoftacoma.org.
3. For invoices paid by credit card, invoices shall also display the last name of the cardholder and last four digits (only) of the card number (e.g., Jones/6311). Unless stated otherwise, invoices shall be electronically submitted by email with corresponding PO number listed in the subject line to (do not combine different POs into one invoice or charge) to pcardadmin@cityoftacoma.org.

2.16 APPROVED EQUALS

A. Unless an item is indicated as "No substitute", special brands, when named, are intended to describe the standard of quality, performance or use desired. Equal items will be considered by the City, provided that the respondent specifies the brand and model, and provides all descriptive literature, independent test results, product samples, local servicing and parts availability to enable the City to evaluate the proposed "equal".

B. The decision of the City as to what items are equal shall be final and conclusive. If the City elects to purchase a brand represented by the respondent to be an "equal", the City's acceptance of the item is conditioned on the City's inspection and testing after receipt. If, in the sole judgment of the City, the item is determined not to be an equal, the item shall be returned at the respondent's expense.

C. When a brand name or level of quality is not stated by the respondent, it is understood the offer is exactly as specified. If more than one brand name is specified, respondents must clearly indicate the brand and model/part number being bid.

2.17 ENTIRE AGREEMENT

This written contract represents the entire Agreement between the parties and supersedes any prior oral statements, discussions or understandings between the parties.

2.18 CODE OF ETHICS

The City's Code of Ethics, Chapter 1.46, Tacoma Municipal Code, provides ethical standards for City personnel and prohibits certain unethical conduct by others including respondents and contractors. Violation of the City's Code of Ethics will be grounds for termination of this contract.

2.19 FEDERAL FINANCIAL ASSISTANCE

If federal funds, including FEMA financial assistance to the City of Tacoma, will be used to fund, pay or reimburse all or a portion of the Contract, Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives and the following clauses will be incorporated into the Contract:

A. EQUAL EMPLOYMENT OPPORTUNITY During the performance of this Contract, Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

1. Employment, 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. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee’s essential job functions discloses the compensation of such other
employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers’ representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

6. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

B. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (B)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (B)(1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
3. Withholding for unpaid wages and liquidated damages. The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B)(2) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (B)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (B)(1) through (4) of this section.

C. CLEAN AIR ACT

1. Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

2. Contractor agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

D. FEDERAL WATER POLLUTION CONTROL ACT

1. Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

2. Contractor agrees to report each violation to the City, understands, and agrees that the City will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

E. DEBARTMENT AND SUSPENSION

1. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor’s principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

2. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

3. This certification is a material representation of fact relied upon by the City. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (insert name of recipient/subrecipient/applicant), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

4. Contractor agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.
F. BYRD ANTI-LOBBYING AMENDMENT

1. Contractors who apply or bid for an award of $100,000 or more shall file the required certification with City. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the City.

2. If applicable, Contractor must sign and submit to the City the following certification:

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, __________, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap.38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

________________________________________________________
Signature of Contractor’s Authorized Official

________________________________________________________
Name and Title of Contractor’s Authorized Official

_____________ Date
G. PROCUREMENT OF RECOVERED MATERIALS

1. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
   a. Competitively within a timeframe providing for compliance with the contract performance schedule;
   b. Meeting contract performance requirements; or
   c. At a reasonable price.

2. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

3. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

[Section III is for contracts that involve construction and/or labor, and are not applicable to contracts solely for material/supply purchases.]

GENERAL PROVISIONS

SECTION III - CONSTRUCTION AND/OR LABOR CONTRACTS

SECTION III REQUIREMENTS APPLY ONLY TO CONSTRUCTION AND/OR LABOR CONTRACTS AND ARE IN ADDITION TO APPLICABLE REQUIREMENTS CONTAINED IN SECTION II CONTRACT REQUIREMENTS.

3.01 RESPONDENT'S DUTY TO EXAMINE

The Respondent agrees to be responsible for examining the site(s) and to have compared them with the Specifications and Contract Drawings, and to be satisfied as to the facilities and difficulties attending the execution of the proposed Contract (such as uncertainty of weather, floods, nature and condition of materials to be handled and all other conditions, obstacles and contingencies) before the delivery of his/her Proposal. No allowance will be subsequently made by the City on behalf of the Respondent by reason of any error or neglect on Respondent's part, for such uncertainties as aforesaid.

3.02 PERMITS

Except when modified by the Special Provisions, the Contractor shall procure and pay for all permits and licenses necessary for the completion of this Contract including those permits required by the City of Tacoma. The City will obtain county or state road crossing permits if required. In the event a necessary permit is not obtained, the Contractor will not be permitted to work on items subject to said permit and any delays caused thereby will not be subject to extra compensation or extensions.

3.03 NOTIFICATION OF OTHER GOVERNMENTAL AGENCIES AND UTILITIES WHEN UNDERGROUND WORK IS INVOLVED

The Contractor shall notify all other affected governmental agencies and utilities whenever underground work is done under the terms of this Contract. The Contractor is required to obtain permission of the appropriate public and private utilities and governmental agencies before performing underground work pursuant to the terms of this Contract. The Contractor is required to call "one call" at 1-800-424-5555 for all work involving excavation or digging more than 12 inches beneath ground or road surface.

The City may have indicated on the plans and specifications the existence of certain underground facilities that are known to the City department responsible for this Contract. It is the Contractor's responsibility to fully comply with the Underground Utility Locate Law, Chapter 19.122 RCW. If the site conditions are "changed or differing" as defined by RCW 19.122.040(l), the Contractor may pursue the party responsible for not properly marking or identifying the underground facility. The Contractor agrees not to file any claim or legal action against the City (department responsible for this Contract) for said "changed or differing" conditions unless said City department is solely responsible for the delay or damages that the Contractor may have incurred.
3.04 TRENCH EXCAVATION BID ITEM

In the event that “trench excavation” in excess of four feet requires a safety system pursuant to Washington State law and safety shoring, sloping, sheeting, or bracing is used, a separate bid item should be set forth in the Proposal for this work. If a separate bid item is not set forth in the Proposal pages, said installed safety system shall be paid at $3.00 per lineal foot of trench, which unit price includes both sides of the trench.

3.05 SAFETY

A. General

The Contractor shall, at all times, exercise adequate precautions for the safety of all persons, including its employees and the employees of a Subcontractor, in the performance of this Contract and shall comply with all applicable provisions of federal, state, county and municipal safety laws and regulations. It is the Contractor's responsibility to furnish safety equipment or to contractually require Subcontractors to furnish adequate safety equipment relevant to their responsibilities.

The Contractor shall obtain the necessary line clearance from the inspector before performing any work in, above, below or across energized Light Division circuits.

The Inspector and/or Engineer may advise the Contractor and the Safety Officer of any safety violations. It is the Contractor's responsibility to make the necessary corrections. Failure to correct safety violations is a breach of this Contract and, as such, shall be grounds for an order from the Safety Officer, Inspector or Engineer to cease further work and remove from the job site until the condition is corrected. Time and wages lost due to such safety shutdowns shall not relieve the Contractor of any provisions of Section 3.14 of this Specification and shall be at the sole cost of the Contractor. The purpose of this authority to stop work is to enforce the contract and not to assume control except to the extent necessary to ensure compliance with the provisions of this contract.

Any of the above actions by employees of the City of Tacoma shall in no way relieve the Contractor of his/her responsibility to provide for the safety of all persons, including his/her employees.

B. Work Hazard Analysis Report

The Contractor will be required to complete a work hazard analysis report. This report shall outline how the Contractor proposes to satisfy all safety laws and regulations involved in performing the work. This report shall be completed and submitted to the City Safety Officer before the pre-construction conference. A copy of the report shall be maintained at the work site (accessible to the supervisor).

3.06 PROTECTION OF WORKERS AND PROPERTY

The Contractor shall erect and maintain good and sufficient guards, barricades and signals at all unsafe places at or near the work and shall, in all cases, maintain safe passageways at all road crossings, and crosswalks, and shall do all other things necessary to prevent accident or loss of any kind.

The Contractor shall protect from damage all utilities, improvements, and all other property that is likely to become displaced or damaged by the execution of the work under this Contract.

The Contractor is responsible for all roads and property damaged by his/her operations as shall be determined by the Engineer administering this Contract. The Contractor shall be responsible for repairing all damage to roads caused by his/her operations to the satisfaction of the particular governmental body having jurisdiction over the road.

3.07 CONTRACTOR - SUPERVISION AND CHARACTER OF EMPLOYEES

A. Superintendent to Supervise Contractor's Employees

The Contractor shall keep on his/her work, during its progress, a competent superintendent and any necessary assistants, all of whom must be satisfactory to the City of Tacoma. The Contractor's superintendent shall not be changed except with the consent of the City of Tacoma, unless the Contractor's superintendent proves to be unsatisfactory to the Contractor and ceases to be in his/her employ. The Contractor's superintendent shall represent the Contractor in his/her absence and all directions given to him/her shall be binding as if given to the Contractor directly. The Contractor shall give efficient supervision to the work, using his/her best skill and attention.
B. Character of Contractor’s Employees
The Contractor shall employ only competent, skillful, faithful and orderly persons to do the work, and whenever the Engineer administering the Contract shall notify the Contractor in writing that any person on the work is, in his or her opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory, the Contractor shall forthwith discharge such persons from the work and shall not again employ him or her on this Contract.

3.08 CONTRACTOR’S COMPLIANCE WITH THE LAW
A. Hours of Labor
The Contractor and Subcontractors shall be bound by the provisions of RCW Chapter 49.28 (as amended) relating to hours of labor. Except as set forth in the Special Provisions, eight (8) hours in any calendar day shall constitute a day’s work on a job performed under this Contract.

In the event that the work is not performed in accordance with this provision and in accordance with the laws of the State of Washington, then this Contract may be terminated by the City of Tacoma for the reason that the same is not performed in accordance with the public policy of the State of Washington as defined in said statutes.

B. Prevailing Wages
If federal, state, local, or any applicable law requires Supplier to pay prevailing wages in connection with a Contract, and Supplier is so notified by the City, then Supplier shall pay applicable prevailing wages.

If applicable, a Schedule of Prevailing Wage Rates and/or the current prevailing wage determination made by the Secretary of Labor for the locality or localities where the Contract will be performed is attached and made of part of the Contract by this reference. If prevailing wages do apply to the Contract, Supplier and its subcontractors shall:

1. Be bound by and perform all transactions regarding the Contract relating to prevailing wages and the usual fringe benefits in compliance with the provisions of Chapter 39.12 RCW, as amended, the Washington State Prevailing Wage Act and/or the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable, including the federal requirement to pay wages not less than once a week,

2. Ensure that no worker, laborer or mechanic employed in the performance of any part of the Contract shall be paid less than the prevailing rate of wage specified on that Schedule and/or specified in a wage determination made by the Secretary of Labor (unless specifically preempted by federal law, the higher of the Washington state prevailing wage or federal Davis-Bacon rate of wage must be paid) and Additionally, in compliance with applicable federal law, contractors are required to pay wages not less than once a week.

3. Immediately upon award of the Contract, contact the Department of Labor and Industries, Prevailing Wages section, Olympia, Washington and/or the federal Department of Labor, to obtain full information, forms and procedures relating to these matters. Per such procedures, a Statement of Intent to Pay Prevailing Wages and/or other or additional documentation required by applicable federal law, must be submitted by Contractor and its subcontractors to the City, in the manner requested by the City, prior to any payment by the City hereunder, and an Affidavit of Wages Paid and/or other or additional documentation required by federal law must be received or verified by the City prior to final Contract payment. In the event any dispute arises as to what are the prevailing rates of wages for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the State of Washington, Department of Labor and industries whose decision shall be final, conclusive and binding on all parties involved in the dispute.
3.09 COPELAND ANTI-KICKBACK ACT
For contracts subject to Davis Bacon Act the following clauses will be incorporated into the Contract:

A. Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

B. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

C. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

3.10 CHANGES

A. In Plans or Quantities
The City of Tacoma, without invalidating this Contract, or any part of this Contract, may order extra work or make reasonable changes by altering, adding to or deducting from the materials, work and labor and the Contract sum will be adjusted accordingly. All such work and labor shall be executed under the conditions of the original Contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change. When work or bid items are deducted, reduced or eliminated, it is agreed that no payment will be made to Contractor for anticipated profit.

B. Extra Work
Any claim or order for extra materials, work and labor made necessary by alterations or additions to the plans or by other reasons for which no price is provided in this Contract, shall not be valid unless the Contractor and Engineer administering the Contract have agreed upon a price prior to commencing extra work, and the agreement has been signed by the Contractor and approved by the Superintendent or his/her designee, and approved by the payment and performance bond surety.

C. Extra Work - No Agreed Price
If it is impracticable to fix an increase in price definitely in advance, the order may fix a maximum price which shall not under any circumstances, be exceeded, and subject to such limitation, such alteration, modification, or extra shall be paid for at the actual necessary cost as determined by the City of Tacoma, which cost (including an allowance for profit) shall be determined as the sum of the following items (1) to (7) inclusive:

(1) Labor, computed at regular wage scale, including premium on compensation insurance and charge for social security taxes, and other taxes, pertaining to labor; no charge for premium pay shall be allowed unless authorized by the Engineer administering the Contract;

(2) The proportionate cost of premiums on comprehensive general liability and other insurance applicable to the extra work involved and required under this Contract;

(3) Material, including sales taxes pertaining to materials;

(4) Plant and equipment rental, to be agreed upon in writing before the work is begun; no charge for the cost of repairs to plant or equipment will be allowed;

(5) Superintendence, general expense and profit computed at 20 percent of the total of paragraphs (1) to (4) inclusive;

(6) The proportionate cost of premiums on bonds required by this Contract, computed by 1 1/2 percent of the total of paragraphs (1) to (5) inclusive.

(7) The City of Tacoma reserves the right to furnish such materials as it may deem expedient, and no allowance will be made for profit thereon.

Whenever any extra work is in progress, for which the definite price has not been agreed on in advance, the Contractor shall each day, report to the Engineer the amount and cost of the labor and material used, and any other expense incurred in such extra work on the preceding day, and no claim for compensation for such extra work will be allowed unless such report shall have been made.
The above-described methods of determining the payment for work and materials shall not apply to the performance of any work or the furnishing of any material, which, in the judgment of the Engineer administering the Contract, may properly be classified under items for which prices are established in the Contract.

D. Claims for Extra Work

If the Contractor claims that any instructions by drawings or otherwise, involve extra cost under this Contract, he/she shall give the City of Tacoma written notice thereof within 30 days after receipt of such instruction, and in any event before proceeding to execute the work, except in an emergency endangering life or property, and the procedures governing the same shall be as provided for immediately above in this paragraph. The method in these paragraphs is the only method available to the Contractor for payment of claims for extra work performed under the terms of this Contract.

3.11 CLEANING UP

The Contractor shall at all times, at his/her own expense, keep the premises free from accumulation of waste materials or debris caused by any workers or the work, at the completion of the work the Contractor shall remove all his waste materials from and about the site and all his/her equipment, sanitary facilities and surplus materials. In the case of dispute, the City of Tacoma may remove the debris and charge the cost to the Contractor as the City of Tacoma shall determine to be just. All material that is deposited or placed elsewhere than in places designated or approved by the Engineer administering the Contract will not be paid for and the Contractor may be required to remove such material and deposit or place it where directed.

3.12 PROGRESS PAYMENT

Progress payments will be made up to the amount of ninety-five percent (95%) of the actual work completed as shall be determined by the Engineer administering the Contract.

The Contractor may request that an escrow account be established as permitted by law, in which event the Contractor will earn interest on the retained funds.

When the time for construction, services and/or installation will exceed thirty (30) days, the Contractor may request, by invoice, to be paid a progress payment based on percentage of work completed. The Engineer will review and approve the progress payment request on a monthly basis.

3.13 FINAL PAYMENT

The final payment of five percent (5%) of the Contract price shall be approved on final acceptance of the work under this Contract by the Superintendent or his/her designee. In addition, before final payment is made, the Contractor shall be required to:

A. Provide a certificate from the Washington State Department of Revenue that all taxes due from the Contractor have been paid or are collectible in accordance with the provisions of Chapter 60.28 and Title 82 of the Revised Code of Washington;

B. Provide the General Release to the City of Tacoma on the form set forth in these Contractdocuments;

C. Provide a release of any outstanding liens that have been otherwise filed against any monies held or retained by the City of Tacoma;

D. File with the City Director of Finance, and with the Director of the Washington State Department of Labor and Industries, on the state form to be provided, an affidavit of wages paid;

E. File with the City Director of Finance, on the state form to be provided, a statement from the State of Washington, Department of Labor and Industries, certifying that the prevailing wage requirements have been satisfied.

F. File with the City Director of Finance, on the state form to be provided, a statement of release from the Public Works Contracts Division of the State of Washington, Department of Labor and Industries, verifying that all industrial insurance and medical aid premiums have been paid.

If there is a fee assessed to the City for any certificate, release or other form required by law, the contractor agrees that the fee amount may be passed on to the Contractor and deducted from the monies paid to the Contractor.
3.14 **FAILURE TO COMPLETE THE WORK ON TIME**

Should the completion of the work required under the Contract be delayed beyond the expiration of the period herein set for the completion of said work, or such extension of said period as may be allowed by reason of unavoidable delays, there shall be deducted from the total Contract price of work, for each calendar day by which such completion shall be delayed beyond said period of such extension thereof the sum of $300 or a sum of money as set forth hereinafter in these Specifications, as the amount of such deduction per calendar day.

Said sum shall be considered not as a penalty, but as liquidated damages, which the City will suffer by reason of the failure of the Contractor to perform and complete the work within the period, herein fixed or such extensions of said period as may be allowed by reason of unavoidable delays.

Any money due or to become due the Contractor may be retained by the City to cover said liquidated damages, and should such money not be sufficient to cover such damages, the City shall have the right to recover the balance from the Contractor or his/her Sureties.

The filing of any bid for the work herein contemplated shall constitute acknowledgment by the Respondent that he/she understands, agrees and has ascertained that the City will actually suffer damages to the amount hereinabove fixed for each and every calendar day during which the completion of the work herein required shall be delayed beyond the expiration of the period herein fixed for such completion or such extension of said period as may be allowed by reason of unavoidable delays.

3.15 **CITY RESERVES RIGHT TO USE FACILITIES PRIOR TO ACCEPTANCE**

The City of Tacoma hereby reserves the right to use the facilities herein contracted prior to final acceptance under this Contract. The use of said facilities, as mentioned herein, shall not be construed as a waiver or relinquishment of any rights that the City of Tacoma has under this Contract.

3.16 **LIST OF SUBCONTRACTORS**

Bid proposals for construction, alteration or repair of any building or other public works that may exceed $1,000,000 including tax shall satisfy the following requirement: Respondent shall submit as part of the bid, the names of the subcontractors, with whom the respondent, if awarded the contract, will subcontract performance of the work of heating, ventilation and air conditioning, plumbing as described in chapter 18.106 RCW, and electrical as described in chapter 19.28 RCW, or to name itself for the work. The respondent shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the respondent must indicate which subcontractor will be used for which alternate. Failure to comply with this provision or the naming of two or more subcontractors to perform the same work shall require the City (pursuant to state law RCW 39.30.060) to determine that respondent's bid is nonresponsive; therefore, the bid will be rejected.
PART III

GENERAL CONDITIONS FOR WASHINGTON STATE FACILITY CONSTRUCTION
## Section 00 72 00
### GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
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July 1, 2010
PART 1 – GENERAL PROVISIONS

1.01 DEFINITIONS

A. "Application for Payment" means a written request submitted by Contractor to A/E for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.

B. "Architect," "Engineer," or "A/E" means a person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.

C. "Change Order" means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.

D. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in Part 8.

E. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates.

F. "Contract Documents" means the Advertisement for Bids, Instructions for Bidders, completed Bid Form, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.

G. "Contract Sum" is the total amount payable by Owner to Contractor, for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work, except Washington State sales tax.

H. "Contract Time" is the number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.

I. "Contractor" means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.

J. "Day(s): Unless otherwise specified, day(s) shall mean calendar day(s)."

K. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.

L. "Final Acceptance" means the written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents, as more fully set forth in Section 6.09 B.

M. "Final Completion" means that the Work is fully and finally complete in accordance with the Contract Documents, as more fully set forth in Section 6.09 A.

N. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05A.

O. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
P. "Notice to Proceed" means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.

Q. "Owner" means the state agency, institution, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.

R. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.

S. "Prior Occupancy" means Owner’s use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08 A.

T. "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in Section 3.02.

U. "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.

V. "Project Record" means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.

W. "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principal category of Work, in such detail as requested by Owner.

X. "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

Y. "Subcontract" means a contract entered into by Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for or in connection with the Work.

Z. "Subcontractor" means any person, other than Contractor, who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.

AA. "Substantial Completion" means that stage in the progress of the Work when the construction is sufficiently complete, as more fully set forth in Section 6.07.

AB. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

1.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:

1. Signed Public Works Contract, including any Change Orders.

2. Supplemental Conditions.

3. Modifications to the General Conditions.

4. General Conditions.
5. **Specifications.** Provisions in Division 1 shall take precedence over provisions of any other Division.

6. **Drawings.** In case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.

7. **Signed and Completed Bid Form.**

8. **Instructions to Bidders.**

9. **Advertisement for Bids.**

1.03 **EXECUTION AND INTENT**

**Contractor Representations:** Contractor makes the following representations to Owner:

1. **Contract Sum reasonable:** The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;

2. **Contractor familiar with project:** Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;

3. **Contractor financially capable:** Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and

4. **Contractor can complete Work:** Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

**PART 2 – INSURANCE AND BONDS**

2.01 **CONTRACTOR’S LIABILITY INSURANCE**

**General insurance requirements:** Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor’s insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this part shall be licensed to do business under Chapter 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in its bid the cost of all insurance and bond costs required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be acceptable to Owner, and its A.M. Best rating shall be indicated on the insurance certificates.

A. **Term of insurance coverage:** Contractor shall maintain the following insurance coverage during the Work and for one year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by Section 5.16.
1. **General Liability Insurance:** Commercial General Liability (CGL) on an Occurrence Form. Coverage shall include, but not be limited to:

   a. Completed operations/products liability;
   b. Explosion, collapse, and underground; and
   c. Employer’s liability coverage.

2. **Automobile Liability Insurance:** Automobile liability

   B. **Industrial Insurance compliance:** Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen’s and Harbor Workers’ Act and the Jones Act.

   C. **Insurance to protect for the following:** All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.

   D. **Owner as Additional Insured:** All insurance coverages shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

2.02 **COVERAGE LIMITS**

**Insurance amounts:** The coverage limits shall be as follows:

A. Limits of Liability shall not be less than $1,000,000 Combined Single Limit for Bodily Injury and Property Damage (other than Automobile Liability) Each Occurrence; Personal Injury and Advertising Liability Each Occurrence.

B. $2,000,000 Combined Single Limit Annual General Aggregate.

C. $2,000,000 Annual Aggregate for Products and Completed Operations Liability.

D. $1,000,000 Combined Single Limit for Automobile Bodily Injury and Property Damage Liability, Each Accident or Loss.

2.03 **INSURANCE COVERAGE CERTIFICATES**

**Certificate required:** Prior to commencement of the Work, Contractor shall furnish to Owner a completed certificate of insurance coverage.

**List Project info:** All insurance certificates shall name Owner’s Project number and Project title.

**Cancellation provisions:** All insurance certificates shall specifically require 45 Days prior notice to Owner of cancellation or any material change, except 30 Days for surplus line insurance.

2.04 **PAYMENT AND PERFORMANCE BONDS**

**Conditions for bonds:** Payment and performance bonds for 100% of the Contract Award Amount, plus state sales tax, shall be furnished for the Work, using the Payment Bond and Performance Bond form published by and available from the American Institute of Architects (AIA) – form A312. Prior to execution of a Change Order that, cumulatively with previous Change Orders, increases the Contract Award Amount by 15% or more, the Contractor shall provide either new payment and performance bonds for the
revised Contract Sum, or riders to the existing payment and performance bonds increasing the amount of the bonds. The Contractor shall likewise provide additional bonds or riders when subsequent Change Orders increase the Contract Sum by 15% or more. No payment or performance bond is required if the Contract Sum is $35,000 or less and Contractor agrees that Owner may, in lieu of the bond, retain 50% of the Contract Sum for the period allowed by RCW 39.08.010.

2.05 ALTERNATIVE SURETY

When alternative surety required: Contractor shall promptly furnish payment and performance bonds from an alternative surety as required to protect Owner and persons supplying labor or materials required by the Contract Documents if:

A. Owner has a reasonable objection to the surety; or

B. Any surety fails to furnish reports on its financial condition if required by Owner.

2.06 BUILDER’S RISK

A. Contractor to buy Property Insurance: Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Substantial Completion. For projects not involving New Building Construction, “Installation Floater” is an acceptable substitute for the Builder’s Risk Insurance. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.

B. Losses covered: Contractor property insurance shall be placed on an “all risk” basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/E’s services and expenses required as a result of an insured loss.

C. Waiver of subrogation rights: Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E’s subconsultants, separate contractors described in Section 5.20, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

PART 3 – TIME AND SCHEDULE

3.01 PROGRESS AND COMPLETION

Contractor to meet schedule: Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

3.02 CONSTRUCTION SCHEDULE

A. Preliminary Progress Schedule: Unless otherwise provided in Division 1, Contractor shall, within 14 Days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule. The Progress Schedule shall show the sequence in which Contractor proposes to perform the Work,
and the dates on which Contractor plans to start and finish major portions of the Work, including dates for shop drawings and other submittals, and for acquiring materials and equipment.

B. **Form of Progress Schedule:** Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.

C. **Owner comments on Progress Schedule:** Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 Days of receipt. Review by Owner of Contractor’s schedule does not constitute an approval or acceptance of Contractor’s construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this section.

D. **Monthly updates and compliance with Progress Schedule:** Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in Section 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, and if directed by Owner, Contractor shall submit a corrective action plan or revise the Progress Schedule to reconcile with the actual progress of the Work.

E. **Contractor to notify Owner of delays:** Contractor shall promptly notify Owner in writing of any actual or anticipated event which is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

### 3.03 OWNER’S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

A. **Owner may suspend Work:** Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 Days, or for such longer period as mutually agreed.

B. **Compliance with suspension; Owner’s options:** Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 Days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:

1. Cancel the written notice suspending the Work; or
2. Terminate the Work covered by the notice as provided in the termination provisions of Part 9.

C. **Resumption of Work:** If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.

D. **Equitable Adjustment for suspensions:** Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance...
directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.

3.04 OWNER’S RIGHT TO STOP THE WORK FOR CAUSE

A. Owner may stop Work for Contractor’s failure to perform: If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.

B. No Equitable Adjustment for Contractor’s failure to perform: Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor’s failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

3.05 DELAY

A. Force Majeure actions not a default; Force Majeure defined: Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party (“Force Majeure”). Acts of Force Majeure include, but are not limited to:

1. Acts of God or the public enemy;
2. Acts or omissions of any government entity;
3. Fire or other casualty for which Contractor is not responsible;
4. Quarantine or epidemic;
5. Strike or defensive lockout;
6. Unusually severe weather conditions which could not have been reasonably anticipated; and
7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.

B. Contract Time adjustment for Force Majeure: Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment according to Section 7.03. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.

C. Contract Time or Contract Sum adjustment if Owner at fault: Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor’s performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to Sections 7.02 and 7.03.

D. No Contract Time or Contract Sum adjustment if Contractor at fault: Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
E. **Contract Time adjustment only for concurrent fault:** To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to Section 7.03, but shall not be entitled to an adjustment in Contract Sum.

F. **Contractor to mitigate delay impacts:** Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise.

**3.06 NOTICE TO OWNER OF LABOR DISPUTES**

A. **Contractor to notify Owner of labor disputes:** If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.

B. **Pass through notification provisions to Subcontractors:** Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

**3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION**

A. **Liquidated Damages**

1. **Reason for Liquidated Damages:** Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.

2. **Calculation of Liquidated Damages amount:** The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.

3. **Contractor responsible even if Liquidated Damages assessed:** Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

B. **Actual Damages**

**Calculation of Actual Damages:** Actual damages will be assessed for failure to achieve Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Final Completion should have been achieved, based on the date Substantial Completion is actually achieved, to the date Final Completion is actually achieved. Owner may offset these costs against any payment due Contractor.
PART 4 – SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

A. Specifications and Drawings are basis of the Work: The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.

B. Parts of the Contract Documents are complementary: The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.

C. Contractor to report discrepancies in Contract Documents: Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.

D. Contractor knowledge of discrepancy in documents – responsibility: Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or Shop Drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.

E. Contractor to perform Work implied by Contract Documents: Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.

F. Interpretation questions referred to A/E: Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

4.02 PROJECT RECORD

A. Contractor to maintain Project Record Drawings and Specifications: Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order Proposals (COP). This separate set of Drawings and Specifications shall be the "Project Record."

B. Update Project Record weekly and keep on site: The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.

C. Final Project Record to A/E before Final Acceptance: Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.
4.03 **SHOP DRAWINGS**

A. **Definition of Shop Drawings:** “Shop Drawings” means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Shop Drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Shop Drawings provided in accordance with the Contract Documents.

B. **Approval of Shop Drawings by Contractor and A/E:** Contractor shall coordinate all Shop Drawings, and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Shop Drawings shall be stamped by an appropriate professional licensed by the state of Washington. Shop Drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Shop Drawings. Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Shop Drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Shop Drawings. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.

C. **Contractor not relieved of responsibility when Shop Drawings approved:** Approval, or other appropriate action with regard to Shop Drawings, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Shop Drawings, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor’s means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.

D. **Variations between Shop Drawings and Contract Documents:** If Shop Drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Shop Drawings, at the time it submits the Shop Drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded upon the Project Record.

E. **Contractor to submit 5 copies of Shop Drawings:** Unless otherwise provided in Division 1, Contractor shall submit to A/E for approval 5 copies of all Shop Drawings. Unless otherwise indicated, 3 sets of all Shop Drawings shall be retained by A/E and 2 sets shall be returned to Contractor.
4.04 **ORGANIZATION OF SPECIFICATIONS**

Specification organization by trade: Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

4.05 **OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

4.05 A. A/E, not Contractor, owns Copyright of Drawings and Specifications: The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E’s service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.

4.05 B. Drawings and Specifications to be used only for this Project: The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.

4.05 C. Shop Drawing license granted to Owner: Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Shop Drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Shop Drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Shop Drawings, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Section 5.03 and 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Shop Drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.

4.05 D. Shop Drawings to be used only for this Project: The Shop Drawings and other submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Shop Drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

**PART 5 – PERFORMANCE**

5.01 **CONTRACTOR CONTROL AND SUPERVISION**

5.01 A. Contractor responsible for Means and Methods of construction: Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the
Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.

B. **Competent Superintendent required:** Performance of the Work shall be directly supervised by a competent superintendent who has authority to act for Contractor. The superintendent must be satisfactory to the Owner and shall not be changed without the prior written consent of Owner. Owner may require Contractor to remove the superintendent from the Work or Project site, if Owner reasonably deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition.

C. **Contractor responsible for acts and omissions of self and agents:** Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.

D. **Contractor to employ competent and disciplined workforce:** Contractor shall enforce strict discipline and good order among all of the Contractor’s employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor’s employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.

E. **Contractor to keep project documents on site:** Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Shop Drawings, and permits and permit drawings.

F. **Contractor to comply with ethical standards:** Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors’ employees, if they are in violation of this act.

5.02 **PERMITS, FEES, AND NOTICES**

A. **Contractor to obtain and pay for permits:** Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.

B. **Allowances for permit fees:** If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor’s bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.

C. **Contractor to comply with all applicable laws:** Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.

5.03 **PATENTS AND ROYALTIES**

Payment, indemnification, and notice: Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a
particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

5.04 **PREVAILING WAGES**

A. **Contractor to pay Prevailing Wages:** Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work, is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor’s responsibility to verify the applicable prevailing wage rate.

B. **Statement of Intent to Pay Prevailing Wages:** Before payment is made by the Owner to the Contractor for any work performed by the Contractor and subcontractors whose work is included in the application for payment, the Contractor shall submit, or shall have previously submitted to the Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor and Industries, certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.

C. **Affidavit of Wages Paid:** Prior to release of retainage, the Contractor shall submit to the Owner an Affidavit of Wages Paid, approved by the Department of Labor and Industries, for the Contractor and every subcontractor, of any tier, that performed work on the Project.

D. **Disputes:** Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.

E. **Statement with pay application; Post Statements of Intent at job site:** Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefilled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.

F. **Contractor to pay for Statements of Intent and Affidavits:** In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.

G. **Certified Payrolls:** Consistent with WAC 296-127-320, the Contractor and any subcontractor shall submit a certified copy of payroll records if requested.

5.05 **HOURS OF LABOR**

A. **Overtime:** Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference. Pursuant to that statute, no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work, shall be permitted or required to work more than eight hours in any one calendar day, provided, that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight hours of each calendar day shall be not less than one and one-half times the rate allowed for this same amount of time during eight hours of service.
4-10 Agreements: Notwithstanding the preceding paragraph, RCW 49.28 permits a contractor or subcontractor in any public works contract subject to those provisions, to enter into an agreement with its employees in which the employees work up to ten hours in a calendar day. No such agreement may provide that the employees work ten-hour days for more than four calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of RCW 49.28 shall not apply to the hours, up to forty hours per week, worked pursuant to any such agreement.

5.06 NONDISCRIMINATION

A. Discrimination prohibited by applicable laws: Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, Sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Protected Classes: Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.

2. Advertisements to state nondiscrimination: Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.

3. Contractor to notify unions and others of nondiscrimination: Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers’ representative of Contractor’s obligations according to the Contract Documents and RCW 49.60.

4. Owner and State access to Contractor records: Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.

5. Pass through provisions to Subcontractors: Contractor shall include the provisions of this section in every Subcontract.

5.07 SAFETY PRECAUTIONS

A. Contractor responsible for safety: Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.

B. Contractor safety responsibilities: In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations,
and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.

C. Contractor to maintain safety records: Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.

D. Contractor to provide HazMat training: Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.

1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
   a. WAC: The requirements of chapter 296-62 WAC, General Occupational Health Standards;
   b. Presence of hazardous chemicals: Any operations in their work area where hazardous chemicals are present; and
   c. Hazard communication program: The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.

2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
   a. Detecting hazardous chemicals: Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
   b. Hazards of chemicals: The physical and health hazards of the chemicals in the work area;
   c. Protection from hazards: The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
   d. Hazard communication program: The details of the hazard communication program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

E. Hazardous, toxic or harmful substances: Contractor’s responsibility for hazardous, toxic, or harmful substances shall include the following duties:

1. Illegal use of dangerous substances: Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or
harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 Days on the Project site.

2. Contractor notifications of spills, failures, inspections, and fines: Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.

F. Public safety and traffic: All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.

G. Contractor to act in an emergency: In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.

H. No duty of safety by Owner or A/E: Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

A. Limited storage areas: Contractor shall confine all operations, including storage of materials, to Owner-approved areas.

B. Temporary buildings and utilities at Contractor expense: Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall be removed by Contractor at its expense upon completion of the Work.

C. Roads and vehicle loads: Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.

D. Ownership and reporting by Contractor of demolished materials: Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.

E. Contractor responsible for care of materials and equipment on-site: Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of
Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.

F. **Contractor responsible for loss of materials and equipment:** Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

### 5.09 PRIOR NOTICE OF EXCAVATION

A. **Excavation defined; Use of locator services:** “Excavation” means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

### 5.10 UNFORESEEN PHYSICAL CONDITIONS

A. **Notice requirement for concealed or unknown conditions:** If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 7 Days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.

B. **Adjustment in Contract Time and Contract Sum:** If such conditions differ materially and cause a change in Contractor’s cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in Part 7.

### 5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES AND IMPROVEMENTS

A. **Contractor to protect and repair property:** Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation: at or near the Project site; and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.

B. **Tree and vegetation protection:** Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.

### 5.12 LAYOUT OF WORK

A. **Advanced planning of the Work:** Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.
B. Layout responsibilities: Contractor shall lay out the Work from Owner-established baselines and
bench marks indicated on the Drawings, and shall be responsible for all field measurements in
connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates,
platforms, equipment, tools, materials, and labor required to lay out any part of the Work.
Contractor shall be responsible for executing the Work to the lines and grades that may be
established. Contractor shall be responsible for maintaining or restoring all stakes and other
marks established.

5.13 MATERIAL AND EQUIPMENT
A. Contractor to provide new and equivalent equipment and materials: All equipment, material, and
articles incorporated into the Work shall be new and of the most suitable grade for the purpose
intended, unless otherwise specifically provided in the Contract Documents. References in the
Specifications to equipment, material, articles, or patented processes by trade name, make, or
catalog number, shall be regarded as establishing a standard quality and shall not be construed
as limiting competition. Contractor may, at its option, use any equipment, material, article, or
process that, in the judgment of A/E, is equal to that named in the specifications, unless
otherwise specifically provided in the Contract Documents.

B. Contractor responsible for fitting parts together: Contractor shall do all cutting, fitting, or patching
that may be required to make its several parts fit together properly, or receive or be received by
work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall
not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or
alter the work of any other contractor unless approved in advance by Owner.

C. Owner may reject defective Work: Should any of the Work be found defective, or in any way not
in accordance with the Contract Documents, this work, in whatever stage of completion, may be
rejected by Owner.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES
A. Owner to provide and charge for utilities: Owner shall make all reasonable utilities available to
Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless
otherwise provided in the Contract Documents, the utility service consumed shall be charged to
or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by
Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities
furnished.

B. Contractor to install temporary connections and meters: Contractor shall, at its expense and in a
skillful manner satisfactory to Owner, install and maintain all necessary temporary connections
and distribution lines, together with appropriate protective devices, and all meters required to
measure the amount of each utility used for the purpose of determining charges. Prior to the date
of Final Acceptance, Contractor shall remove all temporary connections, distribution lines,
meters, and associated equipment and materials.

5.15 TESTS AND INSPECTION
A. Contractor to provide for all testing and inspection of Work: Contractor shall maintain an
adequate testing and inspection program and perform such tests and inspections as are
necessary or required to ensure that the Work conforms to the requirements of the Contract
Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work
and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make
arrangements for such tests, inspections, and approvals with an independent testing laboratory or
entity acceptable to Owner, or with the appropriate public authority, and shall bear all related
costs of tests, inspections, and approvals. Contractor shall give Owner timely notice when and
where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.

B. **Owner may conduct tests and inspections:** Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:

1. **Constitute or imply acceptance;**
2. **Relieve Contractor of responsibility for providing adequate quality control measures;**
3. **Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;**
4. **Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or**
5. **Impair Owner’s right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.**

C. **Inspections or inspectors do not modify Contract Documents:** Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.

D. **Contractor responsibilities on inspections:** Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

5.16 **CORRECTION OF NONCONFORMING WORK**

A. **Work covered by Contractor without inspection:** If a portion of the Work is covered contrary to the requirements in the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.

B. **Payment provisions for uncovering covered Work:** If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes such a request as provided in Part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.

C. **Contractor to correct and pay for non-conforming Work:** Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or
completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.

D. Contractor’s compliance with warranty provisions: If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under Section 6.08, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of one year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor’s duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.

E. Contractor to remove non-conforming Work: Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

F. Owner may charge Contractor for non-conforming Work: If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.

G. Contractor to pay for damaged Work during correction: Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor’s correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

H. No Period of limitation on other requirements: Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one year as described in Section 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor’s obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.

I. Owner may accept non-conforming Work and charge Contractor: If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

5.17 CLEAN UP

Contractor to keep site clean and leave it clean: Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

5.18 ACCESS TO WORK

Owner and A/E access to Work site: Contractor shall provide Owner and A/E access to the Work in progress wherever located.
5.19 OTHER CONTRACTS

Owner may award other contracts; Contractor to cooperate: Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and with Owner’s employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

5.20 SUBCONTRACTORS AND SUPPLIERS

A. Subcontractor Responsibility: The Contractor shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;

2. Have a current Washington Unified Business Identifier (UBI) number;

3. If applicable, have:
   a. Industrial Insurance (workers’ compensation) coverage for the subcontractor’s employees working in Washington, as required in Title 51 RCW;
   b. A Washington Employment Security Department number, as required in Title 50 RCW;
   c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
   d. An electrical contractor license, if required by Chapter 19.28 RCW;
   e. An elevator contractor license, if required by Chapter 70.87 RCW.

4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner’s first advertisement of the project.

B. Provide names of Subcontractors and use qualified firms: Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of $2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner’s written consent before making any substitutions or additions.
C. Subcontracts in writing and pass through provision: All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.

D. Coordination of Subcontractors; Contractor responsible for Work: Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.

E. Automatic assignment of subcontracts: Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:

1. Effective only after termination and Owner approval: The assignment is effective only after termination by Owner for cause pursuant to Section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and

2. Owner assumes Contractor’s responsibilities: After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.

3. Impact of bond: The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

5.21 WARRANTY OF CONSTRUCTION

A. Contractor warranty of Work: In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.

B. Contractor responsibilities: With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:

1. Obtain warranties: Obtain all warranties that would be given in normal commercial practice;

2. Warranties for benefit of Owner: Require all warranties to be executed, in writing, for the benefit of Owner;

3. Enforcement of warranties: Enforce all warranties for the benefit of Owner, if directed by Owner; and

4. Contractor responsibility for subcontractor warranties: Be responsible to enforce any subcontractor’s, manufacturer’s, or supplier’s warranties should they extend beyond the period specified in the Contract Documents.

C. Warranties beyond Final Acceptance: The obligations under this section shall survive Final Acceptance.
5.22 **INDEMNIFICATION**

A. **Contractor to indemnify Owner:** Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:

1. **Sole negligence of Contractor:** The sole negligence of Contractor or any of its Subcontractors;

2. **Concurrent negligence:** The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor; and

3. **Patent infringement:** The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret.

B. **Employee action and RCW Title 51:** In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

**PART 6 – PAYMENTS AND COMPLETION**

6.01 **CONTRACT SUM**

Owner shall pay Contract Sum: Owner shall pay Contractor the Contract Sum plus state sales tax for performance of the Work, in accordance with the Contract Documents.

6.02 **SCHEDULE OF VALUES**

Contractor to submit Schedule of Values: Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner (“Schedule of Values”). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, O&M manuals, and any other requirements for Project closeout, and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

6.03 **APPLICATION FOR PAYMENT**

A. **Monthly Application for Payment with substantiation:** At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.

B. **Contractor certifies Subcontractors paid:** By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in Section 1.03, are true and correct, to the best of Contractor’s knowledge, as of the date of the Application for Payment.
C. **Reconciliation of Work with Progress Schedule:** At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule.

D. **Payment for material delivered to site or stored off-site:** If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:

1. **Suitable facility or location:** The material will be placed in a facility or location that is structurally sound, dry, lighted and suitable for the materials to be stored;

2. **Facility or location within 10 miles of Project:** The facility or location is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;

3. **Facility or location exclusive to Project’s materials:** Only materials for the Project are stored within the facility or location (or a secure portion of a facility or location set aside for the Project);

4. **Insurance provided on materials in facility or location:** Contractor furnishes Owner a certificate of insurance extending Contractor’s insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;

5. **Facility or location locked and secure:** The facility or location (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;

6. **Owner right of access to facility or location:** Owner shall at all times have the right of access in company of Contractor;

7. **Contractor assumes total responsibility for stored materials:** Contractor and its surety assume total responsibility for the stored materials; and

8. **Contractor provides documentation and Notice when materials moved to site:** Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish Notice to Owner when materials are moved from storage to the Project site.

### 6.04 PROGRESS PAYMENTS

A. **Owner to pay within 30 Days:** Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 Days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.

B. **Withholding retainage; Options for retainage:** Owner shall retain 5% of the amount of each progress payment until 45 Days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner’s request, consent of surety to release of the retainage. In accordance with chapter 60.28 RCW, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
C. **Title passes to Owner upon payment:** Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.

D. **Interest on unpaid balances:** Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in chapter 39.76 RCW.

### 6.05 PAYMENTS WITHHELD

A. **Owner’s right to withhold payment:** Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:

1. **Non-compliant Work:** Work not in accordance with the Contract Documents;

2. **Remaining Work to cost more than unpaid balance:** Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;

3. **Owner correction or completion Work:** Work by Owner to correct defective Work or complete the Work in accordance with Section 5.16;

4. **Contractor’s failure to perform:** Contractor’s failure to perform in accordance with the Contract Documents; or

5. **Contractor’s negligent acts or omissions:** Cost or liability that may occur to Owner as the result of Contractor’s fault or negligent acts or omissions.

B. **Owner to notify Contractor of withholding for unsatisfactory performance:** In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with chapter 39.76 RCW.

### 6.06 RETAINAGE AND BOND CLAIM RIGHTS

Chapters 39.08 RCW and 60.28 RCW incorporated by reference: Chapters 39.08 RCW and 60.28 RCW, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

### 6.07 SUBSTANTIAL COMPLETION

**Substantial Completion defined:** Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner has full and unrestricted use and benefit of the facilities (or portion thereof designated and approved by Owner) for the use for which it is intended. All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner’s occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.
6.08 **PRIOR OCCUPANCY**

A. Prior Occupancy defined; Restrictions: Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.

B. Damage; Duty to repair and warranties: Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor’s one year duty to repair any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

6.09 **FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

A. Final Completion defined: Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall constitute Final Acceptance which is a subsequent, separate, and distinct action.

B. Final Acceptance defined: Final Acceptance shall be achieved when the Contractor has completed the requirements of the Contract Documents. The date Final Acceptance is achieved shall be established by Owner in writing. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance, nor final payment, shall release Contractor or its sureties from any obligations of these Contract Documents or the payment and performance bonds, or constitute a waiver of any claims by Owner arising from Contractor’s failure to perform the Work in accordance with the Contract Documents.

C. Final payment waives Claim rights: Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in Part 8.

**PART 7 – CHANGES**

7.01 **CHANGE IN THE WORK**

A. Changes in Work, Contract Sum, and Contract Time by Change Order: Owner may, at any time and without notice to Contractor’s surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in Section 7.02 or 7.03, respectively, and such adjustment(s) shall be incorporated into a Change Order.

B. Owner may request COP from Contractor: If Owner desires to order a change in the Work, it may request a written Change Order Proposal (COP) from Contractor. Contractor shall submit a Change Order Proposal within 14 Days of the request from Owner, or within such other period as mutually agreed. Contractor’s Change Order Proposal shall be full compensation for
implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

C. **COP negotiations:** Upon receipt of the Change Order Proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in Sections 7.02 and 7.03, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner’s approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.

D. **Change Order as full payment and final settlement:** If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.

E. **Failure to agree upon terms of Change Order; Final offer and Claims:** If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 Days of Contractor’s request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner’s final offer, or the parties are otherwise unable to reach agreement, Contractor’s only remedy shall be to file a Claim as provided in Part 8.

F. **Field Authorizations:** The Owner may direct the Contractor to proceed with a change in the work through a written Field Authorization (also referred to as a Field Order) when the time required to price and execute a Change Order would impact the Project.

The Field Authorization shall describe and include the following:

1. The scope of work
2. An agreed upon maximum not-to-exceed amount
3. Any estimated change to the Contract Time
4. The method of final cost determination in accordance with the requirements of Part 7 of the General Conditions
5. The supporting cost data to be submitted in accordance with the requirements of Part 7 of the General Conditions

Upon satisfactory submittal by the Contractor and approval by the Owner of supporting cost data, a Change Order will be executed. The Owner will not make payment to the Contractor for Field Authorization work until that work has been incorporated into an executed Change Order.
7.02 CHANGE IN THE CONTRACT SUM

A. General Application

1. Contract Sum changes only by Change Order: The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order Proposal.

2. Owner fault or negligence as basis for change in Contract Sum: If the cost of Contractor’s performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Contractor’s changed cost of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of Force Majeure as defined in Section 3.05.

   (a) Notice and record keeping for equitable adjustment: A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 Days of the occurrence of the event giving rise to the request. For purposes of this part, “occurrence” means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.

   (b) Content of notice for equitable adjustment; Failure to comply: Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 Days before Contractor’s written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

   (c) Contractor to provide supplemental information: Within 30 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with Section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.
(d) **Contractor to proceed with Work as directed:** Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.

(e) **Contractor to combine requests for same event together:** Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.

3. **Methods for calculating Change Order amount:** The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods:
   
   a. **Fixed Price:** On the basis of a fixed price as determined in paragraph 7.02B.
   
   b. **Unit Prices:** By application of unit prices to the quantities of the items involved as determined in paragraph 7.02C.
   
   c. **Time and Materials:** On the basis of time and material as determined in paragraph 7.02D.

4. **Fixed price method is default; Owner may direct otherwise:** When Owner has requested Contractor to submit a Change Order Proposal, Owner may direct Contractor as to which method in subparagraph 3 above to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work, or of a request for an equitable adjustment, on the basis of the fixed price method.

**B. Change Order Pricing – Fixed Price**

**Procedures:** When the fixed price method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:

1. **Breakdown and itemization of details on COP:** Contractor’s Change Order Proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets in a form approved by Owner.

2. **Use of industry standards in calculating costs:** All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material quantities, and equipment costs.

3. **Costs contingent on Owner’s actions:** If any of Contractor’s pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.

4. **Markups on additive and deductive Work:** The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond and insurance markups will apply to the net difference.

5. **Breakdown not required if change less than $1,000:** If the total cost of the change in the Work or request for equitable adjustment does not exceed $1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
6. **Breakdown required if change between $1,000 and $2,500**: If the total cost of the change in the Work or request for equitable adjustment is between $1,000 and $2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:

   a. lump sum labor;
   b. lump sum material;
   c. lump sum equipment usage;
   d. overhead and profit as set forth below; and
   e. insurance and bond costs as set forth below.

7. **Components of increased cost**: Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:

   a. **Craft labor costs**: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor, as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:

      (1) **Basic wages and benefits**: Hourly rates and benefits as stated on the Department of Labor and Industries approved “statement of intent to pay prevailing wages” or a higher amount if approved by the Owner. Direct supervision shall be a reasonable percentage not to exceed 15% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.

      (2) **Worker's insurance**: Direct contributions to the state of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.

      (3) **Federal insurance**: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.

      (4) **Travel allowance**: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.

      (5) **Safety**: Cost incurred due to the Washington Industrial Safety and Health Act, which shall be a reasonable percentage not to exceed 2% of the sum of the amounts calculated in (1), (2), and (3) above.

   b. **Material costs**: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs, second from supplier quotations or if these are not available, from standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges, shall be itemized.
c. **Equipment costs:** This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:

2. The National Electrical Contractors Association for equipment used on electrical work.
3. The Mechanical Contractors Association of America for equipment used on mechanical work.

The EquipmentWatch Rental Rate Blue Book shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement, current edition on the Contract execution date.

d. **Allowance for small tools, expendables & consumable supplies:** Small tools consist of tools which cost $250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:

1. **3% for Contractor:** For Contractor, 3% of direct labor costs.
2. **5% for Subcontractors:** For Subcontractors, 5% of direct labor costs.

Expendables and consumables supplies directly associated with the change in Work must be itemized.

e. **Subcontractor costs:** This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors’ cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.

f. **Allowance for overhead:** This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any change in the Contract Sum. If the Contractor is compensated under Section 7.03D, the amount of such compensation shall be reduced by the amount Contractor is otherwise entitled to under this subsection (f). This allowance shall compensate Contractor for all noncraft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the rates below:

1. **Projects less than $3 million:** For projects where the Contract Award Amount is under $3 million, the following shall apply:
(a) **Contractor markup on Contractor Work:** For Contractor, for any Work actually performed by Contractor’s own forces, 16% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

(b) **Subcontractor markup for Subcontractor Work:** For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 16% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

(c) **Contractor markup for Subcontractor Work:** For Contractor, for any work performed by its Subcontractor(s) 6% of the first $50,000 of the amount due each Subcontractor, and 4% of the remaining amount if any.

(d) **Subcontractor markup for lower tier Subcontractor Work:** For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first $50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.

(e) **Basis of cost applicable for markup:** The cost to which overhead is to be applied shall be developed in accordance with Section 7.02B 7a.–e.

(2). **Projects more than $3 million:** For projects where the Contract Award Amount is equal to or exceeds $3 million, the following shall apply:

(a) **Contractor markup on Contractor Work:** For Contractor, for any Work actually performed by Contractor’s own forces, 12% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

(b) **Subcontractor markup for Subcontractor Work:** For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

(c) **Contractor markup for Subcontractor Work:** For Contractor, for any Work performed by its Subcontractor(s), 4% of the first $50,000 of the amount due each Subcontractor, and 2% of the remaining amount if any.

(d) **Subcontractor markup for lower tier Subcontractor Work:** For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first $50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.

(e) **Basis of cost applicable for markup:** The cost to which overhead is to be applied shall be developed in accordance with Section 7.02B 7a.–e.

g. **Allowance for profit:** Allowance for profit is an amount to be added to the cost of any change in contract sum, but not to the cost of change in Contract Time for which contractor has been compensated pursuant to the conditions set forth in Section 7.03. It shall be limited to a reasonable amount, mutually acceptable, or if none can be agreed upon, to an amount not to exceed the rates below:

(1) **Contractor / Subcontractor markup for self-performed Work:** For Contractor or Subcontractor of any tier for work performed by their forces, 6% of the cost developed in accordance with Section 7.02B 7a.–e.
(2) Contractor / Subcontractor markup for Work performed at lower tier: For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 4% of the subcontract cost developed in accordance with Section 7.02B 7a. – h.

h. Insurance and bond premiums: Cost of change in insurance or bond premium: This is defined as:

(1) Contractor’s liability insurance: The cost of any changes in Contractor’s liability insurance arising directly from execution of the Change Order; and

(2) Payment and Performance Bond: The cost of the additional premium for Contractor’s bond arising directly from the changed Work.

The cost of any change in insurance or bond premium shall be added after overhead and allowance for profit are calculated in accordance with subparagraph f. and g above.

C. Change Order Pricing – Unit Prices

1. Content of Owner authorization: Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner’s authorization shall clearly state:

   a. Scope: Scope of work to be performed;

   b. Reimbursement basis: Type of reimbursement including pre-agreed rates for material quantities; and

   c. Reimbursement limit: Cost limit of reimbursement.

2. Contractor responsibilities: Contractor shall:

   a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working;

   b. Leave access as appropriate for quantity measurement; and

   c. Not exceed any cost limit(s) without Owner’s prior written approval.

3. Cost breakdown consistent with Fixed Price requirements: Contractor shall submit costs in accordance with paragraph 7.02B and satisfy the following requirements:

   a. Unit prices must include overhead, profit, bond and insurance premiums: Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead, profit, bond, and insurance costs; and

   b. Owner verification of quantities: Quantities must be supported by field measurement statements signed by Owner.

D. Change Order Pricing – Time-and-Material Prices

1. Content of Owner authorization: Whenever Owner authorizes Contractor to perform Work on a time-and-material basis, Owner’s authorization shall clearly state:

   a. Scope: Scope of Work to be performed;
b. **Reimbursement basis:** Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and

c. **Reimbursement limit:** Cost limit of reimbursement.

2. **Contractor responsibilities:** Contractor shall:

   a. **Identify workers assigned:** Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;

   b. **Provide daily timesheets:** Identify on daily time sheets all labor performed in accordance with this authorization. Submit copies of daily time sheets within 2 working days for Owner’s review.

   c. **Allow Owner to measure quantities:** Leave access as appropriate for quantity measurement;

   d. **Perform Work efficiently:** Perform all Work in accordance with this section as efficiently as possible; and

   e. **Not exceed Owner’s cost limit:** Not exceed any cost limit(s) without Owner’s prior written approval.

3. **Cost breakdown consistent with Fixed Price requirements:** Contractor shall submit costs in accordance with paragraph 7.02B and additional verification supported by:

   a. **Timesheets:** Labor detailed on daily time sheets; and

   b. **Invoices:** Invoices for material.

7.03 **CHANGE IN THE CONTRACT TIME**

A. **COP requests for Contract Time:** The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order Proposal.

B. **Time extension permitted if not Contractor’s fault:** If the time of Contractor’s performance is changed due to an act of Force Majeure, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor’s changed time of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible.

1. **Notice and record keeping for Contract Time request:** A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 Days of the occurrence of the event giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such record and if requested, shall promptly furnish copies of such record to Owner.

2. **Timing and content of Contractor’s Notice:** Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 Days before Contractor’s written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the
Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

3. **Contractor to provide supplemental information**: Within 30 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph 7.03B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

4. **Contractor to proceed with Work as directed**: Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.

C. **Contractor to demonstrate impact on critical path of schedule**: Any change in the Contract Time covered by a Change Order, or based on a request for an equitable adjustment in the Contract Time, shall be limited to the change in the critical path of Contractor’s schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order Proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by resequencing of the Work or other reasonable alternatives.

D. **Cost of change in Contract Time**: Contractor may request compensation for the cost of a change in Contract Time in accordance with this paragraph, 7.03D, subject to the following conditions:

1. **Must be solely fault of Owner or A/E**: The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E;

2. **Procedures**: Contractor shall follow the procedure set forth in paragraph 7.03B;

3. **Demonstrate impact on critical path**: Contractor shall establish the extent of the change in Contract Time in accordance with paragraph 7.03C; and

4. **Limitations on daily costs**: The daily cost of any change in Contract Time shall be limited to the items below, less the amount of any change in the Contract Sum the Contractor may otherwise be entitled to pursuant to Section 7.02B 7f for any change in the Work that contributed to this change in Contract Time:

   a. **Non-productive supervision or labor**: cost of nonproductive field supervision or labor extended because of delay;

   b. **Weekly meetings and indirect activities**: cost of weekly meetings or similar indirect activities extended because of the delay;
c. Temporary facilities or equipment rental: cost of temporary facilities or equipment rental extended because of the delay;

d. Insurance premiums: cost of insurance extended because of the delay;

e. Overhead: general and administrative overhead in an amount to be agreed upon, but not to exceed 3% of the Contract Award Amount divided by the originally specified Contract Time for each Day of the delay.

PART 8 – CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS PROCEDURE

A. Claim is Contractor's remedy: If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in Section 7.01, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in Section 7.02 or the Contract Time as provided in Section 7.03, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.

B. Claim filing deadline for Contractor: Contractor shall file its Claim within 120 Days from Owner’s final offer made in accordance with paragraph 7.01E, or by the date of Final Acceptance, whichever occurs first.

C. Claim must cover all costs and be documented: The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:

1. Factual statement of Claim: A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim;

2. Dates: The date on which facts arose which gave rise to the Claim;

3. Owner and A/E employee's knowledgeable about Claim: The name of each employee of Owner or A/E knowledgeable about the Claim;

4. Support from Contract Documents: The specific provisions of the Contract Documents which support the Claim;

5. Identification of other supporting information: The identification of any documents and the substance of any oral communications that support the Claim;

6. Copies of supporting documentation: Copies of any identified documents, other than the Contract Documents, that support the Claim;

7. Details on Claim for Contract Time: If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor’s analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time;

8. Details on Claim for adjustment of Contract Sum: If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail as required by Section 7.02; and
9. **Statement certifying Claim:** A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.

D. **Owner's response to Claim filed:** After Contractor has submitted a fully documented Claim that complies with all applicable provisions of Parts 7 and 8, Owner shall respond, in writing, to Contractor as follows:

1. **Response time for Claim less than $50,000:** If the Claim amount is less than $50,000, with a decision within 60 Days from the date the Claim is received; or

2. **Response time for Claim of $50,000 or more:** If the Claim amount is $50,000 or more, with a decision within 60 Days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.

E. **Owner's review of Claim and finality of decision:** To assist in the review of Contractor's Claim, Owner may visit the Project site, or request additional information, in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision as set forth above shall be final and conclusive as to all matters set forth in the Claim, unless Contractor follows the procedure set forth in Section 8.02.

F. **Waiver of Contractor rights for failure to comply with this Section:** Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by the Contractor unless made in accordance with the requirements of this Section.

8.02 **ARBITRATION**

A. **Timing of Contractor's demand for arbitration:** If Contractor disagrees with Owner's decision rendered in accordance with paragraph 8.01D, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 Days after the date of Owner's decision on such Claim; failure to demand arbitration within said 30 Day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.

B. **Filing of Notice for arbitration:** Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of the AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:

1. **Claims less than $30,000:** Disputes involving $30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or

2. **Claims greater than $30,000:** Disputes over $30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of the AAA, unless the parties agree to use the expedited rules.

C. **Arbitration is forum for resolving Claims:** All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may
occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

D. **Owner may combine Claims into same arbitration:** Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.

E. **Settlement outside of arbitration to be documented in Change Order:** If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

**8.03 CLAIMS AUDITS**

A. **Owner may audit Claims:** All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.

B. **Contractor to make documents available:** In support of Owner audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:

1. Daily time sheets and supervisor’s daily reports;
2. Collective bargaining agreements;
3. Insurance, welfare, and benefits records;
4. Payroll registers;
5. Earnings records;
6. Payroll tax forms;
7. Material invoices, requisitions, and delivery confirmations;
8. Material cost distribution worksheet;
9. Equipment records (list of company equipment, rates, etc.);
11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
12. Subcontractors’ and agents’ payment certificates;
13. Cancelled checks (payroll and vendors);
14. Job cost report, including monthly totals;
15. Job payroll ledger;
16. Planned resource loading schedules and summaries;
17. General ledger;
18. Cash disbursements journal;
19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;
20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
21. If a source other than depreciation records is used to develop costs for Contractor’s internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
22. All nonprivileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim;
23. Work sheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals; and
24. Work sheets, software, and all other documents used by Contractor to prepare its bid.

C. Contractor to provide facilities for audit and shall cooperate: The audit may be performed by employees of Owner or a representative of Owner. Contractor, and its Subcontractors, shall provide adequate facilities acceptable to Owner, for the audit during normal business hours. Contractor, and all Subcontractors, shall make a good faith effort to cooperate with Owner’s auditors.

PART 9 – TERMINATION OF THE WORK

9.01 TERMINATION BY OWNER FOR CAUSE

A. 7 Day Notice to Terminate for Cause: Owner may, upon 7 Days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:

1. Contractor fails to prosecute Work: Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
2. Contractor bankrupt: Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
3. Contractor fails to correct Work: Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
4. Contractor fails to supply workers or materials: Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
5. Contractor failure to pay Subcontractors or labor: Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;

July 1, 2010
6. **Contractor violates laws:** Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or

7. **Contractor in material breach of Contract:** Contractor is otherwise in material breach of any provision of the Contract Documents.

B. **Owner's actions upon termination:** Upon termination, Owner may at its option:

1. **Take possession of Project site:** Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;

2. **Accept assignment of Subcontracts:** Accept assignment of subcontracts pursuant to Section 5.20; and

3. **Finish the Work:** Finish the Work by whatever other reasonable method it deems expedient.

C. **Surety's role:** Owner’s rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

D. **Contractor’s required actions:** When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.

E. **Contractor to pay for unfinished Work:** If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E’s services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor’s actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.

F. **Contractor and Surety still responsible for Work performed:** Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.

G. **Conversion of “Termination for Cause” to “Termination for Convenience”:** If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to Section 9.02.

9.02 **TERMINATION BY OWNER FOR CONVENIENCE**

A. **Owner Notice of Termination for Convenience:** Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.

B. **Contractor response to termination Notice:** Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:

1. **Cease Work:** Stop performing Work on the date and as specified in the notice of termination;
2. **No further orders or Subcontracts**: Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;

3. **Cancel orders and Subcontracts**: Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;

4. **Assign orders and Subcontracts to Owner**: Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;

5. **Take action to protect the Work**: Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and

6. **Continue performance not terminated**: Continue performance only to the extent not terminated

C. **Terms of adjustment in Contract Sum if Contract terminated**: If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of Part 7.

D. **Owner to determine whether to adjust Contract Time**: If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

**PART 10 – MISCELLANEOUS PROVISIONS**

10.01 **GOVERNING LAW**

Applicable law and venue: The Contract Documents and the rights of the parties herein shall be governed by the laws of the state of Washington. Venue shall be in the county in which Owner’s principal place of business is located, unless otherwise specified.

10.02 **SUCCESSORS AND ASSIGNS**

Bound to successors; Assignment of Contract: Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

10.03 **MEANING OF WORDS**

Meaning of words used in Specifications: Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority,
whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings, or required to complete the installation.

10.04 **RIGHTS AND REMEDIES**

No waiver of rights: No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall action or failure to act constitute approval or an acquiescence in a breach therein, except as may be specifically agreed in writing.

10.05 **CONTRACTOR REGISTRATION**

Contractor must be registered or licensed: Pursuant to RCW 39.06, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27.

10.06 **TIME COMPUTATIONS**

Computing time: When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

10.07 **RECORDS RETENTION**

Six year records retention period: The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with Section 8.03, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

10.08 **THIRD-PARTY AGREEMENTS**

No third party relationships created: The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

10.09 **ANTITRUST ASSIGNMENT**

Contractor assigns overcharge amounts to Owner: Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

10.10 **HEADINGS AND CAPTIONS**

Headings for convenience only: All headings and captions used in these General Conditions are only for convenience of reference, and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.
PART IV

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PART 1 GENERAL PROVISIONS

1.01 DEFINITIONS

Replace Article H in Section 1.01 with the following City Supplemental Conditions:

AI. “Contract Time” is the number of calendar days or the dates stated in the Contract to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Owner for final payment.

Replace Article O in Section 1.01 with the following City Supplemental Conditions:

O. “Notice” means a written or electronic notice which has been delivered to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail to the last business address known to the party giving notice.

Replace Article Q in Section 1.01 with the following City Supplemental Conditions:

Q. “Owner” means the City or its authorized representative with the authority to enter into, administer, and/or terminate the work in accordance with the Contract Documents and make related determinations and findings.

Add the following articles to Section 1.01 of Supplemental Conditions:

AC. “Abbreviations” refer to trade association names and titles of general standards that are frequently abbreviated. Where such acronyms or abbreviations are used in the specifications or other Contract documents, they mean recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision. Refer to the “Encyclopedia of Associations” published by Gale Research Co., available in most libraries.

AD. “Alternate Bid” (or Alternate) is an amount stated in the Bid to be added or deducted from the amount of the Base Bid if the corresponding change in project scope or materials or methods of construction described in the Bidding Documents is accepted.

AE. “Base Bid” is the sum stated in the Bid for which the Bidder offers to perform the work described as the base, to which work may be added or deducted for sums stated in Alternate Bids and Unit Prices. The Base Bid does not include Force Account work and taxes.

AF. “Calendar Day” is the 24-hour period from midnight to midnight.

AG. “City” is the City of Tacoma.

AH. “Contracting Agency” (or City) is the City of Tacoma.
AI. “Contract Provisions” is the publication addressing the work required for an individual project. At the time of the call for bids, the Contract provisions may include, for a specific individual project, the general conditions, supplements to the general conditions, the special provisions, a listing of the applicable standard plans, the prevailing minimum hourly wage rates, Contract forms, affirmative action requirements, and LEAP.

AJ. “Engineer” is the City of Tacoma’s registered design professional who will act as the City’s authorized representative when so designated by the City.

AK. “Furnish” is used to mean supply and deliver to the project site, ready for unloading, unpacking, assembly, installation and other.

AL. “Holiday(s)” means the following calendar days: January 1st, 3rd Monday of January, 3rd Monday of February, last Monday of May, July 4th, 1st Monday of September, November 11th, 4th Thursday of November, 4th Friday of November, December 25th. If a holiday is on a Saturday, the previous Friday will be observed as a holiday. If the holiday is on a Sunday, the following Monday will be observed as a holiday.

AM. “Indicated” refers to graphic representations, notes or schedules on the drawings, or other paragraphs or schedules in the specifications, and similar requirements in the Contract Documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used, it is to help the reader locate the reference; no limit on location is intended.

AN. “Install” is used to describe operations at the project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

AO. “Installer” is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or Contractor of lower tier for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

AP. “Milestone” means a principal event specified in the Contract Documents relating to an intermediate completion date or time for a Phase prior to Substantial Completion of all Work. Milestones may be adjusted at the sole discretion of the Owner.

AQ. “Provide” means to furnish and install, complete and ready for intended use.

AR. “Project Site” is the space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown in the plans and may or may not be identical with the description of the land on which
the project is to be built.

AS. “Request for Information” is a request from the Contractor to the Owner seeking an interpretation or a clarification of some requirement of the Contract Documents.

AT. “Unit Price” is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Contract Documents.

AU. “Utility Owner” is used to describe a service, light, power, water, gas, and telecommunications by a public utility.

### 1.02 ORDER OF PRECEDENCE

Replace the entire Section 1.02 with the following City Supplemental Conditions:

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:

1. Signed Public Works Contract, including any Change Orders, and any Special Forms.
2. Addenda issued during the bidding period.
3. Washington State Department of Ecology Requirements
4. United States Environmental Protection Agency Requirements
5. City of Tacoma General Provisions
6. Supplemental Conditions as modified by the City of Tacoma.
8. Specifications – provisions in Division 1 shall take precedence over provisions of any other Division.
9. Drawings – in case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.
10. Construction Documents Appendices.
12. Special Notice to Bidders.
13. Advertisement for Bids.
15. Reference Documents.

### 1.03 EXECUTION AND INTENT

Replace Section 1.03.2 with the following City Supplemental Conditions:

2. Contractor familiar with project: Contractor has carefully reviewed the Contract Documents, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work,
services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;

Add the following paragraph to Section 1.03 of City Supplemental Conditions:

The intent of the Contract is to be prescribing a complete work. Omissions from the Contract of details of work, which are necessary to carry out the Contract, shall not relieve the Contractor from performing the omitted work.

1.04 SUBSTITUTIONS

Add the following new Section 1.04 to General Provisions:

A. Approved Equals

1. Unless an item is indicated as No substitute”, special brands, when named, are intended to describe the standard of quality, performance or use desired. Equal items will be considered by the City, provided that the respondent specifies the brand and model, and provides all the descriptive literature, independent test results, product samples, local servicing and parts availability to enable the City to evaluate the proposed “equal”.

2. The decision of the City as to what items are equal shall be final and conclusive. If the City elects to purchase a brand represented by the respondent to be an “equal”, the City’s acceptance of the item is conditioned on the City’s inspection and testing after receipt. If, in the sole judgement of the City, the item is determined not to be an equal, the item shall be returned at the respondent’s expense.

3. When the brand name, or level of quality is not stated by the respondent, it is understood the offer is exactly as specified. If more than one brand name is specified, respondent must clearly indicate the brand and model/part number being bid.

B. Substitution Requests Prior to Bid: Refer to Bid Submittal Package and Specification Section 01300, Product Requirements for allowable process for substitutions prior to the bid.

C. Substitution Requests made after Award of Contract: Requests for approval of substitute materials or products will not be considered, except if one or more of the following conditions exists.

1. Indicate one or more reasons why substitution is required with Substitution Request.

   a. Unavailability: A substitution is required because the specified item is not available, due to factors beyond the control of the Contractor or subcontractor. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the work promptly or coordinate activities properly.

   b. Unsuitability: Subsequent information or changes disclose inability of the specified item to perform as intended, and where the Contractor certifies that the proposed substitution will overcome such non-performance.
c. Regulatory Requirements: Final interpretations of Code, regulatory requirements, safety requirements, or insurance requirements necessitate a change to due inability of the specified item to conform, and the proposed substitution can be approved.
d. Warranty: Manufacturer or fabricator cannot certify or warrant performance of specified item as required, and where the Contractor certifies that the proposed substitution will provide the required warranty.
e. Owner's Benefit: Acceptance of the proposed substitution is clearly in the Owner's best interest because of cost, quality, or other consideration. In requesting a substitution under this clause, the Contractor shall furnish substantiation of any such reason.

2. During the construction period, Contractor will be notified in writing of decision to accept or reject the Substitution Request by the Owner. Permission to make any substitution after award of Contract shall be effected by a Change Order.

3. The Contractor shall accompany any request for substitution with such drawings, specifications, samples, manufacturer's literature, performance data, and other information necessary to describe and evaluate the proposed substitution completely as defined in Section 01300 of the Technical Specifications. The burden of proof shall be on the Contractor.

4. Redesign and Coordination: In making request for approval of substitute materials, the Contractor must represent that it has investigated the proposed product and, in its opinion, it is equal or equivalent in all respects to that specified. Also, Contractor will coordinate all trades including changes thereto as may be required, that it waives all claims for additional costs which subsequently.

1.05 REQUEST FOR INFORMATION

Add the following new Section 1.05 to General Provisions:

A. If the Contractor determines that some portion of the drawings, specifications or other Contract Documents require clarification or interpretation by the Owner because of an apparent error, inconsistency, omission, or lack of clarity in the Contract, the Contractor shall promptly submit a Request For Information ("RFI") and, unless otherwise directed, shall not proceed with the affected Work until the Owner has responded to the RFI. The Contractor shall plan its work in an efficient manner so as to allow for timely responses to RFIs.

B. RFIs shall only be submitted by the Contractor utilizing e-BUILDER as described in Section 01315. The Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed by the Owner. In the RFI the Contractor shall set forth its own interpretation or
understanding of the requirement along with reasons why it reached such an understanding and any adjustments recommended to proceed with the Work.

C. The Owner will review RFIs to determine whether they meet the requirements identified above in paragraph B to qualify as an RFI. If the Owner determines that the document is not an RFI it will be returned to the Contractor unreviewed as to content. When appropriate the Contractor may resubmit the RFI, with all required information and in the proper manner.

D. The Owner shall respond in writing within five (5) calendar days to Contractor’s RFI.

1. At the request of the Owner, the Contractor shall prioritize its RFIs, identify a date by which the Contractor prefers the RFI be answered, and reasons for such priority.

2. If the Contractor submits a RFI on an activity less than fourteen (14) days prior to the commencement of that activity, the Contractor shall not be entitled to any time extension or adjustment in Contract Price due to the time it takes the Owner to respond to the RFI provided that the Owner responds within five (5) days. No delay to the Contractor’s work or damages to the Contractor shall be attributable to the failure by the Owner to respond to the RFI until five (5) days after the Owner’s receipt of the RFI, and then only if the failure by the Owner to respond is unreasonable and affects the Contract completion date.

E. The Owner’s response to a RFI shall not be considered a change to the Contract requirements. To the extent the Contractor believes that the Owner’s response to the RFI constitutes changed work impacting Contract Price or Contract Time, the Contractor shall submit a Contractor’s Change Order Proposal.

1.06 DISQUALIFICATION OF BIDDERS

Add the following new Section 1.06 to City Supplemental Conditions:

A. A bidder may be deemed not responsible and the proposal rejected by the City for any of the following:

1. More than one proposal is submitted for the same project from a bidder under the same or different name;

2. Evidence of collusion exists with any other bidder. Participants in collusion will be restricted from submitting further bids;

3. A bidder is not pre-qualified for the work or to the full extent of the bid;

4. An unsatisfactory performance record exists based on past or current work;
1.07 AWARD OF CONTRACT
Add the following new Section 1.07 to City Supplemental Conditions:

A. The Owner reserves the right to Award, in any order or combination, such Additives, Deductives, or Alternates, as may be set forth in the Bid Forms.

1.08 MINIMUM EXPERIENCE REQUIREMENTS
Add the following new Section 1.08 to City Supplemental Conditions:

A. The Bidder shall submit if required as part of its bid submittal package the necessary information on the Statement of Qualifications Form for the Leach Creek Stormwater Holding Basin Modifications to demonstrate compliance with the minimum experience requirements. The City reserves the right to request clarifying or additional information.

B. The Statement of Qualifications Form for the Leach Creek Stormwater Holding Basin Modifications shall be completed in its entirety and submitted with the bid submittal package. Failure to submit and meet the requirements shall be grounds for rejection of the bid. The City of Tacoma shall be the sole judge in determining if the prospective bidder meets the minimum experience requirements.

1.09 UTILITY COORDINATION
Add the following new Section 1.09 to City Supplemental Conditions:

A. The Contractor shall coordinate his/her work with all utilities and other organizations, which have their facilities within the project area. A Utility coordination meeting with all the utility organization shall be
coordinated. These may include but are not limited to

B. The Contractor is responsible for location of private underground utilities within the private property which are not maintained by an outside utility company, and which are not located through the One Call Locators Service.

   1. The Contractor shall provide and pay for private locator service to locate private utilities.

1.10 TRAFFIC CONTROL
Add the following new Section 1.10 to City Supplemental Conditions:

A. All road closures, obstructions, or detours will require approval by the Owner. The Contractor must submit a written request 24-hours in advance of any planned work that will impact a roadway. There is no guarantee that such request will be granted.

B. The design, construction, and maintenance of all detours, including traffic control, traffic control signage, and ADA access and pedestrian access is the sole responsibility of the Contractor. This includes detours both outside the limits of the project and within the limits of the project.

C. For any road closures, obstructions, or detours, the Contractor shall submit a traffic control plan for approval by the Owner. The detour plan shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), state standard specifications, and these specifications.

PART 2 INSURANCE AND BONDS

2.01 CONTRACTOR’S LIABILITY INSURANCE
Delete this section and replace with the following:

Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part V of the Contract Documents.

Owner as Additional Insured: All insurance coverages shall be endorsed to include the Owner and A/E as an additional insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner and A/E as an additional insured.

2.02 COVERAGE LIMITS
Delete this section and replace with the following:

Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part V of the Contract Documents.

2.03 INSURANCE COVERAGE CERTIFICATES
Delete this section and replace with the following:
Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part V of the Contract Documents.

2.04 PAYMENT AND PERFORMANCE BONDS

Replace the entire Section 2.04 with the following:

A Payment and a Performance Bond shall be obtained by the Contractor utilizing the forms entitled “Payment Bond to the City of Tacoma” and “Performance Bond to the City of Tacoma” as found at the front of the Contract Documents under Part I Bid Proposal and Contract Forms. Contractor shall provide a Payment and a Performance Bond, including power of attorney, for 100 percent of the amount of the Bid (including sales tax) per RCW 39.08, securing performance of work; all Contract obligations; materials, and payment of laborers, manufacturers, and subcontractors. Contractor shall include in its bid the bond costs required to complete the base work, accepted alternates, and sales tax.

In the event that the Contractor intends to have a subcontractor perform all or a portion of the project, the Contractor should consider requiring its own performance bond from the subcontractor to guarantee successful performance of this project component.

2.05 ADDITIONAL BOND SECURITY

Add Section 2.05 with the following City Supplemental Conditions:

The Contract amount is increased by 20% or more.

2.06 BUILDER’S RISK

Replace Article A of Section 2.06 with the following:

A. Installation Floater Insurance: Contractor shall obtain all insurance policies, coverages, and terms included in the City of Tacoma Insurance Requirements in Part V of the Contract Documents.

Delete Articles B and C.

PART 3 TIME AND SCHEDULE

3.01 PROGRESS AND COMPLETION

Add the following Articles to Sections 3.01 of Time and Schedule

A. Contract Time for this project shall be 90 Calendar Days following the issuance of the Notice To Proceed.

B. Time for Physical Completion shall be 7 Calendar Days following the issuance of Substantial Completion.

C. All preliminary Shop Drawings shall be submitted within 7 Calendar Days following the issuance of the Notice To Proceed.

3.02 CONSTRUCTION SCHEDULE

Replace Article C Section 3.02 with the following City Supplemental Conditions:
A. **Owner comments on Progress Schedule:** Owner shall return comments on the preliminary Progress Schedule to Contractor within 7 Days of receipt. Review by Owner of Contractor’s schedule does not constitute an approval or acceptance of Contractor’s construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this section.

*Replace Section 3.02.D with the following City Supplemental Conditions:*

B. Submit a revised Progress Schedule that includes a three (3) week ahead scheduled work with each pay application, or as directed by the City, indicating but not limited to:

1. Actual starts and finishes of activities and changes in slack or float, lags and leads for each item;
2. Percent complete;
3. Changes in network logic.

Content of each revised Progress Schedule shall be the same information required in Section 3.02.B above.

1. Problem areas; anticipated delay; and impact of these on Schedule.
2. Report corrective action taken, or proposed, and its effect.
3. Should actual progress fall more than one (1) week behind the progress identified in the Target Schedule, the Contractor shall explain the cause and will take the necessary steps to alter the construction schedule to comply with the Contract Completion date.

Payment will not be made until Progress Schedule revisions are up to date and accurate.

### 3.05 DELAY

*Replace the entire Section 3.05 with the following City Supplemental Conditions:*

A. **Avoidable delays in the prosecution or completion of the Work** shall include all delays that might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of the Contractor. Avoidable delays may include, but are not limited to:

1. Reasonable loss of time resulting from the necessity of submitting drawings to the City for acceptance,
2. Collecting survey/field/analytical information,
3. Site management and coordination,
4. Measurements and inspections,
5. Subcontractor management, and
6. Such interruptions as may occur in the prosecution of the Work on account of the reasonable interference of other Contractors employed by the City, these delays, which may interrupt the prosecution of parts of the Work, while at the time
may be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the Work, or prevent the completion of the whole Work within the time herein specified, will be deemed avoidable within the meaning of this Contract.

B. Unavoidable delays in the prosecution of completion of the Work under this Contract shall include all delays which may result through causes beyond the control of the Contractor, and which he could not have provided against by the exercise of care, prudence, foresight, or diligence. Unavoidable delays shall hereinafter be referred to as "Force Majeure".

Force Majeure includes, but is not limited to:
1. Acts of God or the public enemy;
2. Acts or omissions of any government entity;
3. Fire or other casualty for which Contractor is not responsible;
4. Quarantine or epidemic;
5. Strike or defensive lockout;
6. Orders issued by the Owner, changing the amount of Work to be accomplished in excess of 25% per single change.
7. Failure of the Owner to provide rights-of-entry.

These delays shall be considered unavoidable so far as they necessarily interfere with the Contractor's completion of the whole Work.

C. Whenever the Contractor foresees any delay in the prosecution of the Work, and in any event immediately upon the occurrence of any such delay, the Contractor shall submit a written notice to the City as provided in Section 7.02 of the General Conditions. The City may determine whether the delay is to be considered avoidable or unavoidable ("Force Majeure"), how long it continues, and to what extent the prosecution and completion of the Work are to be delayed thereby.

Contractor may be entitled to an equitable adjustment in the Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of City, provided the Contractor makes a request according to sections 7.02 and 7.03.

After the completion of any part or the whole of the Work, the City, in approving the amount due the Contractor, will assume that any and all delays which have occurred in its prosecution and completion have been avoidable, except such delays as shall have been called to the attention of the City in writing as per Section 7.02 at the time of their occurrence, and later found by the City to have been unavoidable. The Contractor shall make no claims that any delay not called to the attention of the City, in writing, at the time of its occurrence has been an unavoidable delay ("Force Majeure").

D. For delays which are unavoidable ("Force Majeure"), as determined
by the City, an extension of time beyond the time specified for completion will be allowed, within which to complete the Contract. The Contractor will not be charged, because of any extension of time for such unavoidable delay, any liquidated damages or engineering and related costs, as are charged in the case of avoidable delays. Contractors overhead cost associated with “Force Majeure” are excluded from equitable adjustment.

E. If the Work called for under this Contract is not finished and completed by the Contractor, in all parts and in accordance with all requirements in the time specified, including extensions of time granted because of an unavoidable delay; the Contractor will be charged liquidated damages, or direct engineering and related costs as provided for in the Standard Specifications.

In addition, the City shall charge to the Contractor, and may deduct from the [mal payment for the Work, all engineering and related costs incurred by the City in connection with the Work during the period of such extension or extensions. The City shall make the final determination as to the appropriateness of charges required to complete the Work.

F. The granting of any extension of time on account of delays, which in the judgment of the City are avoidable delays, shall in no way operate as a waiver on the part of the City of its rights under this Contract.

3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION
Add Section 3.07.A to City Supplemental Conditions:

A. Time is of the essence on the Contract. Delays inconvenience the City’s daily operation and add undue time and cost required for administration, engineering, inspections, and supervision. Accordingly, the Contractor agrees:

1. To Pay (according to the following formula) liquidated damages for each calendar day beyond the number of days established for milestone or substantial completion, and

2. To authorize the City to deduct these liquidated damages from any money due or coming due to the Contractor.

LIQUIDATED DAMAGES FORMULA $LD = \frac{0.20C}{T}$

Where:

- $LD = \text{liquidated damages per calendar day (rounded to nearest dollar)}$
- $C = \text{original contract amount for Work Order}$
- $T = \text{original time for milestone or substantial completion}$

B. When the contract work has progressed to the extent that the City has full use and benefit of the facilities, both from the operational and safety
standpoint, and only minor incidental work, replacement of temporary substitute facilities, or correction or repair remains to physically complete of the total contract, the City may determine the work is substantially complete. The City will notify the Contractor in writing of the substantial completion date. For overruns in contract time occurring after the date so established, the formula for liquidated damages as shown above will not apply. For overruns in contract time occurring after the substantial completion date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until actual final completion date of all the contract work. The Contractor shall complete the remaining work as promptly as possible.

3.08 SUSPENSION OF WORK
Add Section 3.08 to City Supplemental Conditions:

A. The City may order suspension of all or any part of the work if:
   1. The Contractor does not comply with the contract or the City's orders.

B. When ordered by the City to suspend or resume work, the Contractor shall do so immediately.

C. If the work is suspended for reason (1) above, the period of work stoppage will be counted as calendar days maintaining the original contract completion requirement. The lost work time, however, shall not relieve the Contractor from any Contract responsibility.

D. If the work is suspended for reason (2) above, the period of work stoppage will be counted as working days. The lost work time, however, shall not relieve the Contractor from any contract responsibility.

E. If the performance of all or any part of the work is suspended, delayed, or interrupted for an unreasonable period of time by an act of the Contracting Agency in the administration of the Contract, or by failure to act within the time specified in the Contract (or if no time is specified), the City will make an adjustment for any increase in the cost or time for the performance of the Contract (excluding profit, overhead, home office expense, supervisory personnel labor not specifically assigned to the project) necessarily caused by the suspension, delay, or interruption. However, no adjustment will be made for any suspension, delay, or interruption if (1) the performance would have been suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or (2) an equitable adjustment is provided for or excluded under any other provision of the Contract.

F. If the Contractor believes that the performance of the work is suspended, delayed, or interrupted for an unreasonable period of time and such suspension, delay, or interruption is the responsibility of the Contracting Agency, the Contractor shall immediately submit a written request for equitable adjustment to the Engineer as provided in Section 7.02. No
adjustment shall be allowed for any costs incurred more than 7 calendar days before the date the Engineer receives the Contractor’s written request for equitable adjustment. If the Contractor contends damages have been suffered as a result of such suspension, delay, or interruption, the protest shall not be allowed unless the request for equitable adjustment (stating the amount of damages) is asserted in writing within 14 calendar days of end of the delay. The Contractor shall keep full and complete records of the costs and additional time of such suspension, delay, or interruption and shall permit the Engineer to have access to those records and any other records as may be deemed necessary by the Engineer to assist in evaluating the protest.

G. The City will determine if an equitable adjustment in cost or time is due as provided in this section. The equitable adjustment for increase in costs, if due, shall be subject to the limitations provided in Section 7.02, provided that no profit of any kind will be allowed on any increase in cost necessarily caused by the suspension, delay, or interruption.

H. Request for extensions of time will be evaluated in accordance with Section 7.03.

I. No claim by the Contractor under this clause shall be allowed unless the Contractor has followed the procedures provided in this Section and Sections 7.02 and 7.03.

J. Contractor shall notify surety of all claims and provide evidence to Owner that surety has been advised.

3.09 MAINTENANCE DURING SUSPENSION
Add Section 3.09 with City Supplemental Conditions:

A. Before and during any suspension (as described in Section 3.08) the Contractor shall protect the work from damage or deterioration. Suspension shall not relieve the Contractor from anything the Contract requires unless this section states otherwise.

B. After any suspension, the Contractor shall retain all responsibilities the Contract assigns for repairing or restoring the construction area to the requirement of the plans.

3.10 EXECUTION OF CONTRACT – SCHEDULE
Add Section 3.10 to City Supplemental Conditions:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 5 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification and a satisfactory bond as required.
Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within 5 calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 2 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

PART 4 SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.03 SHOP DRAWINGS
Replace Section 4.03.E with City Supplemental Conditions:

E. Contractor to submit Shop Drawings electronically: Unless otherwise provided in Division 1, Contractor shall submit to Owner for approval Shop Drawings electronically through e-Builder.

Add Section 4.03.F with City Supplemental Conditions:

F. The Contractor shall submit a submittal schedule with dates for Shop Drawings within 7 Calendar Days of issuance of Notice To Proceed.

4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS
Add Section 4.05.E with City Supplemental Conditions:

E. The Contractor may pick up, at their own cost, additional plans and specifications from ARC located at 632 Broadway, Tacoma, Washington 98402 or by going to http://www.nwcontractorsnetwork.com.

PART 5 PERFORMANCE

5.02 PERMITS, FEES AND NOTICES
Add Section 5.02.A with City Supplemental Conditions:

A. The actual cost of the general building permit shall be paid directly to the permitting agency by the City.

5.04 PREVAILING WAGES
Add Section 5.04.H with City Supplemental Conditions:

H. Copies of approved Intents to Pay Prevailing Wages for the Contractor and all subcontractors shall be submitted with the Contractor’s first application for payment. As additional subcontractors perform work on the project, their approved Intent forms shall be submitted with the
Contractor’s next application for payment.

1. The Contractor and all subcontractors shall promptly submit to the City certified payroll copies if requested, with the second pay application.

2. The City of Tacoma reserves the right to withhold payment if the Contractor does not provide copies of Certified Payroll with each application of payment.

5.07 SAFETY PRECAUTIONS

Replace Section 5.07.A with City Supplemental Conditions:

A. In performing this Contract, the Contractor shall provide for protecting the lives and health of employees and other persons; preventing damage to property, materials, supplies, and equipment; and avoid work interruptions. For these purposes, the Contractor shall:

Follow Washington Industrial Safety and Health Act (WISHA) regional directives and provide a site-specific safety program that will require an accident prevention and hazard analysis plan for the Contractor and each subcontractor on the work site. The Contractor shall submit a site-specific safety plan to the City’s representative prior to the initial scheduled construction meeting.

a. Provide adequate safety devices and measures including, but not limited to, the appropriate safety literature, notice, training, permits, placement and use of barricades, signs, signal lights, ladders, scaffolding, staging, runways, hoist, construction elevators, shoring, temporary lighting, grounded outlets, wiring, hazardous materials, vehicles, construction processes, and equipment required by Chapter 19.27 RCW, State Building Code (Uniform Building, Electrical, Mechanical, Fire, and Plumbing Codes); Chapter 212-12 WAC, Fire Marshal Standards, Chapter 49.17 RCW, WISHA; Chapter 296-155 WAC, Safety Standards for Construction Work; Chapter 296-65 WAC; WISHA Asbestos Standard; WAC 296-62-071, Respirator Standard; WAC 296-62, General Occupation Health Standards, WAC 296-24, General Safety and Health Standards, WAC 296-24, General Safety and Health Standards, Chapter 49.70 RCW, and Right to Know Act.

b. Comply with the State Environmental Policy Act (SEPA), Clean Air Act, Shoreline Management Act, and other applicable federal, state, and local statutes and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources.

c. Post all permits, notices, and/or approvals in a conspicuous location at the construction site.

d. Provide any additional measures that the City determines to be reasonable and necessary for ensuring a safe environment in areas open to the public. Nothing in this part shall be construed as
imposing a duty upon the City or A/E to prescribe safety conditions relating to employees, public, or agents of the Contractors.

e. All construction personnel shall wear highly visible reflective vests and hardhats while on the Leach Creek Stormwater Holding Basin property.

5.10 UNFORESEEN PHYSICAL CONDITIONS
Replace Section 5.10.A with City Supplemental Conditions:

A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 1 Day after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.

5.15 TESTS AND INSPECTION
Replace Section 5.15.A and 5.15.B with City Supplemental Conditions:

A. The City will enlist and pay for the services of a qualified testing agency to provide quality control, third party testing, and special inspection services as stated specifically in Division 01 and Technical Specifications of the Project Specifications. All other testing or inspecting shall be by Contractor’s 3rd Party Agency and paid for by Contractor.

B. Tests and Inspections shall include the following minimum requirements:
   1. Preparatory Inspection (pre-installation meetings): This shall be performed prior to beginning any work and shall include:
      a. A review of applicable specifications;
      b. A review of the Contract plans;
      c. A check to assure that all materials and/or equipment have been tested, submitted and approved;
      d. A check to assure that provisions have been made to provide control inspection and testing;
      e. Examination of the work area to assure that all required preliminary work has been completed and is in Contract compliance;
      f. A physical examination of required materials, equipment and sample work to assure that they conform to approved shop drawings or submitted data and are properly stored;
      g. Discussion of procedures for constructing the work, including repetitive deficiencies, construction tolerances and workmanship standards specified in the documents.
   2. Initial Inspection: This shall be performed as soon as work begins on
a definable feature of work and the following shall be accomplished:
a. A check of preliminary work to ensure that it is in Contract compliance and review of the preparatory meeting minutes;
b. Verification of full Contract compliance and verify that required control inspection and testing is underway;
c. Establish level of workmanship, verify that it meets minimum acceptable workmanship standards, and compare work with sample panels, etc., as appropriate;
d. Resolve all differences;
e. This inspection phase shall be repeated for each new crew on site performing the work, or any time standards are not being met.

3. Follow-Up Inspections: These follow up inspections shall be performed daily to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The City or City’s representative may require joint Contractor inspections at any time and on a periodic basis to evaluate the effectiveness of the quality control system.

4. Tests: All operation and acceptance tests, where specified, are to be performed to verify control measures are adequate.
a. Costs for re-testing work that was previously tested but did not meet the requirements for the work shall be the responsibility of the Contractor.

5.20 SUBCONTRACTORS AND SUPPLIERS

Replace Section 5.20.B with City Supplemental Conditions:

B. The Contractor shall submit the Request for Sublet Form provided by the City of Tacoma for every subcontractor used on the project prior to construction. Contractor shall not utilize any subcontractor or manufacturer to whom the City has a reasonable objection, and shall obtain City’s written consent before making any substitutions or additions.


F. The LEAP and EIC Programs have been adopted by the City to counteract economic and social ills, which accompany high rates of unemployment within the City of Tacoma.

1. The Tacoma City Council established the LEAP Program for Public Works Contracts pursuant to City of Tacoma Ordinance No. 26301. The primary goal for this program is to provide an opportunity for City of Tacoma and Empowerment Zone/Enterprise Community residents to acquire skills, enter Apprenticeship Programs, and perform work that provides living wages.

2. The Tacoma City Council established the EIC Program for Public Works Contracts pursuant to City of Tacoma Ordinance No. 28625. The primary goal for this program is to ensure equitable participation of historically under-utilized business enterprises, by establishing
goals for their utilization in public Contracting.

G. The Contractor shall not subcontract work unless the City approves in writing. Each request to subcontract shall be on the form the City provides. The subcontractor shall be a licensed State of Washington Contractor and shall have a valid City of Tacoma business license. If the City requests, the Contractor shall provide proof that the subcontractor has the experience, ability, and equipment the work requires. The City will approve the request only if satisfied with the proposed subcontractor’s record, equipment, experience, and ability. Approval to subcontract shall not:

a. Relieve the Contractor of any responsibility to carry out the Contract;

b. Relieve the Contractor of any obligations or liability under the Contract and the Contractor’s bond;

c. Create any Contract between the Contracting Agency and the subcontractor; or

d. Convey to the subcontractor any rights against the Contracting Agency.

H. The Contracting Agency will not consider the following as subcontracting:

a. Purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any other materials supplied by established and recognized commercial plants.

I. If City determines that any subcontractor is performing services in an unsatisfactory manner or is not completing the Work in accordance with the requirements of the Contract Documents or is otherwise undesirable or unacceptable, City will by written notice so notify Contractor. Contractor shall then take immediate steps to rectify and correct the situation. If City and Contractor mutually agree such actions are ineffective or infeasible, Contractor shall terminate such subcontractor. Subcontracting by subcontractors will be subject to the same regulations.

5.21 WARRANTY OF CONSTRUCTION
Add Section 5.21.D with City Supplemental Conditions:

D. Warranties shall commence upon issuance of Substantial Completion.

5.23 ADJACENT PROPERTIES AND FACILITIES
Add Section 5.23 with City Supplemental Conditions:

A. Contractor shall be responsible for negotiations of any waivers or alternate arrangements required to enable transportation of materials to the site at the Contractors expense. The Contractor shall provide City with any written agreements as a matter of record only.
B. Maintain conditions of access road to site such that access is not hindered as the result of construction related deterioration.

PART 6 PAYMENTS AND COMPLETION

6.02 SCHEDULE OF VALUES

Add Section 6.02 with City Supplemental Conditions:

Subcontracted Work shall be paid to the Contractor on the basis of Contractor's actual cost of amounts properly paid to such subcontractors. A Schedule of Values shall be submitted for the Work of each subcontractor, as well as suppliers providing materials in excess of $2,500.00. The total for all progress payments shall not exceed the Contract Sum, as may be adjusted by Change Orders. The General Contractor shall provide a schedule of values for Lump Sum bid items for review and acceptance.

The General Contractor shall be required to submit signed lien waivers by Corporate Office for all parties. The General Contractor shall submit the anticipated cash flow for the project and update monthly.

6.03 APPLICATION FOR PAYMENT

Replace Article B in Section 6.03 with the following City provision:

B. Contractor certifies Subcontractors paid: By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment. Contractor shall submit application for payment on AIA form G702/G703, with modifications made for payment certification. Payment shall be certified by a corporate officer of the Contractor.

Replace Article D in Section 6.03 with the following City provision:

D. Payment for material delivered to site or stored off-site: If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. No payment will be made for material stored at an alternate location. The Contractor shall comply with or furnish satisfactory evidence of the following:

Delete items 1 through 8 of Article D of Section 6.03 of Payments and Completion and replace with the following:

1. Contractor assumes total responsibility for stored materials: Contractor and its surety assume total responsibility for the stored materials; and
2. Title: Title to all Work and materials covered by an accepted and paid Application For Payment shall pass to the Owner at the time of such payment, free and clear of all liens, claims, security interest, and encumbrances. Passage of title shall not, however, (1) relieve Contractor from any of its duties and responsibilities for the Work or materials, (2) waive any rights of the Owner to insist on full compliance by Contractor with the Contract requirements, or (3) constitute acceptance of the Work or materials

6.04 PROGRESS PAYMENTS
Add Section 6.04.E with City Supplemental Conditions:

E. Taxes.

Unless otherwise required in this Specification, applicable federal, state, city and local taxes shall be included in the submittal as indicated below. The total cost to the City, including all applicable taxes, may be the basis for Contract award determination. As used herein, the term "taxes" shall include any and all taxes, assessments, fees, charges, interest, penalties, and/or fines imposed by applicable laws and regulations in connection with the procurement of goods and/or services hereunder.

1. Federal Excise Tax
The City of Tacoma is exempt from federal excise tax. The City will furnish a Federal Excise Tax Exemption certificate, if required. If the Respondent fails to include applicable tax in its submittal, then Respondent shall be solely responsible for the payment of said tax.

2. State and Local Sales Tax
The City of Tacoma is subject to Washington state sales tax. It is the Respondent's obligation to state the correct sales tax percentage and include the applicable Washington state, city, and local sales tax as a separate line item(s) in the submittal.

3. City of Tacoma Business and Occupation Tax
It is the Respondent's obligation to include City of Tacoma Business and Occupation tax in the unit and/or lump sum prices submitted; it shall not be shown separately on the submittal.
Per Sub-Title 6A of the City of Tacoma Municipal Code, transactions with the City of Tacoma may be subject to the City's Business and Occupation Tax.

It is the responsibility of the Respondent awarded the Contract to register with the City of Tacoma's Tax and License Division, 733 South Market Street, Room 21, Tacoma, WA 98402-3768, telephone (253) 591-5252, website http://www.cityoftacoma.org/Page.aspx?nid+201.

4. Any or All Other Taxes
Any or all other taxes are the responsibility of the Respondent unless otherwise required by law.
6.07  **SUBSTANTIAL COMPLETION**

*Add Section 6.07.A with City Supplemental Conditions:*

A. The prerequisites for issuance of a Certificate of Substantial Completion by the City are as follows:

1. Submit the final progress payment showing 100% completion for the work being claimed as substantially complete. List any incomplete items of work along with their value and an explanation of why the work is incomplete.
2. Coordinate with the City for changeover of all insurance coverage.
3. Submit all warranties, guarantees, maintenance agreements, and workmanship/warranty bonds as required by the Contract Documents.
4. Deliver all tools, spare parts, “Attic Stock” and other deliverables to the City as required by the Contract Documents.
5. Submit Record Drawings as required by the Contract Documents.
6. Perform all work as required to obtain a Certificate of Occupancy.
7. Punch List Procedures
   i. Prior to Substantial Completion (approximately 10 working days) Contractor provide its own initial Punch List (List of Deficiencies) for the Owner’s review. Owner and Engineer on Record shall review and make edits as they deem appropriate. The List of Deficiencies will be sent back to the Contractor for the Contractor to perform the work. The Contractor must complete the work in a satisfactorily manner before the Owner will accept.

6.09  **FINAL COMPLETION, ACCEPTANCE, AND PAYMENT**

*Add Section 6.09.A with City Supplemental Conditions:*

A. Final Completion shall be the same as Physical Completion.

*Add Section 6.09.D with City Supplemental Conditions:*

D. Prerequisites for Final Acceptance

1. Obtain the City’s written approval that all items on the List of Deficiencies as prepared by the Contractor have been completed.
2. Submit consent of Surety. Provide the standard form of the surety company or submit consent using the AIA Document G-707 form.
3. Submit all Record Drawings and Record Specifications.
4. Complete final clean up and repair of items damaged during construction.
5. Reinsertion Procedure
   i. Upon receipt of the Contractor’s Notice that work on the List of Deficiencies has been completed, the City will visit the site to determine if the work has progressed to an acceptable level of quality justifying a final inspection. If Contractors work is acceptable and complete the Owner shall issue written acceptance of corrections so stated on List of Deficiencies.

PART 7 CHANGES

7.01 CHANGE IN THE WORK

Replace Section 7.01.B with City Supplemental Conditions:

B. If City desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor shall submit a Change Order proposal within 7 days of the request from City, or within such other period as mutually agreed. Contractor's Change Order proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.

Replace Section 7.01.E with City Supplemental Conditions:

E. Failure to agree upon terms of Change Order; Final offer and Claims: If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 14 Days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in Part 8.

Add Section 7.01.G with City Supplemental Conditions:

G. Change Order Documentation

1. A log will be maintained by the Contractor subject to review and comment by Owner for each of the documents identified in this section leading up to issuances of Change Order. These logs will record transmittals, suspense dates, review stopovers, dates of actions, and other specific pertinent information to track the progress of the subject documents. The Owner reserves the right to dispute any and all entries to which the Contractor shall include in said log.
2. The City reserves the right to include and exclude as many Requests for Proposals and or Change Order Proposals into one Change Order as the City determines is in its best interest.

7.02 CHANGE IN THE CONTRACT SUM

*Replace Section 7.02.A.2(b) and (c) with City Supplemental Conditions:*

(b) Content of notice for equitable adjustment; Failure to comply: Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 2 Days before Contractor’s written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

(c) Contractor to provide supplemental information: Within 3 Days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with Section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

*Replace Section 7.02.B.4 with City Supplemental Condition:*

4. Markups on additive and deductive Work: The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work unless deductive change exceeds $10,000. Where a change in the Work involves additive or deductive Work by
the same Contractor or Subcontractor, small tools, overhead, profit, bond and insurance markups will apply to the net difference.

Replace Section 7.02.B.7.a(1) with City Supplemental Conditions:

1. Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved “statement of intent to pay prevailing wages” or a higher amount if approved by the City only if supported by certified payrolls. Direct supervision shall be a reasonable percentage not to exceed 10% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor’s hours.

Delete Section 7.02.B.7.a(4) in its entirety.

Replace Section 7.02.B.7.d with City Supplemental Conditions:

d. Allowance for small tools, expendables & consumable supplies: Small tools consist of tools which cost $250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:
1. 1% for Contractor: For Contractor, 1% of direct labor costs.
2. 2% for Subcontractors: For Subcontractor, 2% if direct labor costs.

Expendables and consumables supplies directly associated with the change in Work must be itemized.

Replace Section 7.02.B.7.f(1)(a) with City Supplemental Conditions, Projects less than $3 million:

a. Contractor markup on Contractor Work for Overhead: For Contractor, for any Work actually performed by Contractor’s own forces, 10% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

Replace Section 7.02.B.7.f(1)(b) with City Supplemental Conditions, Projects less than $3 million:

b. Subcontractor markup for Subcontractor Work for Overhead: For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% of the first $50,000 of the cost, and 4% of the remaining cost, if any.

Replace Section 7.02.B.7.f(1)(c) with City Supplemental Conditions, Projects less than $3 million:

c. Contractor markup for Subcontractor Work: For Contractor, for anywork performed by its Subcontractor(s) 6% of the first
$50,000 of the amount due each Subcontractor, and 4% of the remaining amount, if any.

Replace Section 7.02.B.7.f(1)(d) with City Supplemental Conditions, Projects less than $3 million:

d. Subcontractor markup for lower tier Subcontractor Work: For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first $50,000 of the amount due the sub- Subcontractor, and 2% of the remaining amount if any.

Replace Section 7.02.B.7.f(1)(e) with City Supplemental Conditions, Projects less than $3 million:

e. Basis of cost applicable for markup: The cost to which overhead is to be applied shall be developed in accordance with Section 7.02B 7a.–e.

Replace Section 7.02.B.7.g(1) with City Supplemental Conditions:

1. Contractor / Subcontractor markup for self-performed Work for Profit: For Contractor or Subcontractor of any tier for work performed by their forces, 5% of the cost developed in accordance with Section 7.02B 7a.–e.

Replace Section 7.02.B.7.g(2) with City Supplemental Conditions:

2. Contractor / Subcontractor markup for Work performed at lower tier for Profit: For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 5% of the subcontract cost developed in accordance with Section 7.02.B.7.a–h.

Replace Section 7.02.B.7.h(1) with City Supplemental Conditions:

1. Contractor’s liability insurance: The cost of any changes in Contractor’s liability insurance arising directly from execution of the Change Order shall not exceed 1%; and

Replace Section 7.02.B.7.h(2) with City Supplemental Conditions:

2. Payment and Performance Bond: The cost of the additional premium for Contractor’s bond arising directly from the changed Work shall not exceed 1.5%.

Add Section 7.02C, with City Supplemental Conditions:
All mark-ups per Section 7.02.B.7.f

Add Section 7.02.D.4 with City Supplemental Conditions:

4. Subcontractor and sub-subcontractor proposals to the Contractor for time and material Work shall include all direct costs plus overhead, profit, taxes, bond, and insurance costs, calculated as provided in Section 7.02B.

7.03 CHANGE IN THE CONTRACT TIME
Replace Section 7.03.B.2 with City Supplemental Conditions:

2. Timing and content of Contractor’s Notice: Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 2 Days before Contractor’s written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner’s interests are prejudiced, constitute a waiver of Contractor’s right to an equitable adjustment.

Replace Section 7.03.B.3 with City Supplemental Conditions:

3. Contractor to provide supplemental information: Within 3 days of the occurrence of the event giving rise to the request, unless city agrees in writing to allow an additional period of time to ascertain more accurate data, contractor shall supplement the written notice provided in accordance with subparagraph 7.03.B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the contract documents provide entitlement to an equitable adjustment in contract time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by City. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent city’s interests are prejudiced, constitute a waiver of contractor’s right to an equitable adjustment.

Replace Section 7.03.D.4.a with City Supplemental Conditions:

a. Non-productive supervision or labor: cost of Contractor and its crews specifically assigned to the project.

Home office cost is not allowed.

Delete section 7.03.D.4.b in its entirety.
Replace Section 7.03.D.4.c with City Supplemental Conditions:

c. Temporary facilities or equipment rental: cost of temporary facilities or equipment rental extended because of the delay, at invoiced cost, no mark-ups allowed.

Replace Section 7.03.D.4.d with City Supplemental Conditions:

d. Insurance premiums: cost of insurance by invoice extended because of the delay

Replace Section 7.03.D.e with City Supplemental Conditions:

e. Overhead: general and administrative overhead in an amount to be agreed upon, but not to exceed 1% of the Contract Award Amount divided by the originally specified Contract Time for each Day of the delay.

Add Section 7.03.E with City Supplemental Conditions:

E. Notwithstanding any other provision of the Contract Documents, no claim by the Contractor for an equitable adjustment hereunder will be allowed if not asserted within seven (7) days of discovery.

7.04 DELETED OR TERMINATED WORK

Add the following new Section 7.04 with City Supplemental Conditions:

A. If the Agreement is terminated for convenience in accordance with Section 9.02, or as modified or if any item of Work is deleted in whole or in part, payment will be made for partially completed items mutually agreed or as determined by the City in the proportion that the partially completed Work is to the total item. No claim for damages of any kind or for loss of anticipated profits on deleted or uncompleted work will be allowed because of the termination or deductive Change Order.

B. If the Agreement is terminated for convenience or parts of the Work are deleted, the Contract Time shall be adjusted as the Parties agree. If the Parties cannot agree, the City shall determine the equitable adjustment for Contract Time.

C. Acceptable materials ordered by the Contractor or delivered on the Work prior to the date the Work was terminated or deleted by the City, will either be purchased from the Contractor by the City at the actual cost and shall become the property of the City, or the City will reimburse the Contractor for the actual costs connected with returning these materials to the Manufacturers.

D. If Agreement is terminated prior to the Notice to Proceed, no cost will be incurred by either party.
PART 8 CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS PROCEDURE

Replace Section 8.01.B with City Supplemental Conditions:

B. Claim filing deadline for Contractor: Contractor shall file its Claim within 15 days from Owner’s final offer made in accordance with paragraph 7.01E, or by the date of Substantial Completion, whichever occurs first.

Replace Section 8.01.C.6 with City Supplemental Conditions:

1. Copies of supporting documentation: Copies of any identified documents, inclusive of the Contract Documents, that support the Claim;

Replace Section 8.01.D.1 and 8.01.D.2 with City Supplemental Conditions:

1. Response time for Claim less than $50,000: If the Claim amount is less than $50,000, with a decision within 30 Days from the date the Claim is received; or

2. Response time for Claims of $50,000 or more: If the Claim amount is $50,000 or more, with a decision within 45 Days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. City will then respond with a written decision in such additional time.

Add the following Section 8.01.G with City Supplemental Conditions:

G. Contractor shall fully investigate its subcontractor’s claims and process said claim(s) as Contractor’s Claim. Any and all claims which do not meet notification requirements shall be considered null and void.

8.02 ARBITRATION

Replace Section 8.02.B with City Supplemental Conditions:

B. Filing of Notice of arbitration: Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), in the state where project is located, with a copy provided to the City. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:

1. Claims for less than $30,000: Disputes involving $30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or
2. **Claims greater than $30,000**: Disputes over $30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of AAA, unless the parties agree to use the expedited rules.

**8.03 CLAIMS AUDIT**

*Add Section 8.03.B with City Supplemental Conditions:*

25. Schedules

26. Expediting Records and Information

27. Privilege documentation shall be allowed for all Claims of $500,000 and over.

**8.04 AUDIT**

*Add the following new Section 8.04.A with City Supplemental Conditions:*

A. At such times as City deems necessary for reasonable cause, Contractor shall permit the City to inspect and audit all pertinent books and records of the Contractor and its subcontractors or other persons or entities that have performed work in connection with or related to the Contractor's Work under this Agreement. The audit may take place up to three years after Completion. The books and records are to be made available at reasonable times in Pierce County, Washington, or at such other reasonable location as City selects. At City’s request, Contractor shall supply City with, or shall permit City to make a copy of, any books and records and any portion thereof. Contractor shall ensure that such inspection, audit and copying right is a condition of any Subcontract, agreement or other arrangement under which any person or entity is permitted to perform work in connection with or related to the Work under this Agreement. Any failure of the Contractor to incorporate contract requirements shall be at the expense of the Contractor.

**PART 9 TERMINATION OF THE WORK**

**9.01 TERMINATION BY CITY FOR CAUSE**

*Add the following Articles to Section 9.01 with City Supplemental Conditions:*

H. If the Contractor defaults, fails, or neglects to carry out the Work in accordance with the Contract Documents, the City may give written notice to cure the problem within seven (7) days. If the problem is not cured or the City determines the effort for correction is inadequate within this time, the City may give a second notice to cure within seven (7) days. If the problem is not cured within this time, the City may issue a notice to terminate for cause, which shall be effective immediately upon issuance.

I. The City rights to the site are subject to the rights and duties of the surety, if any, that may be obligated under any bond provided in accordance with the Contract Documents.
J. In a termination situation, the City reserves the right to use any subcontractor, material manufacturer, fabricator, or any vendor originally contracted by the Contractor or to assign their Contract with the Contractor to the City. The cost of completing the work shall include additional management, design services, legal fees, and other associated costs to complete the project as scheduled.

K. The Contractor will be terminated for cause if any employee, agent, or representative of the Contractor gives, or offers to give, any gratuity such as a gift or entertainment to an official, employee, officer, or agent of the City.

9.02 TERMINATION BY CITY FOR CONVENIENCE
Add Section 9.02.C with City Supplemental Conditions:

C. This Contract may be terminated by the City upon fourteen (14) days written notice to the Contractor in the event the City determines it is in the best interest of the City to terminate this project. If such termination occurs, cost incurred by the Contractor for any bid/proposal preparation prior to award of contract is the sole responsibility of the Contractor. The City shall only pay the Contractor for work completed and materials or equipment delivered after Notice to Proceed as previously approved by the City.

PART 10 MISCELLANEOUS PROVISIONS

No provisions were made by the City of Tacoma.

END OF SUPPLEMENTAL CONDITIONS
PART V

CITY OF TACOMA

INSURANCE REQUIREMENTS
This Insurance Requirements shall serve as an attachment and/or exhibit form to the Contract. The Agency entering a Contract with City of Tacoma, whether designated as a Supplier, Contractor, Vendor, Proposer, Bidder, Respondent, Seller, Merchant, Service Provider, or otherwise referred to as “Contractor”.

1. **GENERAL REQUIREMENTS**

The following General Requirements apply to Contractor and to Subcontractor(s) performing services and/or activities pursuant to the terms of this Contract. Contractor acknowledges and agrees to the following insurance requirements:

1.1. Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the City of Tacoma.

1.2. Contractor shall keep in force during the entire term of the Contract, at no expense to the City of Tacoma, the insurance coverage and limits of liability listed below and for Thirty (30) calendar days after completion of all work required by the Contract, unless otherwise provided herein.

1.3. Liability insurance policies, except for Professional Liability and Workers’ Compensation, shall:
   1.3.1. Name the City of Tacoma and its officers, elected officials, employees, and agents as additional insured
   1.3.2. Be considered primary and non-contributory for all claims with any insurance or self-insurance or limits of liability maintained by the City of Tacoma
   1.3.3. Contain a “Waiver of Subrogation” clause in favor of City of Tacoma
   1.3.4. Include a “Separation of Insureds” clause that applies coverage separately to each insured and additional insured
   1.3.5. Name the “City of Tacoma” on certificates of insurance and endorsements and not a specific person or department
   1.3.6. Be for both ongoing and completed operations using Insurance Services Office (ISO) form CG 20 10 04 13 and CG 20 37 04 13 or the equivalent
   1.3.7. Be satisfied by a single primary limit or by a combination of a primary policy and a separate excess umbrella

1.4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements below. Verification of coverage shall include:
   1.4.1. An ACORD certificate or equivalent
   1.4.2. Copies of requested endorsements

1.5. Contractor shall provide to City of Tacoma Procurement & Payable Division, prior to the execution of the Contract, Certificate(s) of Insurance and endorsements from the insurer certifying the coverage of all insurance required herein. Contract or Permit number and the City of Tacoma Department must be shown on the Certificate of Insurance.

1.6. A renewal Certificate of Insurance shall be provided electronically prior to coverage
1.7. Contractor shall send a notice of cancellation or non-renewal of this required insurance within Thirty (30) calendar days to coi@cityoftacoma.org.

1.8. “Claims-Made” coverages, except for pollution coverage, shall be maintained for a minimum of three years following the expiration or earlier termination of the Contract. Pollution coverage shall be maintained for six years following the expiration of the Contract. The retroactive date shall be prior to or coincident with the effective date of the Contract.

1.9. Each insurance policy must be written by companies licensed or authorized (or issued as surplus line by Washington surplus line broker) in the State of Washington pursuant to RCW 48 with an (A-) VII or higher in the A.M. Best key rating guide.

1.10. Contractor shall not allow any insurance to be cancelled, voided, suspended, or reduced in coverage/limits, or lapse during any term of this Contract. Otherwise, it shall constitute a material breach of the Contract.

1.11. Contractor shall be responsible for the payment of all premiums, deductibles and self-insured retentions, and shall indemnify and hold the City of Tacoma harmless to the extent such a deductible or self-insured retained limit may apply to the City of Tacoma as an additional insured. Any deductible or self-insured retained limits in excess of Twenty Five Thousand Dollars ($25,000) must be disclosed and approved by City of Tacoma Risk Manager and shown on the Certificate of Insurance.

1.12. City of Tacoma reserves the right to review insurance requirements during any term of the Contract and to require that Contractor make reasonable adjustments when the scope of services changes.

1.13. All costs for insurance are included in the initial Contract and no additional payment will be made by City of Tacoma to Contractor.

1.14. Insurance coverages specified in this Contract are not intended and will not be interpreted to limit the responsibility or liability of Contractor or Subcontractor(s).

1.15. Failure by City of Tacoma to identify a deficiency in the insurance documentation or to verify coverage or compliance by Contractor with these insurance requirements shall not be construed as a waiver of Contractor’s obligation to maintain such insurance.

1.16. If Contractor is a government agency or self-insured for any of the above insurance requirements, Contractor shall be liable for any self-insured retention or deductible portion of any claim for which insurance is required. A certification of self-insurance shall be attached and incorporated by reference and shall constitute compliance with this Section.

2. SUBCONTRACTORS
It is Contractor's responsibility to ensure that each subcontractor obtain and maintain adequate liability insurance coverage that applies to the service provided. Contractor shall provide evidence of such insurance upon City of Tacoma's request. Failure of any subcontractor to comply with insurance requirements does not limit Contractor's liability or responsibility.

3. REQUIRED INSURANCE AND LIMITS

The insurance policies shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve Contractor from liability in excess of such limits.

3.1 Commercial General Liability Insurance
Contractor shall maintain Commercial General Liability Insurance policy with limits not less than One Million Dollars ($1,000,000) each occurrence and Two Million Dollars ($2,000,000) annual aggregate. This policy shall be written on ISO form CG 00 01 04 13 or its equivalent and shall include product liability especially when a Contract is solely for purchasing supplies. It includes Products and Completed Operations for three years following the completion of work related to performing construction services. It shall be endorsed to include: A per project aggregate policy limit (using ISO form CG 25 03 05 09 or equivalent endorsement).

3.2 Commercial (Business) Automobile Liability Insurance
Contractor shall maintain Commercial Automobile Liability policy with limits not less than One Million Dollars ($1,000,000) each accident for bodily injury and property damage and bodily injury and property damage coverage for owned (if any), non-owned, hired, or leased vehicles. Commercial Automobile Liability Insurance shall be written using ISO form CA 00 01 or equivalent. Contractor must also maintain MCS 90 and CA 99 48 endorsements or equivalent if "Pollutants" are to be transported unless in-transit Pollution coverage is covered under required Contractor's Pollution Liability Insurance.

3.3 Workers' Compensation
Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington, as well as any other similar coverage required for this work by applicable federal laws of other states. Contractor must comply with their domicile State Industrial Insurance laws if it is outside the State of Washington.

3.4 Employers' Liability Insurance
Contractor shall maintain Employers' Liability coverage with limits not less than One Million Dollars ($1,000,000) each employee, One Million Dollars ($1,000,000) each accident, and One Million Dollars ($1,000,000) policy limit.

3.5 Professional Liability Insurance or Errors and Omissions
For contracts with professional licensing, design, or engineering services. Contractor and/or its subcontractor shall maintain Professional Liability or Errors and Omissions with limits of One Million Dollars ($1,000,000) per claim and Two Million Dollars ($2,000,000) in the aggregate covering acts, errors and omissions arising out of the professional services under this Contract. Contractor shall maintain this coverage for Two Million Dollars ($2,000,000) if the policy limit includes the payment of claims or defense costs, from the policy limit. If the scope of such design-related professional services includes work related to pollution conditions, the Professional Liability policy shall include Pollution Liability coverage.

3.6 Excess or Umbrella Liability Insurance
Contractor shall provide Excess or Umbrella Liability Insurance with limits not less than Three Million Dollars ($3,000,000) per occurrence and in the aggregate. This coverage shall apply, at a minimum, in excess of primary underlying Commercial General Liability, Employer’s Liability, Pollution Liability, Marine General Liability, Protection and Indemnity, and Automobile Liability if required herein.

3.7 Pollution Liability Insurance
Contractor shall maintain Pollution Liability or Environmental Liability Insurance with limits not less than One Million Dollars ($1,000,000) each occurrence and Two Million Dollars ($2,000,000) in the aggregate. Coverage shall include investigation and defense costs for bodily injury and property damage, loss of use of damaged or destroyed property, Natural Resource Damage, and Hazardous Substance Removal. Such coverage shall provide both on-site and off-site cleanup costs, cover gradual and sudden pollution, and include in its scope of coverage the City of Tacoma damage claims for loss arising out of Contractor’s work.

3.8 Builder’s Risk Insurance
Contractor shall maintain during the term of the Contract and until final acceptance of the work by the City of Tacoma, a policy of Builder’s Risk Insurance providing coverage for all-risk of physical injury to all structures to be constructed according to the Contract. City of Tacoma shall be included as a named insured (not named as additional insured) on the policy. Builder’s Risk Insurance policy shall:

3.8.1 Have a deductible of no more than Five Thousand Dollars ($5,000) for each occurrence, the payment of which will be the responsibility of Contractor. Any increased deductibles accepted by City of Tacoma will remain the responsibility of Contractor
3.8.2 Be on an ISO Special Form Causes of Loss or the equivalent and also include coverage for Collapse, Earthquake and Flood. The deductible for Earthquake and Flood may be higher than the $5,000 deductible required in 3.8.1
3.8.3 Include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site
3.8.4 Be written in the amount of the completed value of the structures, with no coinsurance provisions exposure on the part of Contractor or City of Tacoma
3.8.5 Contain a Waiver of Subrogation provision whereby each insured waives their subrogation rights to the extent the loss is covered by this insurance
3.8.6 Grant permission to occupy, allowing the building or structure to be partially occupied prior to completion, without detrimental effect to the coverage provided
3.8.7 Include coverage for the testing and startup of the building’s operating systems
3.8.8 Include coverage for City of Tacoma’s loss of use or business interruption arising out of a covered loss which delays completion
3.8.9 Include resultant damage coverage for loss due to faulty workmanship and defective material
3.8.10 Include coverage for startup and testing
3.8.11 Include coverage for resultant damage coverage for loss due to faulty workmanship and defective material

Contractor and City of Tacoma waive all rights against each other, their respective subcontractors, agents, and representatives for damages caused by fire or other perils to the extent covered by Builder’s Risk Insurance or other property insurance applicable to the
3.9 Other Insurance
Other insurance may be deemed appropriate to cover risks and exposures related to the scope of work or changes to the scope of work required by City of Tacoma. The costs of such necessary and appropriate Insurance coverage shall be borne by Contractor.
PART VI

TECHNICAL SPECIFICATIONS
DIVISION 1—GENERAL REQUIREMENTS

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15121 FLEXIBLE INLINE CHECK VALVE

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SECTION 01010

SUMMARY OF WORK

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01014 – Contract Time and Work Sequence
   2. Section 01015 – Contractor Use of Premises
   3. Section 01126 – Bypass Systems
   4. Section 01300 – Submittals
   5. Section 01500 – Temporary Construction Facilities
   6. Section 01560 – Environmental Controls
   7. Section 01062 – Permits and Easements
   8. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   9. Section 02710 – Site Water Discharge
  10. Section 02715 – Dewatering Systems

1.02 SUMMARY

A. This section provides an overview of the extent of the work to be performed under this Contract. Detailed requirements and extent of work are specified on the Drawings and within the Specification sections. The Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment, taxes, licenses, permits, inspection fees, and other facilities and services needed for proper execution, testing, and completion of the work under this Contract.

B. The work covered under this Contract will be performed at the Leach Creek Stormwater Holding Basin, Tacoma, Washington under City Contract Number ENV-03031-01. The purpose of this project is to control stormwater flow to improve flood water management during storm water events by constructing a channel to connect the two sub-basins and lowering the storm water pump intake elevations at the pump station. In addition to improved flood management, the project includes modifications to improve the condition and performance of the outlet structure by replacing the 60-inch diameter concrete overflow riser, replacing the existing grating, and adding a flexible check valve on the 42-inch diameter pipe.

1.03 DEFINITIONS
A. All definitions set forth in the Contract Documents are applicable to the Bidding Documents.

B. “Day” shall mean calendar day unless specified otherwise. A Calendar Day shall be defined as the time period of 24 hours measured from midnight to the next midnight, including weekends and holidays.

C. “Construction Manager” (or Engineer) is the Owner’s designated representative, whether employed by the City or a Consultant to the City.


E. “WSS” or “Washington State Standard Specifications for Road, Bridge and Municipal Construction” shall refer to the 2023 edition of Division One through Division Nine of the “Standard Specifications for Road, Bridge, and Municipal Construction”, published by the Washington State Department of Transportation (WSDOT).

1.04 SPECIFICATION LANGUAGE

A. Whenever there is wording stating that an item is “as specified” or “as shown”, the reference is to all Technical Specifications and all Drawings in the Contract Documents.

B. The words “Provide” and “Furnish” shall mean supplying, installing and incorporating into the Work all labor, materials, supplies and equipment necessary to do so. The word “Supply” shall mean to acquire, deliver and transfer the item to the City as specified.

C. Unless otherwise indicated, all materials and equipment incorporated into the Work shall be as specified and shall be new and free of defects.

D. Where indicated and referenced in the Contract, the cited paragraphs and standards of the Washington State Department of Transportation and American Public Works Association Standard Specifications, latest edition shall apply.

1.05 CONTACT PERSON

A. For further information relating to these Specifications please contact:


1.06 PRE-BID CONFERENCE

A. A pre-bid conference will be held at the Center for Urban Waters Commencement Bay Conference Room, 101 South located at 326 East D Street, Tacoma, WA 98421, at 10:00 a.m. on April 18, 2023, to answer questions and explain bidding procedures associated with the Equity in Contracting (EIC) Program requirements included in the contract. The pre-bid conference will also discuss site access and
constraints and construction coordination as outlined in Section 01014 – Contract Time and Work Sequence, Section 01015 – Contractor Use of Premises, and Section 01313 – Project Management and Coordination. Prospective bidders are urged to attend.

B. Immediately after the pre-bid conference, at approximately 11:30 a.m., there will be a walk-through of the Leach Creek Stormwater Holding Basin at the project site, located at 943 Holly Dr, Firecrest, WA 98466.

1.07 PROJECT DESCRIPTION

A. The work to be performed under this Contract shall consist of furnishing all tools, equipment, materials, supplies, manufactured articles, all transportation and services, fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for the fulfillment of the Contract in strict accordance the Specifications, schedules, Drawings, and all other portions of the Project Manual. The work to be performed under this Contract is for the City of Tacoma’s Leach Creek Stormwater Holding Basin includes, but is not limited to the following:

1. Pre-construction dewatering
2. Removal of standing water at the site. Installation of the temporary stream bypass pumping system and piping for channel construction and outlet structure modifications. This pumping system shall be removed after project completion.
3. Installation of the temporary dewatering and water treatment system, including wells or wellpoints, pump, pipes, tanks, valves, and appurtenances. This system shall be removed after project completion. The work will include dewatering the site prior to construction and dewatering during the construction period. Methods for pre-construction and construction dewatering may be different.
4. Clearing, grubbing, and grading of the stormwater holding basin
5. Clearing and dredging of the Pump Station forebay
6. Clearing, cutting, and grading the new channel
7. Removal and replacement of outlet structure galvanized steel grating
8. Removal of existing 60-inch concrete overflow manhole
9. Removal and salvage of existing stilling wells
10. Removal and salvage of existing level instruments and enclosure including above ground conduit
11. Installation of a 60-inch pre-cast place concrete manhole
12. Installation of a 42-inch inline flexible check valve and valve support
13. Restoration and planting of the stormwater holding basin
14. Completion of record drawings

B. The above is a brief description of the work and is not intended to be a complete list of work required by this Contract. The work to be completed is described in the Contract Documents.
C. Federal, State and Local Laws, Statutes and Regulations are not individually referenced. The Specifications incorporate by reference the latest version of federal, state and local statutes, laws and regulations. In case of conflict between the requirements of the Specifications and requirements of the statutes and regulations, the Contractor shall bring them to the attention of the Construction Manager. Lacking a specific response, the more stringent shall control. In no case can this Contract be interpreted to override statutes and regulations of governing authorities.

1.08 DESCRIPTION OF BID ITEMS

A. Payment for the Bid Items, as further specified herein, shall be the entirety of all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, manufactured articles, all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the Contract Documents, including all appurtenances thereto and including all costs of compliance with the regulations of public agencies having jurisdiction, including the safety and health requirements of OSHA and WISHA.

B. Indirect costs such as supervision, overhead, profit, the general conditions specified in the Contract shall be allocated to each bid item as applicable for work defined in the Bid Item. No separate payment will be made to the Contractor for these indirect costs.

C. The Bidding Schedule is divided into Bid Items whose definitions are as follows:

**Bid Item 1: Mobilization and Project Administration.** Mobilization and project administration may include but is not limited to preconstruction costs of preparatory work and operations by the Contractor, temporary facilities, project closeout procedures, and the removal of equipment and surplus materials from the project site upon completion of Construction (demobilization). The Contract Price for mobilization shall constitute full compensation for all labor, materials and equipment required for: the movement of personnel, equipment, supplies and incidentals to the project site and removal after contract work is complete. Establishment of offices or other facilities for the work and acquisition of permits, bonds and insurance, testing, survey, temporary utilities, temporary facilities, temporary fencing, temporary roads, temporary signage, preparation of record drawings, field engineering and layout, and other documentation as required.

Mobilization costs for all subcontracted work shall be considered included in the price bid and no additional payment will be allowed. Payment shall be based on Lump Sum bid.

**Bid Item 2: Temporary Erosion and Sediment Control.** Includes all costs for the work required to furnish, install, maintain, and remove temporary water pollution/erosion control measures, all in accordance with these specifications, Section 02270 – Erosion control and Stormwater Pollution Prevention, and as directed by the Construction Manager. Payment shall be based on Lump Sum bid.

Specifically included in, but not limited to, the Contract Price bid for this item are all costs for:
1. Preparing and submitting applications for Construction Stormwater Pollution Prevention Plan (SWPPP) application. This includes all costs to prepare and submit plans and permit application materials and paying all permit application and review fees;

2. Stockpiling the specified quantities of erosion control materials on site, ready for use;

3. Revising and adding new BMPs due to changing weather and site conditions;

4. Repair and maintenance of water pollution and erosion control BMPs if work is suspended;

5. Furnishing, maintaining, and removing temporary silt fencing and fencings (if necessary);

6. Covering and recovering material and disturbed areas with plastic sheeting;

7. Installing, maintaining, and removing a temporary construction exit;

8. Maintaining an Erosion Control, Sedimentation, and Water Quality Monitoring Log Book on the job site;

9. Recording weekly Erosion Control inspections and any required Water Quality Sampling in the Monitoring Log Book;

10. Providing original Erosion Control, Sedimentation, and Water Quality Monitoring Log Book to the City for its records, at completion of the project;

11. Installing, maintaining, and removing additional erosion control BMPs deemed necessary by the City to prevent surface water quality degradation; and

12. Preparing and submitting revisions to the ESC and SWPPP to reflect erosion and sediment control measures that may differ from those shown in the Contract Plans.

**Bid Item 3: Temporary Bypass Pumping.** Includes pumping out of standing water from site prior to installation of bypass pumping system. Includes cost for providing a temporary bypass pumping system with capacities, duration, and as described in Section 01126 – Bypass System. Bypass systems include all required temporary intake structures (pump suction pits), suction and discharge piping, pumping units, pipes plugs, appurtenances, consumables, and all material required to operate and maintain the temporary bypass system. Includes the labor for a person to monitor the system during non-working hours for the duration of the project. Separate bypass systems may be required at different locations to divert the flow from different sub-basins entering the Leach Creek Holding Basin, as well as bypassing the outlet structure. Construction, maintenance, and removal of temporary coffer dams for flow diversion shall be incidental. Payment shall be based on Lump Sum bid.

**Bid Item 4: Clearing and Grubbing.** Includes clearing, grubbing, hauling of trees, vegetation, permitted disposal of all vegetation, debris, and other materials to be exported from the site; including all labor materials, tools, and equipment necessary to satisfactorily complete the work defined in the Contract Documents. Topsoil is considered contaminated and shall be disposed of at the LRI Landfill in Graham, WA. Topsoil disposal shall be included as part of Bid Item 5. Payment for clearing and grubbing, and disposal of trees and vegetation (excluding the disposal of topsoil), shall be based on Lump Sum bid.
Bid Item 5: Channel and Pump Station Forebay Excavation and Hauling of Contaminated Soil. Includes all labor, materials, equipment necessary to excavate existing materials to the grades and methods indicated in the Contract Documents. All excavated soils are considered contaminated and shall be hauled to the LRI Landfill in Graham, WA. Included in the bid shall be excavation, handling, loading, and hauling of contaminated material to the landfill site (tipping fees will be paid by the City). Geotextile fabric for soils stabilization/separation shall be incidental. Payment shall be based on a per Ton bid. Quantity shall be determined from measured truckload of fill delivered and placed. As the quantity of this item is currently unknown, the Owner is providing an estimate of 10,500 Ton to be used by each bidder. Unit price will remain the same regardless of final quantity.

Bid Item 6: Access Roadway / Ramp. Includes all labor, materials, and equipment necessary to prepare subgrade and deliver, place and compact quarry spalls and gravel base course for access ramp construction, and gravel base and top course for repair of gravel surfacing removed or disturbed during construction as indicated in the Contract Documents. Payment shall be based on a Per Ton bid. Since the quantity of this may change, the Owner is providing an estimate of 700 Ton to be used by each bidder. Unit price will remain the same regardless of final quantity.

Bid Item 7: Stormwater Holding Basin Modifications. Includes all labor, material, and equipment necessary to complete improvements to the holding basin including, but not limited to ecology block walls, rip rap inlet, placement of compost, placement of permanent erosion control measures, plantings, and landscaping. Payment shall be based on a Lump Sum bid.

Bid Item 8: Outlet Structure Modifications. Work includes, but is not limited to, demolition and salvaging, installation of overflow manhole, furnishing and installation of a 42-inch inline check valve and valve support, installation of new grating, site restoration, and all other work required as specified in the Contract Documents. Payment shall be based on Lump Sum bid.

Bid Item 9: Temporary Dewatering and Water Treatment. Includes costs of providing pre-construction and construction dewatering and treatment system to meet requirements specified in Section 02715 – Dewatering System, including storage containment, treatment, analysis, monitoring, reporting, inspection, and discharge of extracted groundwater in accordance with 02710 – Site Water Discharge and 02715 – Dewatering System and for the duration specified in Section 01014 – Contract Time and Work Sequence. Construction, maintenance, and removal of temporary wells, piping and pumping systems, and tanks shall be included. Payment shall be based on Lump Sum bid.

1.09 CONTRACT TIME AND WORK SEQUENCE

A. The Contractor is responsible for coordinating the work in order to comply with the schedule constraints and milestones specified in Section 01014 – Contract Time and Work Sequence.
1.10 **PRECONSTRUCTION CONFERENCE**

A. Prior to beginning construction, a meeting of representatives of the Contractor, the Owner, the Engineer, and other affected agencies will be held. The purpose of the meeting will be to establish lines of authority and communication and identify duties and responsibilities of each party. Discussion will cover specific contract plans, specifications, unusual conditions, schedules for completion, equal employment regulations, EIC and LEAP reporting requirements, and other pertinent features of the Contract and Project Manual. Written notification of the preconstruction conference will be made by the Owner.

1.11 **PRIVATE/PUBLIC PROPERTY**

A. The City will contact all property owners and tenants surrounding the project site via newsletter/mailing, a minimum of one (1) week prior to start of on-site construction. The newsletter/mailing will advise the owners and tenants of the construction schedule and indicate the Contractor’s name, contact person, and telephone numbers.

B. If it is determined by the Contractor that insufficient staging area is available at the Leach Creek Stormwater Basin site, the Contractor shall secure its own off-site staging area in the vicinity of the Leach Creek Stormwater Basin. Contractor shall provide a copy of the private agreement and is responsible for all permits and fees associated with the additional staging area. Following completion of all work shown and specified and prior to release of Retainage, the Contractor shall provide the City of Tacoma with a release signed by the owner(s) of property secured by the Contractor for additional staging area.

1.12 **PERMITS AND EASEMENTS**

A. Permits and Easements are indicated in Section 01062 – Permits and Easements.

1.13 **EXISTING UTILITIES**

A. In general, the locations of existing piping, whether aboveground or underground, are indicated on the Drawings. This information has been obtained from the City’s record drawings and on-site survey. The City does not guarantee the accuracy or completeness of this information, and it is understood that other aboveground or underground facilities not shown on the Drawings may be encountered during the performance of the work.

B. Existing above ground utilities, including but not limited to power transmission and distribution, and telephone systems, whether shown on the drawings or not, shall be maintained, relocated, rerouted, protected, removed and restored, at least to original condition, as necessary to perform the work, at no additional cost to the City. Contractor shall perform utility locates in public and private properties, and exploratory excavations to verify location of existing underground utilities. Coordination with utility service providers shall be by Contractor. All costs for the Work described above for protection of existing utilities shall be paid for by the Contractor.
C. Underground utilities which are damaged or destroyed by the Contractor, shall be restored to original or better condition at no additional cost to the City.

1.14 WORKING HOURS

A. Working hours shall be as indicated in Section 01014 – Contract Time and Work Sequence. Note that Section 01015 – Contractor Use of Premises, Section 01062 – Permits and Easements and Section 01560 – Environmental Controls may impose further restrictions on working hours.

1.15 ELECTRIC POWER

A. Contractor shall note that there is no power service available on site. Contractor shall account for the need to use generators of fuel to power equipment. Additional information is provided under Section 01500 – Temporary Construction Facilities.

1.15 FIELD OFFICE

A. Contractor shall provide and pay for any required field office or mobile trailer and all associated costs. Limited space is available in the Staging Area specified on the Drawings. Location and orientation of the field office(s) shall be approved in writing by the Construction Manager.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECToN 01014  
CONTRACT TIME AND WORK SEQUENCE

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01015 – Contractor Use of Premises
   3. Section 01126 – Bypass System
   4. Section 01300 – Submittals
   5. Section 01500 – Temporary Construction Facilities
   6. Section 01560 – Environmental Controls
   7. Section 01720 – Closeout Procedures and Record Drawings.
   8. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   9. Section 02710 – Site Water Discharge
   10. Section 02715 – Dewatering System

1.02 SUMMARY

A. This section describes completion times, milestones, work sequence, constraints, hours of work, and liquidated damages.

B. Contractor shall schedule and conduct all work in a manner consistent with the Contract, and comply with the construction schedule, the specific work sequence, Contract milestones and constraints of the work specified. Contractor shall plan the sequence of construction to accommodate all Contract requirements.

C. The existing Leach Creek Stormwater Holding Basin conveys stormwater and surface runoff from the surrounding areas through the Leach Creek stormwater channels to Leach Creek downstream of the outlet structure.

D. Except as provided for herein, the Contractor shall schedule and conduct all work to prevent shutdowns, overflows, and interference with normal operations and maintenance, including access for Owner maintenance workers. The Contractor shall coordinate the work to provide continuous stormwater and surface runoff capability.
E. This section specifies some, but not all, constraints, and an anticipated feasible work sequence for the performance of, or scheduling of, Contract work. The Contractor shall schedule and conduct all work in a manner consistent with the Contract, and comply with the Contract Milestones, construction sequence and constraints of the work as specified in this Section.

1.03 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Detailed outage plan and time schedule for operations which make it necessary to remove or take offline any electrical circuit, equipment, or structure. The schedule shall be coordinated with the construction schedule specified in the Supplemental Conditions Section 00 73 00 and shall meet the restrictions and conditions specified in this Section. The detailed outage plan shall describe the Contractor’s method for bypass or how to maintain continuous stormwater flows except where provided for herein, the length of time required to complete said operation, and the necessary equipment provided by the Contractor. Contractor shall provide power transmission line protection as required during the Work.

D. Schedule of working hours as specified in this Section.

E. Submittals as set forth in Section 01126 – Bypass Plan.

F. Submittals as set forth in Section 02270 – Erosion Control and Stormwater Pollution Prevention.

G. Submittals as set forth in Section 02710 – Site Water Discharge.

H. Submittals as set forth in Section 02715 – Dewatering Systems

1.04 EROSION AND SEDIMENT CONTROL

A. Erosion and sediment control measures shall meet the requirements specified in Section 02270.

1.05 BYPASSING

A. Bypass system shall meet the requirements specified in Section 01126.
1.06 SITE WATER DISCHARGE
   A. Site water discharge system shall meet the requirements specified in Section 02710.

1.07 DEWATERING
   A. Dewatering system shall meet the requirements specified in Section 02715.

1.08 WORK SITE ACCESS REQUIREMENTS AND PLANNED OUTAGES
   A. Contractor shall not bring tools, materials, or equipment to the site except via the haul route identified by City of Tacoma and included as reference information under Section 01015 – Contractor Use of Premises.

   B. Planned outages: Short-term power outages will be allowed for the existing system provided outage duration is agreed upon by Construction Manager and 48-hour notice is provided. During an outage, the ability to restore the system must be maintained whether through temporary pumping capacity as specified in this Section, or ability to restore power within one hour.

1.09 SEQUENCE, CONSTRAINTS, AND SCHEDULE OF CONSTRUCTION
   A. GENERAL

   1. Additional requirements and constraints are specified under referenced sections listed in paragraph 1.01. Contractor shall ensure coordination between all requirements and constraints specified.

   2. Access for Owner’s pump station maintenance personnel shall be fully maintained.

   3. Prior to beginning work, Contractor shall remove standing water from holding basin and pump station forebay.

   4. After the standing water is removed, Contractor shall establish bypass systems as specified in Section 01226 – Bypass Systems to manage and divert water away from work area.

   5. Once bypass systems are established, install erosion and sedimentation control (ESC) measures.

   B. STANDING WATER ON SITE: The site is an active stormwater holding basin. At a minimum, it is anticipated the water will be present above elevation 212 feet. Standing water will be present in multiple, non-contiguous, locations on the site. Standing water will need to be removed prior to accessing the site to install ESC measures and bypass pumping equipment. The Contractor shall pump out the holding basin to proposed finish grade elevation to allow access to install ESC measures, the dewatering system, and the bypass system.
C. **TEMPORARY BYPASS SYSTEMS:** The following items shall be completed prior to beginning any work in the basin and on the outlet structure:

1. Install the temporary bypass systems as described in Section 01126 – Bypass Systems. The temporary bypass systems must be installed immediately after removal of the standing water before the site fills with water.

2. Temporary bypass systems and temporary bypass pumps operation, including all controls shall be fully tested before committing to bypass of the flows specified in Section 01226 – Bypass System.

3. Existing pump station and temporary bypass pumps shall be in concurrent operation for a minimum of 48-hours to allow switching back to the existing pump station in event that a temporary pump station system problem should occur during the test period. The mechanical as well as electrical connections shall be configured to allow this flexibility.

4. The temporary pumps shall operate without any malfunction or alarms over an 8-hour period before the existing pump station and basin can be bypassed and the remainder of the work can commence. The Construction Manager will provide written authorization to proceed with remaining work on the existing basin and outlet structure.

5. Contractor shall assign individual(s) to monitor the bypass system during non-working hours.

D. **TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:**

1. Install temporary water pollution/erosion control measures, all in accordance with these specifications, Section 02270 – Erosion control and Stormwater Pollution Prevention.

E. **DEWATERING:** Once the site is accessible, and bypass systems and ESC measures have been established, the Contractor shall install the construction dewatering system.

1. Install the dewatering system as described in Section 02715 – Dewatering Systems.

2. The Contractor shall anticipate ground water will be encountered throughout the excavation area. Groundwater shall be treated as specified in Section 02710 – Site Water Discharge prior to discharging downstream of the Outlet Structure.

3. After verifying proper functionality, the dewatering system shall be tested in Contractor attended operation for a period of 8-hours without malfunction before it is allowed to operate unattended. In the event that a problem occurs, the Contractor shall make necessary repairs or changes, test for functionality, and perform attended operation retest.
4. The dewatering system shall operate without any malfunction or alarms over the specified period before it is allowed to operate unattended.

5. Prior to excavation is commenced, the dewatering system shall run for a period as required to lower the groundwater table below the 206 feet, as specified in Section 02715 – Dewatering Systems.

6. Trash and submersible pumps shall not be used and are not allowed.

F. CONSTRUCTION SCHEDULE: The construction schedule required in the Supplemental Conditions as modified by the City of Tacoma shall provide for the following specific conditions and construction sequence:

1. Install temporary bypass, ESC measures, and dewatering systems. Sequence shall be as specified in Paragraph 1.09 of this specification.

2. Once the water management strategies are implemented, the following shall be completed:
   a. Flag and mark clearing limits per approved Construction Storm Water Pollution Prevention Plan.
   b. Erosion and sedimentation control measures installed and accepted by the Construction Manager.
   c. Owner shall complete notifications required in accordance with Section 01010 – Work Summary.

3. Install temporary construction access and fencing that shall remain in place at all times to prevent unauthorized entrance to the site.

4. After complete testing of the temporary bypass, dewatering and treatment system, Contractor shall complete the remaining work:
   a. Complete all basin modifications.
   b. Structural and mechanical modifications at the outlet structure.
   c. Test and commission all systems.

5. Remove temporary bypass, dewatering, and treatment systems and related components.

6. Restore site to original conditions as specified.

7. Complete closeout procedures as listed in Section 01720 – Closeout Procedures and Record Drawings.

1.10 HOURS OF WORK

A. Refer to Section 01560 – Environmental Controls for additional constraints, including noise restrictions.

B. Except in the case of emergency, the bypass pumping system attendant, or unless otherwise approved by the Owner, the normal straight time working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day and a 5-day work week.
C. The normal straight time 8-hour working period for the Contract shall be established at the preconstruction conference or prior to the Contractor commencing onsite work.

D. If a Contractor desires to perform work on holidays, Saturdays, Sundays, or before 7:00 a.m. or after 6:00 p.m. on any day, the Contractor shall apply in writing to the Owner for permission to work such times. Such requests shall be submitted to the Owner no later than noon two working days prior to the day for which the Contractor is requesting permission to work.

E. Permission to work between the hours of 9:00 p.m. and 7:00 a.m. during weekdays and between the hours of 9:00 p.m. and 9:00 a.m. on weekends or holidays are to be also subject to the specified noise control requirements. Approval to continue work during these hours may be revoked at any time complaints are received from the public or adjoining property owners regarding the noise from the Contractor’s operations. The Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

F. Permission to work Saturdays, Sundays, holidays or other than the agreed upon normal straight time working hours Monday through Friday may be given subject to certain other conditions set forth by the Owner. These conditions may include but are not limited to: requiring the Owner or such assistants as the Owner may deem necessary to be present during the work; requiring the Contractor to reimburse the Owner for the costs in excess of straight-time costs for Owner’s employees who worked during such times, on non-Federal aid projects; considering the work performed on Saturdays and holidays as working days with regards to the contract time; and considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period. Assistants may include, but are not limited to, survey crews; personnel from the Owner’s material testing lab; inspectors; and other Owner’s employees when in the opinion of the Owner, such work necessitates their presence.

G. With the exception of the bypass system attendant, work outside of the scheduled work hours shall be submitted and requires approval by the Owner. Contractor shall designate one person per overnight shift to monitor the bypass pumping system. Bypass system attendant shall be assigned for non-working hours.

H. Overall project schedule shall be adjusted to reflect any changes to proposed work schedule. If the Contractor works unscheduled hours and/or if the Contractor has not obtained Owner approval at least 48-hours prior to the start of unscheduled work. In such a case, the Contracting Agency may deduct from amounts due or to become due to the Contractor for the costs more than straight-time cost of employees of the Contracting Agency required to work overtime hours. The Contractor by the specification does hereby authorize the Owner to deduct such costs from the amount due or to become due to the Contractor.
1.11 COMPLETION TIMES

A. The Contractor shall complete all of the work shown and specified within **90 calendar days** after the effective date of the Notice to Proceed (NTP); subject to the milestones specified in paragraph 01014.1.12.

1.12 MILESTONES

A. The following defines specific milestone dates which shall be adhered to and are the last acceptable dates unless modified in writing by the Owner and Contractor:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date / Timeframe</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7 calendar days after NTP</td>
<td>• Site Specific Health and Safety Plan</td>
</tr>
<tr>
<td>2</td>
<td>7 calendar days after NTP</td>
<td>• Schedule of Values and Construction Schedule</td>
</tr>
<tr>
<td>3</td>
<td>14 calendar days from Notice to Proceed</td>
<td>• Contractor shall have the submittals specified in paragraph 01014.1.03 and all related sections in for review.</td>
</tr>
<tr>
<td>4</td>
<td>Work must be completed by September 30, 2023.</td>
<td>• Complete all remaining work, including demolition of existing structures; structural and mechanical modifications, installation and testing of new equipment; basin modifications. This milestone includes seven days of commissioning.</td>
</tr>
<tr>
<td>5</td>
<td>7 calendar days from Milestone 4</td>
<td>• Removal of temporary pumping system and piping; temporary fencing; complete punch list items; clean site; demobilize.</td>
</tr>
</tbody>
</table>

1.13 LIQUIDATED DAMAGES

A. Liquidated damages for failure to reach completion of Milestone 4 and 5 shall be in accordance with the Supplementary Conditions.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01015

CONTRACTOR’S USE OF PREMISES

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 01500 – Temporary Construction Facilities
   3. Section 01560 – Environmental Controls

1.02 SUMMARY

A. Contractor personnel parking will be allowed along the access road staging area as shown on G-001. No Contractor personnel parking will be allowed in the pump station site or outside the property limits without express written permission of the Owner. Contractor may contract for parking on private property as required. At no time shall Contractor vehicles block access to the pump station or outlet structure.

B. A staging area will be provided to the Contractor as shown on G-001. The Contractor’s work, operations, and staging shall be confined within the project site limits as specified. The Contractor shall not work outside these limits unless permission on easements has been obtained. The staging area shall remain organized. The area shall be kept clear of debris and the Contractor shall provide proper disposal receptacles for disposal of garbage and debris generated during construction.

C. Contractor shall allow access to the existing pump station during working and non-working hours. Contractor shall secure site during non-working hours with temporary fencing.

D. Contractor shall not use any part of the existing pump station and pump station access road areas without express approval from the Owner. Contractor shall not use any part of the downstream stream channel for work related to the improvements of the basin and outlet structure and shall ensure no clearing or grading beyond the clearing limits shown on the Contract drawings. Additional disturbance due to Contractor staging and storage, bypass and dewatering activities beyond clearing limits shown shall be minimal and included within the limits of disturbance finalized within the Contractors Stormwater Pollution Prevention Plan.

E. The Contractor shall notify the Construction Manager one (1) week in advance of the time it is necessary to take out of service any existing equipment, pipeline, electrical
circuit, or structure. The Contractor shall be responsible for providing all temporary piping, pumping, power, and control facilities as are required to maintain continuous operation except as otherwise specified in Section 01014. The integrity of existing utilities shall be maintained by the Contractor at all times.

F. Discharge of fuel, oil, lubricants, solvents, concrete slurry, and other materials to surface waters or drainage courses is strictly prohibited. Any and all discharges of contaminants to surface waters or drainage courses shall be immediately reported to the Construction Manager. In the event accidental discharge is caused by the Contractor's operations and adequate and immediate response is not obtained, the Construction Manager is entitled to employ other entities to stop the discharge without giving written notice to the Contractor.

G. Penalties imposed on the Owner as a result of any discharge caused by the actions of the Contractor, his employees, or subcontractors, shall be borne in full by the Contractor, including legal fees and other expenses to the Owner resulting directly or indirectly from the discharge.

H. The Contractor shall develop a Site Utilization Plan detailing the proposed on-site and off-site staging area, parking areas, signage location, and hauling routes.

1.03 VEHICULAR ACCESS AND HAULING

A. There are load limits in place along the dam. Contractor shall develop a Dam Loading Plan detailing proposed methods and equipment used to maintain dam stability for loads in excess of equivalent surcharge load limit of 335 pounds per square foot (psf).

B. Direct truck traffic to utilize the existing facility gates designated for use in the Contract Documents. Contractor shall access and exit site via the haul route identified by City of Tacoma and provided as supplemental information to this Section.

C. Contractor personnel shall be on site and available to direct truck and equipment traffic at all times such activities are being mobilized, conducted, and de-mobilized.

D. Do not permit trucks to congregate or queue outside the property boundaries.

E. Do not obstruct neighborhood traffic patterns, public work operations and operations by Metro Parks Tacoma.

1. Delivery:
   a. Coordinate equipment delivery to occur during low traffic conditions, specifically early morning hours, and not before 7 AM.
   b. Do not attempt to unload, operate, or load equipment beyond the noise production limitations allowable.

2. Construction Activities:
a. Coordinate construction deliveries to occur during times when construction personnel will be on hand to direct the truck driver.
b. Post signage on the site indicating the designated route for deliveries to the project.
c. Direct drivers regularly through verbal instructions, written materials, notices, and subcontracts about the traffic control plan procedures.
d. Recommend adjustments to the traffic control plan as needed to the Owner.

F. Maintain all haul route roadways related to construction activities safe and in good conditions, and repair as necessary or as directed by the Construction Manager. Maintain signs, lights, and pavement markings along haul routes.

G. Refer to hauling route provided as Reference Information after this section.

1.04 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. A Site Utilization Plan indicating the staging areas, parking areas, proposed signage location, and haul routes if it deviates from the one identified by the City.

D. Dam Loading Plans. Proposed methods and equipment used to maintain dam stability for loads in excess of equivalent surcharge load limit of 335 psf.

1.05 REFERENCE INFORMATION

A. The attachment listed below, following “End of Section,” is provided as reference only.

1. Haul Route and Notes.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
GENERAL HAUL ROUTE ALLOWED FOR THE PROJECT. SEE SPECIAL TRAFFIC REQUIREMENTS, THIS SHEET.

SPECIAL TRAFFIC REQUIREMENTS:

1. Vehicles leaving the project site from Holly Drive shall exit to southbound Orchard Street only, and shall access I-5 via South 56th Street.

2. Vehicles entering the project site shall approach from southbound Orchard Street and make a right turn on Holly Drive to access the project site.

3. No left turns will be allowed from the project site onto Orchard Street.

LEGEND:

CLASS A POST MOUNTED CONSTRUCTION SIGN PER SECTION 1-10.3(3)A OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
SECTION 01060
HEALTH AND SAFETY

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02200 – Earthwork

1.02 SUMMARY

A. The Contractor shall take measures to assure that personnel observe proper safety precautions when working in these areas. The Contractor shall be experienced and qualified to anticipate and meet the safety and health requirements of this project.

B. The Contractor shall be responsible for the health and safety conditions at the job site related to the regulated substances. This includes the health and safety of workers and public during work and non-working hours. The Contractor shall inform all workers and visitors of the potential for exposure to regulated materials. The Contractor shall follow regulatory procedures to prevent the release of contamination.

C. As specified in Section 02200 – Earthwork, contaminated material has been documented at the site. Contaminated material excavated during the project is considered solid waste. The Contractor’s Health and Safety Plan shall specify training requirements for the site, including 24-, 48-, or 80-hour training OSHA training as referenced in WAC 296 843 20010, if applicable. The Contractor shall be responsible for all training costs.

D. The Contractor shall require that Contractor’s personnel observe proper hygienic precautions.

E. This Section specifies procedures for complying with applicable laws and regulations related to worker safety and health. It is not the intent of the Engineer or Owner to develop, manage and/or administer the safety and health programs of the Contractor or in any way assume the responsibility for the safety and health of their employees. It is required that all Contractors adhere to applicable federal, state, and local safety and health standards.

F. This Section also describes the requirements for submittal of the Contractor’s Site-Specific Health and Safety Plan (HASP).
1.03  SAFETY AND HEALTH REGULATIONS

A. It is not the intent of the Engineer or Owner to list and identify all applicable safety codes, standards and/or regulations requiring compliance by all contractors and subcontractors in performance of the Work. Contractors and subcontractors shall be solely responsible for identifying and determining all safety codes, standards, and regulations, which are applicable to the work.

B. The Contractor and subcontractors are encouraged to use the consulting services of the State of Washington Department of Labor and Industries (L&I) Consulting Section at 1-800-647-0982, for assistance with the requirements of this Section.

C. The Contractor shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from Labor Building, 14th and Constitution Avenue N.W., Washington, DC 20013.

D. The Contractor shall also comply with the provisions of the Federal Occupational Safety and Health Act, as amended.

1.04  REFERENCE STANDARDS

A. Comply with and implement current applicable federal, state, and local health and safety standards including all revisions on the work site including, but not limited to, the following:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 USC 651 et seq.</td>
<td>Federal Occupational Safety and Health Act</td>
</tr>
<tr>
<td>29 CFR 1910</td>
<td>OSHA General Health and Safety Standards</td>
</tr>
<tr>
<td>29 CFR 1926</td>
<td>OSHA Construction Safety and Health Standards</td>
</tr>
<tr>
<td>RCW 49.17</td>
<td>Washington Industrial Safety and Health Act</td>
</tr>
<tr>
<td>Chapter 296-24 WAC</td>
<td>WISHA General Safety and Health Standards</td>
</tr>
<tr>
<td>Chapter 296-27 WAC</td>
<td>WISHA Record-keeping and Reporting</td>
</tr>
<tr>
<td>Chapter 296-36 WAC</td>
<td>WISHA Safety Standards-Compressed Air Work</td>
</tr>
<tr>
<td>Chapter 296-44 WAC</td>
<td>WISHA Safety Standards for Electrical Construction Work</td>
</tr>
<tr>
<td>Chapter 296-45 WAC</td>
<td>WISHA Electrical Workers Safety Rules</td>
</tr>
<tr>
<td>Chapter 296-62 WAC</td>
<td>WISHA General Occupational Health Standards</td>
</tr>
<tr>
<td>Chapter 296-67 WAC</td>
<td>WISHA Process Safety Management Standards</td>
</tr>
<tr>
<td>Chapter 296-155 WAC</td>
<td>WISHA Safety Standards for Construction</td>
</tr>
<tr>
<td>40 CFR 355</td>
<td>Emergency Planning and Notification</td>
</tr>
</tbody>
</table>
1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Submit a Comprehensive Site-Specific Health and Safety Plan (HASP) covering all aspects of the Contractor’s work activity-related conditions. At a minimum, the plan shall be based on a site-specific hazard analysis and will include, but not be limited to, the following requirements where applicable to the work:

- Excavation and fall protection, working over liquid, ventilation, and hot work.
- Contaminated soils and groundwater handling and disposal safety procedures.
- Engineering controls, work practices, personnel and equipment decontamination procedures, and types of personal protective equipment to be used.
- Hazardous communication. Fuels, and other chemicals. A list of chemical hazards and physical hazards, allowable OSHA exposure levels, threshold limit values, and all other regulatory exposure levels.
- If 24-, 48-, or 80-hour training is required by the Site Health and Safety Plan, then the Contractor shall provide a list of all persons, by work category/type, who will be trained. Photocopies of the employee’s training certificates shall be submitted to the Contracting Agency.
- An emergency evacuation plan for immediate removal to the nearest hospital or doctor’s care for any person who may be injured on the job site. It shall include evacuation routes to medical treatment and emergency telephone numbers for hospitals, ambulances, police and fire departments, poison control, and the City of Tacoma. Permit Required Confined Space Operation.
- A list of safety and monitoring equipment to be kept at the job site and its storage location. A record of monitoring equipment calibration shall be maintained.
- The plan shall be submitted within 5 working days of receiving Notice to Proceed.
- The plan shall be revised to address issues requested by the Construction Manager, regulatory agencies, or other agencies with jurisdiction.
- The HASP must be reviewed, and any requested changes addressed prior to start of work.

1.06 CONTRACTOR QUALITY ASSURANCE
A. Be responsible for carefully reviewing the entire scope of work, the work site location, adjacent structures and systems, and applicable Contract Documents requirements to fully inform and satisfy itself, by personal review and examination, or by such other means as they prefer, of the safety considerations and requirements that must be addressed and planned prior to the start of work.

B. Be responsible for ensuring that Contractor employees and the subcontractor’s employees comply with the HASP. Ensure the subcontractors receive and review a copy of this Section.

C. The Contractor shall appoint a Site Health and Safety Officer for the project. The Health and Safety Officer must meet the requirements contained in 29 CFR Part 1910 and Chapter 296-62 WAC and who is qualified by experience and training in hazardous waste operations in accordance with other applicable laws, regulations, and requirements of this Section. The Site Health and Safety Officer shall be qualified and authorized to monitor, supervise, and enforce safety compliance with the Site Health and Safety Plan. The Site Health and Safety Officer shall be on site at all times when work operations involve excavation and trenching or at other times when the potential for encountering contaminated soil.

D. The name and telephone number of the safety supervisor shall appear in the HASP.

1.07 HEALTH AND SAFETY COMPLIANCE

A. The Contractor shall ensure the necessary air monitoring, ventilation equipment, protective equipment, fall protection and other specified supplies and equipment are made readily available to employees to facilitate implementation of the HASP.

B. Notify the Construction Manager of all accidents and on the job injuries within the same workday.

C. Submit to Construction Manager documentation of all pre-job safety meetings with all subcontractors.

D. Conduct, document and submit to Construction Manager minutes from weekly safety tailgate meetings.

E. Submit any reports generated as part of the HASP on a monthly basis.

F. The Construction Manager may notify the Contractor of any suspected or observed inadequacies in the implementation of the HASP and may contact the regulatory agencies with jurisdiction if such inadequacies are not addressed.
PRODUCTS
NOT USED

PART 2–EXECUTION
NOT USED

**END OF SECTION**
SECTION 01062
PERMITS AND EASEMENTS

PART 1–GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.
B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02200 – Earthwork
   3. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   4. Section 02280 – Wetland Mitigation Implementation

1.02 SUMMARY
A. In accordance with the General Conditions, the Contractor shall at all times comply with applicable permits, ordinances, laws, and regulations.

1.03 PERMITS
A. The Owner has acquired or is acquiring the following permits and approvals, which shall be transferred to the Contractor prior to the start of construction:
   1. Washington Department of Fish and Wildlife
   2. Waste Disposal Agreement (WDA)
B. Contractor shall obtain:
   1. Construction Stormwater Pollution Prevention Plan
C. The Contractor shall examine the permits granted to the Owner and shall be responsible for complying with all conditions set forth in the permits. Should there be any permit conditions not incorporated into the documents, changes to the documents issued after the bid date will be incorporated as outlined in paragraph 01062-1.04. Failure of the Contractor to review permit conditions will not relieve the Contractor from compliance with the requirements stated therein.

1.04 EASEMENTS
A. Easements available for conducting any portion of the work will be provided by the City of Tacoma.
1.05 PERMITS AND EASEMENTS OBTAINED AFTER BID SUBMITTAL

A. If, after the bid submittal date, the Owner obtains any permits or easements which require changes to the work hereunder and thereby cause an increase or decrease in the Contractor’s cost of, or the time required for, the performance of the work under this Contract, the Contractor shall submit information sufficient for the Engineer to determine the extent of the effects on the Contractor’s cost and/or schedule. If the Construction Manager agrees that the Contractor’s cost and/or schedule will be affected by such changes, such effects will be handled in accordance with the General Conditions. The Construction Manager will provide a copy of any such permits or easements to the Contractor. The Contractor shall comply with all applicable terms and conditions contained in such permits or easements.

1.06 PERMITS TO BE OBTAINED BY CONTRACTOR

A. The Contractor shall obtain all other permits required to perform the work, including any State, County, or City permits.

B. The Contractor shall prepare and submit to the proper authority all information required for the issuance of such permits and shall pay all costs thereof, including agency inspections unless specifically provided otherwise in these Contract Documents.

C. The Contractor shall provide a copy of each such permit to the Construction Manager. Such additional permits may include, but shall not be limited to:

1. Disposal or hauling permits for disposal of waste materials.

1.07 BUSINESS LICENSES

A. The Contractor and all subcontractors shall obtain and maintain City of Tacoma and Washington State business licenses during the course of the work.

1.08 POSTING PERMITS AND EASEMENTS

A. Permits and easements shall be posted at the site of the work.

1.09 RESTORATION OF PROPERTY

A. The Contractor shall comply with all property restoration requirements contained in any and all permits and easements required for the performance of the work.

B. Whenever any work is performed on property other than the limits shown on the Contract Documents or work not included in the Contract, the Contractor shall furnish the Construction Manager, before final payment, a written release from the property owner, or proper authority acting for the owner, of each property affected stating that the restoration of structures and surfaces has been completed to the satisfaction of the owner and that the owner has no claims for
damages on account of such restoration. If, in the opinion of the Construction Manager, the release is unreasonably withheld by the property owner, the Owner may, in its sole discretion, accept the portion of the work involved and cause final payment to be made to Contractor.

1.10 WASTE DISPOSAL

A. Except for specific requirements included in the Contract, all existing vegetation and granular material which is removed under this Contract and not otherwise designated to be incorporated into the project shall be disposed of off-site at the Contractor’s expense. The Contractor shall be responsible for obtaining necessary permits or approvals for the Contractor’s disposal site.

B. Topsoil and excavated material is considered contaminated. Contaminated material shall be disposed of at the LRI Landfill, located at 30919 Meridian Street East, Graham, WA. The Contractor shall bear the expenses to haul to the disposal area. The City has obtained a WDA and will be responsible to pay disposal and dump fees at the disposal area.

1.11 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Permits and easements obtained by the Contractor.

D. Approvals when work is complete for permits obtained by the Contractor.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01126

BYPASS

PART 1 —GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Contract Time and Work Sequence
   3. Section 01015 – Contractor Use of Premises
   4. Section 01062 – Permits and Easements
   5. Section 01300 – Submittals
   6. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   7. Section 02280 – Wetland Mitigation Implementation

1.02 SUMMARY

A. SCOPE: This section describes the conditions for temporary bypassing of flows around the work area during construction.

B. REQUIREMENTS:
   1. Contractor shall provide labor, materials, and supervision to temporarily operate and maintain bypass flows around the Contractor’s work area. All references to the bypass system and/or bypass pumping system include, but are not limited to, all pumps, piping, hoses, valves, vehicle protections, cofferdams and other materials and equipment needed to move the intended flows from one location to another.

   2. The actual design of the bypass arrangement and alignment shall be prepared by the Contractor and shall be submitted to the Owner to determine conformance to project objectives.

   3. The outlet structure and existing pump station shall remain accessible at all times throughout the duration of the project. Contractor shall be responsible for diverting flow away from the limits of construction through the use of bypass pumping or flow diversions with prior written approval by the Owner.

   4. The bypassed flow shall be continuously monitored to ensure compliance with water quality limits.
5. All work within the basin shall occur with outlet pipes plugged to isolate the basin from Leach Creek per Army Corps of Engineers Permit requirements (see Section 01062 – Permits and Easements).

1.03 QUALIFICATIONS

A. Contractor shall utilize qualified staff and/or a subcontractor that has been directly responsible for completion of a project that required the bypass pumping of flows in excess of 30 mgd. Approval is required prior to start of work.

B. BYPASS DESIGNER:
   1. Construction bypass design experience on at least five projects of similar size and scope within the previous five years.
   2. Professional Engineer licensed in the state of Washington.

C. SPECIALTY BYPASS SUBCONTRACTOR: bypass experience on at least five projects of similar size and scope within the previous five years.

1.04 JOB CONDITIONS

A. TEMPORARY STRUCTURES:
   1. Temporary bypass systems shall only discharge stormwater and surface runoff from the basin to Leach Creek downstream of the existing outlet structure or as approved by the Owner.
      a. No bypassing to the ground surface, other receiving waters, storm drains, or bypassing that results in soil or groundwater contamination or any potential health hazards shall be permitted.
      b. Discharge velocities shall not create scour, undermining, or other detrimental effect within the vicinity of discharge piping outlet. Discharge piping shall be protected from construction operations and vehicle movements.
   2. A positive means shall be used to seal or isolate the existing outlet structure from backflow into the basin and to permit the required modifications to the outlet structure. The existing outlet pipes will need to be isolated using a plug or similar device.
   3. The Contractor shall take all cautions necessary to ensure that foreign material does not enter the temporary pumping intake screens during modifications to the basin. The Contractor shall keep intake screens and suction lines clean and free from debris. Foreign objects, such as rocks, concrete, debris, logs, and tools, will cause damage to the pumps leading to potential system failure.
   4. When performing activities where confined space entry into structures and pipes is required, be aware that there is continuous flow that originates from several sources, not all of which can be shut down or bypassed.

B. SCHEDULING:
1. The bypassing system shall not be shut down between shifts, on holidays or weekends, or during work stoppages without written permission from the Contractor.

2. The bypass system shall have an attendant around the clock, whose only duty is to maintain the bypass pumping system until the bypassing is no longer required.

3. Contractor to staff the project to ensure the bypass system is monitored during non-working hours for the duration of the project.

C. NOISE RESTRICTIONS

1. Noise Control: Contractor shall comply with local, State, and Federal noise limitation requirements. The Bypass Plan shall reflect these requirements.

2. Contractor shall be required to limit noise production by using special mufflers, barriers, enclosures, equipment positioning, and other approved methods.

3. Noise restrictions are provided in Section 01560 – Environmental Controls.

1.05 FLOW DIVERSION SYSTEMS

A. Temporary cofferdams to divert water around the work area shall be in place prior to initiation of the work within the wetted perimeter and shall remain in place until work is completed, and disturbed areas are stabilized.

B. The temporary diversion systems shall be of sufficient size, constructed of non-erosive materials and installed to divert the entire flow and debris through the bypass or around the isolated work area for the duration of the work.

C. A sandbag revetment, cofferdam, or similar devices shall be installed at the bypass pumping system inlet to divert the entire flow through the bypass system and create sufficient submergence for the pump suction lines.

1.06 PUMPING SYSTEMS

A. Contractor shall pump out standing water at multiple locations on the site prior to installing the bypass pumping system.

B. Contractor shall maintain on site the following minimum requirements for all bypass pumping systems:

1. Sufficient equipment and materials to ensure continuous and successful operation of the bypass and dewatering systems. The complete bypass system, including all pumping units, instruments, piping, and appurtenances to operate continuously.

2. Anticipated flows within the basin vary with seasonal rainfall event patterns.

3. The Leach Creek Holding Basin has two main channels (East and Northwest). Each of these channels convey flow to the Outlet Structure. It is anticipated that flows will need to be pumped from at least two locations with varying inflows.

4. Baseflow bypass:
a. The pumping equipment for bypassing baseflows and surface runoff at each pumping location (locations identified in Reference Information under this section) shall be sized for a total of 3500 gpm (5 mgd), with the ability to turn down the flow rate to a total of 1,800 gpm (2.6 mgd) using variable frequency drives.

b. The pump system shall continuously pump across the dam for the duration of the project to meet the permit requirements listed in Section 01062 – Permits and Easements.

c. Backup baseflow pump systems meeting the 4.a. baseflow minimum requirements shall be on standby at each location and configured to allow the backup system to operate simultaneously with the duty pumping system, for a total flowrate of 10 mgd.

5. High flow bypass:
   a. A high flow bypass pumping system capable of at minimum an additional 20,000 gpm (24 mgd) shall be located at the project site and immediately available to bring online in the event a storm event occurs during planned construction.
   b. The high flow bypass pumping system shall be configured with multiple pumps to provide flexibility to be deployed at the different channel diversion locations.
   c. Configuration of high flow bypass pumping equipment shall allow for simultaneous pumping from up to two different bypass locations and operate simultaneously with the baseflow pumping equipment.

6. All temporary pumping equipment, controls, and maintenance costs shall be borne by the Contractor. Temporary pumping equipment shall be diesel powered and controlled based on basin water level. Temporary pumps shall be operable without refueling for a consecutive period of 48 hours. Refueling shall take place no later than when fuel capacity is such that 12 hours of consecutive operation at the specified pumping capacity is estimated to remain.

7. All fuel tanks located on-site shall be double walled with spill protection and shall have tank level monitoring.

8. Temporary pump controls shall incorporate redundant elevation adjustable “pump on” float or level switches, and “pump off” float or level switches.

9. The Contractor shall maintain on site a sufficient number of valves, tees, elbows, connections, tools, pipe plugs, piping, hoses, and other parts of system hardware to ensure immediate repair or modification of any part of the system as necessary.

1.07 BYPASS AND FLOW CONTROL PLAN

A. The design of the bypass system, including arrangement and configuration, shall be prepared by the Contractor. The Contractor shall submit a project specific Bypass and Flow Control Plan (Bypass Plan) for review and approval by the Construction Manager prior to start of work. Approval of submitted plans shall in no way relieve the Contractor of their responsibility to meet permit requirements or to protect downstream drainage systems and properties.
B. The Bypass Plan shall include but is not limited to the following:
   1. Flow monitoring data, location of monitoring and design calculations for flow diversions
   2. A summary of flow to be bypassed including measured flows and any flows diverted
   3. Drawings indicating the scheme and location of diversion structures, cofferdams, pumps, suction piping, discharge piping, and temporary pipe plugs
   4. Pipe plugging method and type of plug
   5. Pump suction and discharge locations
   6. Capacities and sizes of pumps, standby equipment, power/fuel requirements
   7. Pump controls strategies
   8. Weight of pumping system components including treatment tanks and equipment, configuration (i.e., skid or trailer mounted), and calculations showing how load limits on dam are met
   9. Design calculations proving adequacy of the system and selected equipment, including suction lift capabilities, static lift, friction losses, fitting losses, flow velocity, pump curves showing operating range, suction pipe, and discharge pipe
   10. Method of noise and exhaust control for each pump and generator
   11. Measures to prevent movement, support, or anchor bypass piping including but not limited to thrust and restraint block sizes, placement of barriers, and strapping
   12. Staffing plan demonstrating compliance for continuous monitoring
   13. Fish protection, capture and transportation equipment plan per Washington Department of Fish & Wildlife permit requirements (Section 01062 – Permits and Easements)

C. An example bypass schematic plan is provided as Reference Information attached to this section. The example bypass schematic is provided for reference only. Means and methods of accomplishing the bypassing while meeting all applicable permit requirements shall be the responsibility of the Contractor.

1.08 CONTINGENCY PLAN

A. The Contractor shall develop a contingency plan to minimize damage to the Work area in the event of an emergency. An emergency event includes failure of the bypass pumping system to keep up with incoming flow (e.g. a storm that exceeds the capacity of the bypass system or equipment malfunction). The contingency plan shall include the following information for each of the different emergency conditions:
   1. Describes actions to be implemented in the event of an emergency.
   2. Procedures for revising and adjusting the bypass system to minimize water intrusion into the Work area.
   3. Procedures for water management during an emergency event.
1.09 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Temporary bypass system plan and emergency contingency plan as described in paragraph 01126.1.07. The bypass plan shall include:
   1. Detailed description of bypass system including connection, testing operation, alarm and control functions and disconnection as described in paragraph 01126.1.07.B.
   2. Staffing plan to manage and monitor the bypass system.
   3. Contractor shall submit proposed noise control and exhaust control plans for pumping equipment to meet the requirements specified in Section 01560 – Environmental Controls.
   4. Suction intakes fish protection, capture and transportation equipment plan.
   5. Contractor shall submit bypass piping inspection plan per paragraph 01126.3.01.

D. Contingency plans in the event of an emergency per paragraph 01126.1.08.

PART 2 —PRODUCTS

NOT USED

PART 3 —EXECUTION

3.01 INSPECTION

A. The Contractor shall inspect all piping system for leaks and damage on a daily basis.

B. The Contractor shall inspect all bypass equipment for damage on a daily basis.

C. Contractor shall regularly monitor, a minimum of once daily, any cofferdams, plugs or weirs for performance. The Contractor shall notify the Construction Manager of any unusually high flows.

D. Keep an inspection log at each pump location.

3.02 OPERATION

A. The bypass system will have a trained and qualified attendant on site around the clock, whose only duty is to maintain the bypass diversion and pumping system until the bypassing is no longer required. The attendant shall be qualified to both operate the system and repair any and all problems that may occur. The attendant shall have a cellular phone for communication between the Construction Manager and Owner and the site in the event of emergencies.
B. Contractor shall regularly monitor, a minimum of once daily, any cofferdams, plugs or weirs for performance. The Contractor shall notify the Owner of any unusually high flows.

C. Work stoppage may be required due to a large storm event common to the seasons for which the Work is scheduled. The emergency contingency plan shall describe the activities that are triggered in the event of an emergency to minimize damage to the Work area and downtime.

3.03 DAMAGES

A. The Contractor shall repair, without cost to the Owner, any damage that may result from inadequate or improper installation, maintenance, and operation of bypass system, including mechanical or electrical failures.

3.04 CLEAN-UP

A. Upon completion of bypass pumping operation, Contractor shall remove all materials used for the temporary cofferdam, diversion and bypass activities then clean disturbed areas, restoring to original condition including, but not limited to, pavement restoration and landscaping at least equal to that which existed prior to start of Work.

3.05 REFERENCE INFORMATION

A. The attachment listed below, following “End of Section,” is provided as reference only.
   1. Example Bypass Plan Schematic.

**END OF SECTION**
SECTION 01290
APPLICATIONS FOR PAYMENT

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Work Summary
   2. Section 01300 – Submittals
   3. Section 01315 – Web Based Construction Document Management
   4. Section 01320 – Construction Progress and Documentation
   5. Section 01720 – Closeout Procedures and Record Drawings

1.02 SUMMARY

A. Section includes:
   1. Schedule of Values.
   2. Procedures for preparation and submittal of Applications for Payment.

1.03 FORMAT

A. Develop satisfactory spreadsheet-type form generated from the Progress Schedule.

B. When Change Orders are executed, add Change Orders at end of listing of scheduled activities:
   1. Identify change order by number and description.
   2. Provide cost of change order in appropriate column.

C. After completing, submit Application for Payment.

D. Execute application with signature of responsible officer of Contractor.

1.04 SUBSTANTIATING DATA

A. Provide Substantiating Data with cover letter identifying:
   1. Owner’s specification number and project number.
   2. Project name and location.
3. Contractor’s name and address.
4. Application number and date of submittal.
5. Detailed list of enclosures.
6. For stored products in City of Tacoma with item number and identification on application, description of specific material, and proof of insurance coverage for stored products.
7. Submit certified payroll.

1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Application for Payment and Substantiating Data with cover letter: Submit in accordance with Section 01315 - Web Based Construction Document Management.

D. Prepare progress payment requests on a monthly basis. Base requests on the breakdowns of costs for each scheduled activity and the percentage of completion for each activity.

1.06 SCHEDULE OF VALUES

A. Submit, in conjunction with the Baseline Schedule, a Schedule of Values per General Conditions 00 72 00, GC-6.02 and Supplementary Conditions 00 73 00, SC-6.02, identifying costs of all construction activities as generated by the schedule. Equate the aggregate of these costs to the Contract Sum.

B. Submit corrected schedule of values within 5 calendar days upon receipt of reviewed Schedule of Values.

C. Provide certified payroll statements with application for payment.

D. Additional breakdown requirements:

1. Separate by defined phases of the Work. Provide sub-schedules showing values correlated with each work phase.

2. For items on which progress payments will be requested for materials or equipment purchased/fabricated/delivered but not yet installed, show "initial value" for payment request and "value added" for subsequent stage(s) of completion on that unit of Work. Identify materials stored on-site or off-site.

3. For each line item of installed value exceeding 5 percent of the Contract Sum, show breakdown by major products for ease of review and
confirmation of Work completed. Identify material and labor as separate items.

4. Identify each administrative and procedural requirement separately by phase as a separate line item:
   a. Mobilization.
   b. Project Administration.
   c. Construction schedule.
   d. Bonds and insurance at actual cost.
   e. Demolition and repair.
   f. Cleanup.
   g. Record Documents – paid upon acceptance.
   h. Operation and Maintenance Manual with Parts Lists – paid upon acceptance.
   i. Special warranties.
   j. Temporary facilities.

5. The minimum value shall be no less than 2-percent of the Contract Sum, each, for each requirement listed:
   a. Cleanup.
   b. Record Documents.

6. Round figures to nearest dollar amount.

7. Coordinate items of the Schedule of Values so that there is a corresponding item in the Construction Progress Schedule. If activities are added or removed from the Progress Schedule, revise the Schedule of Values and resubmit.

1.07 PAYMENT APPLICATIONS

A. General:

1. Submit itemized payment request as required in General and Supplementary Conditions 00 72 00 and 00 73 00 together with Schedule of Values and other submittals as listed herein.

2. Except as otherwise indicated, sequence of progress payments is to be regular, and each must be consistent with previous applications and payments; it is recognized that certain applications involve extra requirements, including initial application, application at times of Substantial Completion, and final payment application.

3. By submitting an Application for Payment, Contractor is certifying that to the best of Contractor’s knowledge, information, and belief, the work covered by each Application for Payment has been completed in
accordance with the Contract Documents, that all amounts have been paid for work for which previous Applications for Payment were issued and payments received from the City, and that current payment is now due.

4. Contractor certifying Subcontractor payment: In accordance with General and Supplementary Conditions.

B. Submit progress payment requests at progress meetings.

C. Payment Application Times: The City at the pre-construction meeting will establish the date for each progress payment and the period of construction Work covered by each Application for Payment.

D. Payment Application Forms: In accordance with General and Supplementary Conditions. Provide with continuation sheets for the schedule of values, and place the following paragraphs at the end for signatures:

“The undersigned Contractor certifies that to the best of the Contractor’s knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Document, that all amounts have been paid by the Contractor to employees, Subcontractors, suppliers, etc. for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payments shown herein is now due.

(Contracting Firm)

By ________________________________ _________________________

(SIGN IN INK) Date

E. Application Preparation: Complete every entry on form. Notarize and execute by an Officer of the Company authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action:

1. Entries shall match data on the Schedule of Values and Contractor’s Construction Schedule. Use updated schedules if revisions were made.

2. Include amounts of Change Orders issued before last day of construction period covered by application.

F. Transmittal: Submit in accordance with Section 01315 - Web Based Construction Document Management. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

G. Waivers of Mechanic’s Lien: With each Application for Payment, submit waivers of mechanic’s lien from every entity who is lawfully entitled to file a mechanic’s lien arising out of the Contract and related to the Work covered by the payment.

H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Statement of Intent to pay prevailing wages in accordance with Davis Bacon and related Acts.
3. Schedule of Values.
4. Contractor’s Construction Schedule (preliminary if not final).
5. Products list.
6. Schedule of unit prices.
7. Submittals Schedule (preliminary if not final).
8. List of Contractor’s staff assignments.
9. List of Contractor’s principal suppliers and subcontractors.
12. Initial progress report.
14. Certificates of insurance and insurance policies.
15. Performance and payment bonds.
16. Data needed to acquire Owner’s insurance.
17. Other documents as may be required in the Contract Documents.

I. Applications each Month During Construction: Submit itemized application, each with Contractor’s notarized affidavit and signed receipts from Principal Subcontractors and Suppliers as specified below. Also include with each application:
   1. Updated construction schedule in accordance with Section 01320 – Construction Progress and Documentation.

J. Construction Schedule Update: Submit with applications for payment a revised updated project CPM schedule for evaluation and measurement of actual work-in-place with said applications for payment:
   1. Application for Payment at Substantial Completion: In accordance with General and Supplementary Conditions.
   2. Final Payment Application: In accordance with General and Supplementary Conditions.

K. On-going documentation verifications prior to payment: Owner will verify the following documentation prior to payment. Failure to provide current documentation to Owner’s satisfaction shall be considered grounds for withholding progress payment and/or final payment to the Contractor:
   1. Current Record Documents: With each Progress Meeting, Contractor is required to present for review to the Owner, a current set of Record Documents.
Documents in accordance with Section 01720 – Closeout Procedures and Record Drawings.

2. Compliance documents required to satisfy federal and state loan requirements.

L. Notarization and Signed Receipts: Contractor’s Affidavit:

1. After the first request for payment, all copies of each subsequent request shall be accompanied by Contractor’s notarized original signature with the statement that all subcontractors and suppliers have been paid to date as their interests appeared in the last payment received (less earned retainage applicable to subcontractors). And shall also be accompanied by a signed receipt from the Principal Subcontractors and Suppliers stating that all sub-subcontractors, suppliers, wages, fringes, and taxes arising out of such subcontract have been paid in full as their interest appeared in the last payment received. Any amounts withheld from any subcontractor’s or supplier’s payment due to lack of performance, or other reason, shall be fully documented with the statement, indicating the amount and justification of payment(s) withheld.

2. No application for payment by the Contractor shall be processed unless accompanied by both the affidavit and the receipts.

1.08 OVERTIME

A. Overtime, double shifts and longer than normal shifts will not be considered reason or justification for extra compensation, unless specifically approved in advance and in writing by the Owner.

1.09 SUBSTANTIATING DATA

A. When Owner requires substantiating information, submit data within 3 days justifying line-item amounts in question.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01300

SUBMITTALS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 SUMMARY

A. Submittals and RFIs shall be made in electronic format using the City’s web-based construction management system specified in Section 01315 – Web Based Construction Management. Provide the appropriate document format in order that text is displayed at a minimum of 11-point font size.

1.03 TYPES OF SUBMITTALS

A. Shop Drawings:

1. Identify and Indicate:
   a. Applicable Contract Drawing and Detail number, products, units and assemblies, and system or equipment identification or tag numbers.
   b. Equipment and Component Title: Identical to title shown on Drawings.
   c. Critical field dimensions and relationships to other critical features of Work. Note dimensions established by field measurement.
   d. Project-specific information drawn accurately to scale.

2. Manufacturer’s standard schematic drawings and diagrams.

3. Modify to delete information that is not applicable to the Work.

4. Supplement standard information to provide information specifically applicable to the Work.

5. Product Data: Provide as specified in individual Specifications.

B. Certificates:

1. General:
   a. Provide notarized statement that includes signature of entity responsible for preparing certification.
   b. Signed by officer or other individual authorized to sign documents on behalf of that entity.
2. Welding: In accordance with individual specification sections.

3. Installer: Prepare written statements on manufacturer’s letterhead certifying installer complies with requirements as specified in individual specification section.

4. Material Test: Prepared by qualified testing agency, on testing agency’s standard form, indicating and interpreting test results of material for compliance with requirements.

5. Certificates of Successful Testing or Inspection: Submit when testing or inspection is required by Laws and Regulations or governing agency or specified in individual specification sections.

C. Manufacturer’s Instructions: Written or published information that documents manufacturer’s recommendations, guidelines, and procedures in accordance with individual specification section.

D. Schedules:

1. Schedule of Submittals: Prepare separately with Progress Schedule.
   a. Show for each, at a minimum, the following:
      1) Specification section number.
      2) Identification by numbering and tracking system as specified under Paragraph Transmittal of Submittal.
      3) Estimated date of submission to City, including reviewing and processing time.
   b. On a monthly basis, submit updated Schedule of Submittals to City if changes have occurred or resubmittals are required.

2. Schedule of Values: In accordance with Division 1 or the Supplemental Conditions as Modified by the City of Tacoma.

E. Statement of Qualification: Evidence of qualification, certification, or registration as required in Contract Documents to verify qualifications of engineer, analytical laboratory, specialty Subcontractor, trade, specialist, consultant, installer, and other professionals.

F. Submittals Required by Laws, Regulations, and Governing Agencies:

1. Promptly submit promptly notifications, reports, certifications, payrolls, and otherwise as may be required, directly to the applicable federal, state, or local governing agency or their representative.

2. Transmit to City for City’s records one copy of correspondence and transmittals (to include enclosures and attachments) between Contractor and governing agency.

3. LEAP and EIC Reports via the LEAP/EIC program requirements.
1.04 PROCEDURES

A. The Contractor shall ensure that there is no conflict with other submittals and notify the Construction Manager in each case where his submittal may affect the work of another contractor or the Owner. The Contractor shall coordinate submittals among his subcontractors and suppliers.

B. The Contractor shall coordinate submittals with the work so that work will not be delayed. The Contractor shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals.

C. The Contractor shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the Contractor marked “Reviewed,” “Reviewed with Comment,” “Revise and Resubmit,” or “Rejected.”

D. Submittal Dispositions: City will review, comment, stamp, and distribute as noted:

1. Reviewed:
   a. Contractor may incorporate product(s) or implement Work covered by submittal.
   b. Distribution: Electronic.
2. Reviewed with Comment:
   a. Contractor may incorporate product(s) or implement Work covered by submittal, in accordance with City’s notations.
   b. Distribution: Electronic.
3. Revise and Resubmit:
   a. Make corrections or obtain missing portions and resubmit.
   b. Except for portions indicated, Contractor may begin to incorporate product(s) or implement Work covered by submittal, in accordance with City’s notations.
   c. Distribution: Electronic.
   d. Resubmit with numbers added to the submittal .01, .02 etc.
4. Rejected:
   a. Contractor may not incorporate product(s) or implement Work covered by submittal.
   b. Distribution: Electronic

E. Electronic Submittals: Submittals may be made in electronic format in accordance with Section 01315 – Web Based Construction Management.

1. Each submittal shall be an electronic file in Adobe Acrobat Portable Document Format (PDF). Use the latest version available at time of execution of the Agreement. Minimum PDF resolution provided shall be 300 dpi for Word documents and 600 dpi for Drawings and photos.
2. Electronic files that contain more than 10 pages in PDF format shall contain internal bookmarking from an index page to major sections of the document.
3. Add general information to each PDF file, including title, subject, author, and keywords.

4. PDF files shall be set up to print legibly at 8.5-inch by 11-inch, 11-inch by 17-inch, or 22-inch by 34-inch. No other paper sizes will be accepted.

5. Submit new electronic files for each resubmittal.

F. Transmittal of Submittal:

1. Contractor shall:
   a. Review each submittal and check for compliance with Contract Documents.
   b. Stamp each submittal with uniform approval stamp before submitting to City.
      1) Stamp to include Project name, submittal number, Specification number, Contractor’s reviewer name, date of Contractor’s approval, and statement certifying submittal has been reviewed, checked, and approved for compliance with Contract Documents.
      2) City will not review submittals that do not bear Contractor’s approval stamp and will return them without action.

2. Complete, sign, and transmit with each submittal package, one Transmittal of Contractor’s Submittal form, attached at end of this section.

3. Identify each submittal with the following:
   a. Numbering and Tracking System:
      1) Sequentially number each submittal.
      2) Resubmission of submittal shall have original number with sequential alphabetic suffix.
   b. Specification section and paragraph to which submittal applies.
   c. Project title and City’s project number.
   d. Date of transmittal.
   e. Names of Contractor, Subcontractor or Supplier, and manufacturer as appropriate.

4. Identify and describe each deviation or variation from Contract Documents.

G. Format:

1. Do not base Shop Drawings on reproductions of Contract Documents. Such shop drawings will be rejected upon receipt and returned without review.

2. Package submittal information by individual specification section. Do not combine different specification sections together in submittal package, unless otherwise directed in specification.
3. Present in a clear and thorough manner and in sufficient detail to show kind, size, arrangement, and function of components, materials, and devices, and compliance with Contract Documents.

4. Index with labeled tab dividers in orderly manner.

H. Timeliness: Schedule and submit in accordance Schedule of Submittals, and requirements of individual specification sections.

I. Resubmittals: Clearly identify each correction or change made.

J. Incomplete Submittals:
   1. City will return entire submittal for Contractor’s revision if preliminary review deems it incomplete.
   2. When any of the following are missing, submittal will be deemed incomplete:
      a. Contractor’s review stamp; completed and signed.
      b. Transmittal of Contractor’s Submittal; completed and signed.
      c. Apparent non-review by Contractor

K. Submittals not required by Contract Documents: Will not be reviewed and will be returned stamped “Not Subject to Review.”

1.04 SUBMITTAL SCHEDULE

A. In conformance with Supplemental Conditions Section 00 72 00-3.02, the progress schedule shall be submitted and reviewed prior to commencing any work.

B. No claim will be allowed for damages or extension of time resulting from rejection of a submittal or the requirement of resubmittals as outlined by this section.

C. Processing Time: Allow enough time for submittal and RFI review, including time for resubmittals, as follows.

1. Time for review shall commence on City’s receipt of submittal.

2. City will act upon Contractor’s submittal and transmit response to Contractor not later than seven (7) days after receipt, unless otherwise specified.

3. Resubmittals will be subject to same review time,

4. No adjustment of Contract Times or Price will be allowed due to delays in progress of Work caused by rejection and subsequent resubmittals.

5. Contractor to provide potential suggested solution if available.

D. If more than seven (7) calendar days are required for the Engineer’s review of any individual submittal or resubmittal, an extension of time will be considered in accordance with Supplemental Conditions Section 00 73 00-3.05.

1.05 SUBMITTAL REQUIREMENTS BY SECTION
A. The following is a summary of submittal requirements. **This summary is not inclusive of all submittal requirements but is intended as a general guide.** Submittals include both submittals for review (Part 1) and product data (Part 2). The Contractor shall review each individual section in the Specifications for complete submittal requirements.

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<td>Spill Prevention Plan and Control</td>
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<td>Record Drawings</td>
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<td>Submit AIA Document G704 Substantial Completion Certificate</td>
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<td>Final Application for Payment</td>
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<td>Warranties</td>
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<td>Demolition and Salvage Report</td>
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<td>Samples of Import Fill Material</td>
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<td>Inspection reports</td>
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<td>Wetland Mitigation information: plant information, species, size, and materials</td>
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<td>Technical memorandum and Monitoring Reports to the Department of Ecology and USACE</td>
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<td>SP</td>
<td>Water Management Plan</td>
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<td>Qualifications of trained technician and analytical laboratory</td>
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<td>02710</td>
<td>SP</td>
<td>Monthly Monitoring Reports and Reportable Event Notifications</td>
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<td>Ecology GULD Approval and Operating Information</td>
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<td>Site Logbook</td>
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<td>Transport and Disposal Certification</td>
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<td>Dewatering Work Plan, Methods, Drawings and design data</td>
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<td>Qualifications for the specialty subconsultants and professional services</td>
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<td>Work Plan and Methods Statements</td>
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<td>SP</td>
<td>Drawings and complete design data stamped by a licensed Professional Engineer in the State of Washington</td>
</tr>
<tr>
<td>Section</td>
<td>Ref.*</td>
<td>Description</td>
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<td>SP</td>
<td>Documentation for well installations including permits, well reports, locations and well tag ID numbers</td>
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<td>Documentation in support of filter grain size determination</td>
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<td>Certificate of gravel pack's material quality and gradation</td>
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<td>Weekly monitoring reports.</td>
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<td>Decommissioning records.</td>
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<td>SP</td>
<td>Calibration documentation of flowmeters.</td>
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<td>SP</td>
<td>Daily report of locations and numbers of dewatering wells in operation</td>
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<td>SP</td>
<td>Decommissioning plan and site restoration</td>
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<td>Irrigation plan</td>
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<td>SP</td>
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<td>SP</td>
<td>Monthly plant reports</td>
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<td>SP</td>
<td>Submit maintenance and quality standards</td>
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<td>Notification prior to placing of concrete</td>
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<tr>
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<td>Manufacturer's Data for all anchors and embedded products</td>
</tr>
<tr>
<td>03510</td>
<td>SP</td>
<td>Shop drawings, product data, materials of construction, and details of installation</td>
</tr>
<tr>
<td>03510</td>
<td>SP</td>
<td>Mix Designs</td>
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<tr>
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<td>Mill test reports</td>
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<td>SP</td>
<td>Installation Certification Form</td>
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</tbody>
</table>

*Note: GC = General Conditions  SC = Supplemental Conditions  SP = Special Provisions

**PART 2–PRODUCTS**

NOT USED
PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01315
WEB BASED CONSTRUCTION MANAGEMENT

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01300 – Submittals
   3. Section 01313 – Project Management and Coordination
   4. Section 01320 – Construction Progress Documentation
   5. Section 01720 – Closeout Procedures and Record Drawings

1.02 SUMMARY

A. This Section includes administrative and procedural requirements for the following:
   1. e-Builder’s Purpose & Utilization
   2. Computer Requirements
   3. Training & Support

1.03 E-BUILDER (PROJECT MANAGEMENT COMMUNICATIONS)

A. The Contractor shall use the Internet Web-based Project Management Software communications tool, e-Builder ASP software, and protocols included in that software during this project. The use of project management communications as herein described does not replace or change any contractual responsibilities of the participants.

   1. The internet web-based project communications database is on-line and fully functional. User registration, electronic and computer equipment, and Internet connections are the responsibility of each project participant. The sharing of user accounts is prohibited.

C. Copyrights and Ownership: Nothing in this specification or the subsequent communications supersedes the parties’ obligations and rights for copyright or document ownership as established by the Contract Documents. The use of CAD files, processes or design information distributed in this system is intended only for the project specified herein.
D. Purpose: The intent of using Internet web-based project management software is to improve project work efforts by promoting timely initial communications and responses.

E. Authorized Users: Access to the web site will be by individuals who are licensed users.

1. The City will provide the Contractor with licensed user accounts for the duration of the project.

2. Authorized users will be contacted directly by the web site provider, e-Builder, who will assign the temporary user password.

3. Individuals shall be responsible for the proper use of their passwords and access to data as agents of the company in which they are employed.

4. Only entities with a direct contract with the City or City employees will be allowed to be an authorized user.

F. Administrative Users: Administrative users have access and control of user licenses and all posted items. DO NOT POST PRIVATE ON COMPANY CONFIDENTIAL ITEMS! Improper or abusive language toward any party or repeated posting of items intended to deceive or disrupt the work of the project will not be tolerated and will result in deletion of the offensive items and revocation of user license at the sole discretion of the Administrative User(s).

G. Communications: The City and Contractor shall utilize e-Builder for electronic submittal of all data and documents unless specified otherwise by the City throughout the duration of the project. Communication functions are as follows:

1. Document Integrity and Revisions:

   a. Documents, comments, drawings and other records posted to the system shall remain for the project record. The authorship time and date shall be recorded for each document submitted to the system. Submitting a new document or record with a unique ID, authorship, and time stamp shall be the method used to make modifications or corrections.

   b. The system shall identify revised or superseded documents and their predecessors.

2. Document Security:

   a. The system shall provide a method for communication of documents. The City will control the Contractor’s access to e-Builder by allowing access and assigning user profiles to accepted Contractor personnel. User profiles will define levels of access into the system; determine assigned function-based authorization (determines what can be seen) and user privileges (determines what they can do). Documents shall allow security group assignment to respect the contractual party’s communication
3. Document Integration:
   a. Documents of various types shall be logically related to one another and discoverable. For example, requests for information, daily field reports, supplemental sketches and photographs shall be of reference as related records.

4. Reporting:
   a. The system shall be capable of generating reports for work in progress, and logs for each document type. Summary reports generated by the system shall be available for team members.

5. Notifications and Distribution:
   a. Document distribution to project members shall be accomplished both within the extranet system and via email as appropriate. Project document distribution to parties outside of the project communication system shall be accomplished by secure email of outgoing documents and attachments, readable by a standard email client.
   b. Review comments made (or lack thereof) by the City on Contractor submitted documentation shall not relieve the Contractor from compliance with requirements of the Contract Documents. The Contractor is responsible for managing, tracking, and documenting the Work to comply with the requirements of the Contract Documents. City’s acceptance via automated system notifications or audit logs extends only to the face value of the submitted documentation and does not constitute validation of the Contractor’s submitted information.

6. The following Document Types are required to be transmitted in electronic form to the e-Builders web site by licensed users:
   a. RFI, Request for Information.
   b. Submittals, including record numbering by drawing and specification section.
   c. Transmittals, including record of documents and materials delivered in hard copy.
   d. Meeting Minutes.
   e. Review Comments.
   f. Daily Field Reports.
g. Construction Photographs.

h. Drawings.

i. Supplemental Sketches.

j. Schedules.

k. Specifications.

l. Change Orders, Contract Modifications, and other change documentation.

1.04 COMPUTER REQUIREMENTS

A. In addition to other requirements specified in this Section, the Contractor and his sub-contractors and suppliers at every tier required to have a user license(s) shall be responsible for the following:

1. Providing suitable computer systems for each licensed user at the users normal work location with high-speed Internet access, i.e. DSL, local cable company's Internet connection, or T1 connection.

   a. e-Builder is a web-based environment and therefore subject to the speed and connectivity problems of the Internet. The Contractor is responsible for its own connectivity to the Internet. e-Builder response time is dependent on the Contractor’s equipment, including processor speed, Internet access speed, etc. and current traffic on the Internet. The City will not be liable for any delays associated from the usage of e-Builder including, but not limited to slow response time, down time periods, connectivity problems, or loss of information. The Contractor will ensure that connectivity to the e-Builder system meets the minimum requirements described in this Section. Under no circumstances shall the usage of the e-Builder be grounds for a time extension or cost adjustment to the contract.

2. Each of the above referenced computer systems shall have the following minimum system and software requirements:

   a. Desktop configuration (Laptop configurations are similar and should be equal to or exceed desktop system.)
      1) PC system 500 MHz Intel Pentium III or equivalent AMD processor
      2) 128 MB Ram
      3) Display capable of SVGA (1024 x 768 pixels) 256 colors display
      4) 101 key Keyboard
      5) Mouse or other pointing device
b. Operating system and software shall be properly licensed.

1) Internet Explorer or other browser (current version is a free distribution for download). This specification is not intended to restrict the host server or client computers provided that industry standard HTTP clients may access the published content.

2) Adobe Acrobat Reader (current version is a free distribution for download).

3) Or, users intending to scan and upload to the documents area of the web site should have Adobe Acrobat (current version must be purchased).

4) Users should have the standard Microsoft Office Suite (current version must be purchased) or the equivalent.

1.05 SUBMITTALS

A. Procedures: 01300

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Provide a List of Contractor’s e-Builder Project Management Software key personnel for the City’s acceptance. Include descriptions of key personnel’s roles and responsibilities for this project. Contractor shall identify their organization’s administrator on the list.

1.06 TRAINING & SUPPORT

A. A group training session or sessions scheduled by the City will be provided for the Contractor. e-Builder users are required to attend the scheduled training sessions they are assigned to. Requests for specific scheduled classes will be on a first come first served basis for available spaces. Companies may also obtain group training from e-Builder at their own expense.

B. e-Builder will provide on-going support through on-line help files and phone in Technical Support at 1(888) 288-5717.

PART 2—PRODUCTS

NOT USED
PART 3—EXECUTION

3.01 UTILIZATION

A. Requirements of this section are in addition to the requirements of all other sections of the specifications. e-BUILDER shall be utilized in connection with submittal preparation and information management required by:

1. Section 01300 – Submittals
2. Section 01320 – Construction Progress Documentation
3. All other Division 1 Sections.

B. Record Keeping:

4. Documents shall be submitted by transmission in electronic form to the e-BUILDER web site.
   a. The City and their representatives, the Construction Manager and their representatives, the Engineer and their consultants, and the Contractor:
      1) Shall respond to documents received in electronic form through the web site and consider them as if received in paper document form.
      2) Reserves the right to and shall reply or respond by transmissions in electronic form on the web site to documents actually received in paper document form.
      3) Reserves the right to and shall copy any paper document into electronic form and make same available on the web site.
   b. The following are some but not all of the paper documents which require original signature:
      1) Contract
      2) Change Orders and Change Order Proposals pricing.
      3) Application & Certificates for Payment, Notarized and Signed by Corporate Officer

C. Design Document Submittals

1. All design drawings and specifications shall be submitted PDF attachments to the e-BUILDER web site. CAD files shall be furnished upon request.

D. Shop Drawings

1. Shop drawing and design data documents shall be submitted as CAD .dwg files or PDF attachments to the e-BUILDER web site.
E. Product Data
   1. Product catalog data and manufacturer’s instructions shall be submitted as PDF attachments to the e-Builder web site.

F. Samples
   1. Sample submittals shall be physically submitted as specified in Section 01300 – Submittals. Contractor shall enter submittal data information into e-Builder with a copy of the submittal form(s) attached to the sample.

G. Administrative Submittals
   1. All correspondence and pre-construction submittals shall be submitted using e-Builder. Examples of administrative submittals include, but are not limited to:
      a. All permits and notices for the work.
      b. List of product substitutions
      c. List of contact personnel
      d. Requests for Information (RFI).
      e. Progress schedules and associated reports and updates.
      f. Plans for safety, demolition, environmental protection, and similar activities.
      g. Quality Control plans and reports.
      h. Any general correspondence.

H. Compliance Submittals
   1. Test reports, certificates, and manufacturer field report submittals shall be submitted on e-Builder as PDF attachments. Examples of compliance submittals include, but are not limited to:
      a. Field test reports
      b. Quality control certifications.
      c. Manufacturer’s documentation and certifications for quality of products and materials provided.

I. Record and Closeout Submittals
1. Operation and maintenance data and closeout submittals shall be submitted on e-Builder as PDF documents during the approval and review stage as specified, with actual set of documents submitted for final. Examples of record submittals include, but are not limited to:

d. Operation and Maintenance Manuals: final documents shall be submitted as specified.

e. Record drawings: Final documents shall be submitted as specified.

f. Extra materials, spare stock, etc.: Submittal forms shall indicate when actual materials are submitted.

**END OF SECTION**
SECTION 01320
CONSTRUCTION PROGRESS DOCUMENTATION

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Work Sequence
   3. Section 01300 – Submittals
   4. Section 01313 – Project Management and Coordination
   5. Section 01315 – Web Based Construction Management
   6. Section 01720 – Closeout Procedures and Record Drawings

1.02 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
   1. Preliminary Construction Schedule.
   2. Progress Schedule.
   4. Daily construction reports.
   5. Material location reports.
   6. Field condition reports.
   7. Special reports.
   8. Construction photographs.

B. Failure to comply with the requirements of this section shall be deemed a material breach of contract documents, allowing the City to withhold payment.

1.03 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.

2. Predecessor activity is an activity that must be completed before a given activity can be started.

B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.

C. Critical Path: The longest continuous chain of activities through the network schedule that establishes the minimum overall Project duration and contains no float.

D. Event: The starting or ending point of an activity.

E. Float: The measure of leeway in starting and completing an activity.

1. Float time available in the schedule is for the Contract and is not for the exclusive use of the Contractor and shall be used in priority of who needs to utilize the Float Time first, whether this be the City or the Contractor.

2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.

3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

F. Major Area: A significant section of construction such as sheet pile construction, or a similar significant construction element.

G. Milestone: A key or critical point in time for reference or measurement.

H. Look Ahead Schedule: Annotated, detailed version of the Monthly Update Schedule; conforming to the duration of one (1) week back and three (3) weeks ahead. Highlight those activities originally scheduled which were either delayed or progressed in advance of plan.

1.04 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Daily Construction Reports: Submit electronic and one (1) printed copy at weekly intervals.

D. Special Reports and photographs: Submit electronic and one (1) printed copy at time of unusual event.

E. Preliminary Construction Schedule: Comply with the requirements of the General and Supplemental Conditions.

F. Progress Schedule: Comply with the requirements of the General and Supplemental Conditions.
G. Material Location Reports: Submit electronic and one (1) printed copy at weekly intervals.

H. Field Condition Reports: Submit electronic and one (1) printed copy at time of discovery of differing conditions.

1.05 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

B. Coordinate Progress Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
   1. Secure time commitments for performing critical elements of the Work from parties involved.
   2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

1.06 PROGRESS SCHEDULE

A. Procedures: Comply with the requirements of the General and Supplemental Conditions. If any provisions in this section are in conflict with the General and Supplemental Conditions, the General and Supplemental Conditions takes precedence.

B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion and Final Completion.
   1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

C. Activities: Comply with the following:
   3. Activity Duration: Define activities so no activity is longer than 15 days, unless specifically allowed by City.
   4. Procurement Activities: Include procurement process activities for items, requiring a cycle of more than 30 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
   5. Submittal Review Time: Include review and resubmittal times indicated in Section 01300 in the schedule. Coordinate submittal review times in Contractor’s Construction Schedule with Submittals Schedule.
   6. Startup and Testing Time: Include not less than seven (7) days for startup and testing, notwithstanding requirements specified in Division 1 and equipment specifications.
7. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow a minimum of 10 days for Engineer's administrative procedures necessary for certification of Substantial Completion.

D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and show how the sequence of the Work is affected.

8. Phasing: Arrange list of activities on schedule by phase to be reviewed and accepted by City. Separate each phase of work on schedule and identify any work that will be interphased.

9. Area/Discipline Separations: Identify each major area and/or discipline of construction for each major portion of the Work. Indicate where each construction activity within a major area and/or discipline must be sequenced or integrated with other construction activities to provide for the following:
   a. Earthwork completion
   b. Structural completion
   c. Completion of mechanical installation
   d. Substantial Completion

E. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change on the overall project schedule.

1.07 PRELIMINARY CONSTRUCTION SCHEDULE

A. Comply with the requirements of the General and Supplemental Conditions as Modified by the City of Tacoma.

1.08 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

A. Comply with the requirements in this Section and the General and Supplemental Conditions as Modified by the City of Tacoma.

1.09 REPORTS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Summary of work underway during the day.
5. High and low temperatures and general weather conditions.
6. Accidents.
7. Meetings and significant decisions.
8. Unusual events (refer to special reports).
9. Stoppages, delays, shortages, and losses.
10. Emergency procedures.
11. Orders and requests of authorities having jurisdiction.
12. Change Orders received and implemented.
13. Services connected and disconnected.
15. Substantial Completions authorized.

B. Material Location Reports: At weekly intervals, prepare a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.

C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare a detailed report. Submit with a request for information on City’s RFI form. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

1.10 SPECIAL REPORTS

A. General: Submit special reports directly to City within one day of an incidence. Distribute copies of report to parties affected by the incidence.

B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site within 1 day, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise City in advance when these events are known or predictable.

1.11 CONSTRUCTION PHOTOGRAPHS

A. Photographically document the project as specified in Section 01380.

PART 2—PRODUCTS

NOT USED

PART 3—EXECUTION

3.01 CONTRACTOR CONSTRUCTION SCHEDULE
A. Progress Schedule Updating: at monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.

2. Include a report with updated schedule that indicates every change, including but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.

3. As the Work progresses, indicate Actual Completion percentages for each activity.

4. Comply with the requirements of the General Conditions and the Supplemental Conditions as Modified by the City of Tacoma.

**END OF SECTION**
SECTION 01380
DIGITAL PHOTOGRAPHS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 01315 – Web Based Construction Management
   3. Section 01320 – Construction Progress Documentation

1.02 SUMMARY

A. The Contractor shall take digital photographs prior to commencement of work on the site, during construction, and upon acceptance of the work. Digital photographs shall have file names indicating the date, name of work, and the location where the photograph was taken.

B. Digital photographs collected weekly shall be uploaded electronically via eBuilder as specified in Section 01315 – Web Based Construction Management or submitted to the Construction Manager in a thumb drive.

C. The photographer shall be equipped to take digital photographs either indoors or outdoors. Photographs shall be taken in color with a digital camera with a minimum resolution of 600 dpi.

1.03 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Photographs as required in this Section.

1.04 PRE-CONSTRUCTION PHOTOGRAPHS

A. The Contractor shall provide preconstruction electronic photographs prior to commencement of work on the site. Preconstruction photographs shall be taken at locations designated below:
1.05 CONSTRUCTION PHOTOGRAPHS

A. The Contractor shall provide digital photographs during construction showing the progress of the work. The photographs shall be taken of such subjects as may be directed. Construction photographs shall start the day of the first onsite work and continue as long as the work is in progress.

B. The following specific photographs shall be taken:
   1. Existing grating
   2. Existing concrete riser
   3. Existing 48-inch pipe after demolition of 60-inch concrete riser
   4. New concrete riser and connection to 48-inch existing pipe
   5. Pump station forebay after initial construction dewatering
   6. Pump station forebay after removal of accumulated material
   7. Transition between existing east and west channels and new channel

C. A CD or thumb drive of construction photographs showing a month’s worth of work shall be submitted to the Construction Manager within 10 days of the end of that month. Photographs can also be uploaded to eBuilder.

D. Upon acceptance of the work, digital photographs shall be made of the work where directed by the Construction Manager. A CD or thumb drive of the digital photographs showing the accepted work shall be delivered to the Construction Manager within 10 days after taking the photographs. Photographs can also be uploaded to eBuilder.

1.06 REQUIRED NUMBER OF PHOTOGRAPHS

A. For the work of this contract, the minimum number of digital photographs shall be provided as listed:

<table>
<thead>
<tr>
<th>Location</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perimeter of work site</td>
<td>• All access and haul roads</td>
</tr>
<tr>
<td></td>
<td>• Along boundaries of work site</td>
</tr>
<tr>
<td>Outlet structure</td>
<td>Sufficient photos to cover all demolition and new work</td>
</tr>
<tr>
<td>Inflow channel</td>
<td>Sufficient photos to document the pre-existing surface conditions of planting density, grading and restriction along the inflow channel where disturbances will occur during construction of channel improvements.</td>
</tr>
<tr>
<td>Other points of interest</td>
<td>As determined by Contractor</td>
</tr>
<tr>
<td>Construction Period</td>
<td>Minimum Number of Digital Photographs</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Preconstruction</td>
<td>45</td>
</tr>
<tr>
<td>Construction</td>
<td>30/week</td>
</tr>
<tr>
<td>Acceptance</td>
<td>45</td>
</tr>
</tbody>
</table>

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01400

QUALITY CONTROL

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals

1.02 SUMMARY

A. This Section specifies administrative and procedural requirements for quality control services, field inspections and field testing of civil and structural constructs required for this project. Contractor is responsible for the quality assurance and quality control of their respective work.

1.03 DEFINITIONS

A. Quality Control System (QCS): The quality control, assurance, and inspection system established and carried out to ensure compliance with the Plans and Specifications.

B. QCS Supervisor: That person in responsible charge of the work occurring, as designated by the Contractor in the QCS Plan.

C. QCS Inspector: Responsible, certified personnel inspecting the various constructs at specified milestones and during the project overall and designated by the Construction Manager. The Special Inspector is part of the QCS Inspector team.

D. Factory Test: Tests made on various materials, products and component parts prior to shipment to the job site.

E. Field Tests: Tests and analyses made at or in the vicinity of the job site in connection with the actual construction.

F. Certified Inspection Report: Reports signed by approved inspectors attesting that the items inspected meet the specification requirements other than any exceptions included in the report.

G. Certificate of Compliance: Certificate from the manufacturer of the material or equipment identifying said manufacturer, product and referenced standard, and shall be signed by a designated officer of the manufacturer.
H. Standard Compliance: Condition whereby specified materials or equipment must conform to the standards of organizations such as the American National Standard Institute (ANSI), American Society for Testing and Materials (ASTM), Underwriters Laboratories (UL) or similar organization.

I. Quality Assurance: The day-to-day, in-process supervisory observations of work and materials conducted by the Contractor to assure that the proper methods and materials are being used and installed by tradesmen.

J. Source Quality Control: The in-process testing and inspections conducted by the QCS Inspector(s) to verify that the materials, equipment, workmanship and shop manufactured constructs are in compliance with the Contract Documents, applicable Codes and standards.

K. Field Quality Control: The testing and inspections conducted by the QCS Inspector(s) in the field during and at the completion of each construct to verify that the in-process and completed construction is in compliance with the Contract Documents, applicable Codes and standards.

1.04 REFERENCES

A. This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

B. Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization, or if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued, or replaced.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C802</td>
<td>Standard Practice for Conducting an Inter-Laboratory Test Program to Determine the Precision of Test Methods for Construction.</td>
</tr>
<tr>
<td>ASTM C1093</td>
<td>Practice for Accreditation of Testing Agencies for Unit Masonry.</td>
</tr>
<tr>
<td>Reference</td>
<td>Title</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ASTM D3740</td>
<td>Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.</td>
</tr>
<tr>
<td>ASTM E329</td>
<td>Practice for Use in the Evaluation of Inspection and Testing Agencies as Used in Construction.</td>
</tr>
</tbody>
</table>

### 1.05 CONTRACTOR’S RESPONSIBILITIES

A. Monitor quality assurance over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.

B. Coordinate with, schedule specified inspections by, and provide normal and customary assistance to the QCS Inspectors.

C. Comply fully with manufacturers’ instructions, including each step in sequence.

D. Should manufacturers’ instructions conflict with Contract Documents, request clarification from Construction Manager before proceeding.

E. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

F. Perform work by persons qualified to produce workmanship of specified quality.

G. Employ the services of profession and specialized services as required by the Contract Documents.

### 1.06 REGULATORY REQUIREMENTS

A. GENERAL: Comply with all Federal, State, and local Codes as referenced herein. Such regulations apply to activities including, but not limited to, sitework and zoning, building practices and quality, on and offsite disposal, safety, sanitation, nuisance, and environmental quality.

B. SPECIAL INSPECTION: Special Inspection shall be performed by the Special Inspector under contract with the Construction Manager in conformance with the IBC. Special Inspection is in addition to, but not replacing, other inspections and quality control requirements herein. Where sampling and testing required herein conforms to Special Inspection standards, such sampling and testing need not be duplicated.

C. STRUCTURAL OBSERVATION: Engineer shall make visual observations of the work to assess general conformance with the Contract Documents at significant construction stages and at completion of the structural system. The QCS shall
include a preliminary list of items expected to be observed. Contractor shall request this preliminary list from Engineer through Construction Manager and submit as part of their QCS submittal. The following structural milestones shall be considered significant construction stages:

1. Demolition of structures connected to structures that shall remain.
2. Walls/slabs prepared for concrete placement, with rebar in place.

1.07 FIELD SAMPLE PROCEDURES

A. When field samples are specified in a unit of work, construct each field sample to include work of all trades required to complete the field sample prior to starting related field work. Field samples may be incorporated into the project after acceptance by Construction Manager. Remove unacceptable field samples when directed by Construction Manager. Acceptable samples represent a quality level for the work.

1.08 CONTRACTOR DESIGNED STRUCTURAL SYSTEMS

A. DESIGN ENGINEERING: Contractor shall employ and pay for engineering services from a Professional Engineer registered in the State of Washington for structural design of Contractor-designed structural systems including but not limited to anchor bolts, pumps formwork, mechanical, and electrical systems and equipment.

B. SPECIALIZED SERVICES: Contractor shall employ and pay for services from a qualified professional with experience as required by the specifications. Work to be performed by specialized professional includes but is not limited to landscape architecture, plant biologist, landscape maintenance.

C. TESTS AND INSPECTIONS OF CONTRACTOR DESIGNED STRUCTURAL SYSTEMS: Contractor shall employ and pay for preliminary testing of concrete, grout, and mortar mix designs where required by Code or the submittal process prior to start of such work. Contractor shall pay for required shop and site inspection of Contractor designed structural systems where required by Code or these specifications, to the extent such testing and inspection exceeds that required for the structural system on the drawings and in these specifications.

1.09 MANUFACTURERS’ FIELD SERVICES AND REPORTS

A. When specified in individual specification Sections, product suppliers or manufacturers shall provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to provide instructions when necessary. Contractor shall submit qualifications of observer to Construction Manager 15 days in advance of required observations. QCS Inspector shall record observations and site decisions, or instructions given to applicators or installers that are supplemental or contrary to manufacturers’ written instructions.
1.10 **JOB SITE CONDITIONS**

A. Schedule to ensure all preparatory work has been accomplished prior to proceeding with current work. Proceeding with the work constitutes acceptance of conditions. Allow adequate time for materials susceptible to temperature and humidity to “stabilize” prior to installation. Establish and maintain environmental conditions (i.e., temperature, humidity, lighting) as recommended by the various material manufacturers for the duration of the work.

1.11 **SUBMITTALS**

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.

C. Written description of Contractor’s proposed QCS plan in sufficient detail to illustrate understanding and approach. The QCS plan and submittal shall include a log showing anticipated inspections, Special Inspections, and source and field Quality Assurance procedures. Preliminary submittal of the QCS plan may be made prior to commencing field work. The preliminary submittal will illustrate the project’s initial three month’s work, and be followed one month later by a final QCS plan submittal.

D. Contractor’s proposed QCS Supervisor, qualifications, and if requested, references.

E. Preliminary structural observation set as described in paragraph 1.05 C.

F. Complete structural system information describing Contractor designed structural systems, including sealed calculations, shop and erection drawings, product literature for the various components, ICC –ES Evaluation Reports for structural components, and a discussion of risk issues associated with the proposed system which could adversely impact overall project completion.

G. If requested by the Construction Manager during the work, manufacturer’s field services and reports. If not so requested, treat same as Product Data.

H. Manufacturers’ field services and reports unless requested by Construction Manager to be submitted for review.

I. Special Inspection reports, unless otherwise directed in each technical specification section.
PART 2–PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. CONTRACTOR RESPONSIBILITIES: Provide source quality control according to the reviewed and accepted QCS plan and paragraph 1.04 herein. Coordinate with Construction Manager to facilitate Special inspections performed by the Owner. Provide ready access to sampling and inspection locations and incidental labor customary in such sampling and inspections. Timely prepare and submit submittals and revise as indicated by review comments. Comply with technical requirements in each specification Section that applies to the work.

B. CONSTRUCTION MANAGER RESPONSIBILITIES: Review Contractor’s tracking of QCS activities at monthly meetings. Facilitate completion of submittal review per Section 01300. Assist Contractor to ensure that Special Inspection occurs where and when specified.

C. ACCEPTANCE CRITERIA: Acceptable characteristics and quality of a particular item or construct is defined in that item’s or construct’s specification Section.

PART 3–EXECUTION

3.01 FIELD QUALITY CONTROL

A. Field quality control responsibilities of the Contractor and Construction Manager are substantially the same as described in paragraph 2.01, with the exception that this work occurs primarily on the jobsite as the work progresses, and Special Inspection will occur more often than at the source.

B. Acceptable characteristics and quality of a particular item or construct is defined in that item’s or construct’s specification Section.

3.02 REGULATORY COMPLIANCE – SPECIAL INSPECTIONS

A. Refer to Contract Drawings for systems or materials requiring special inspection. Contractor designed structural systems are subject to the same Special Inspection requirements as all other work.

3.03 CORRECTION OF DEFECTIVE WORK

A. Remove and replace defective, rejected, and condemned work at Contractor’s expense until such work meets the requirements of Contract Documents.

**END OF SECTION**
SECTION 01500
TEMPORARY CONSTRUCTION FACILITIES

PART 1–GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 SUMMARY
   A. This section specifies the following Contractor temporary construction facilities and associated requirements:
      1. Mobilization, furnishing, maintaining, and removing construction facilities and temporary controls, including temporary utilities, construction aids, barriers and enclosures, security, access roads, temporary controls, project sign, storage and laydown areas, field offices and sheds, and removal after construction.
      2. Unless otherwise noted, Contractor shall be responsible for all costs for utility usage and permitting associated with the requirements of this Section.

1.03 SUBMITTALS
   A. Procedures: 01300 – Submittals
   B. Project sign shop drawing including project description and required fields.

1.04 TEMPORARY POWER
   A. There is no power supply available at the site. The Contractor shall plan to supply temporary power (generator or fuel) for the duration of construction as required to complete the Contractor’s work.

1.05 SANITARY FACILITIES
   A. The Contractor shall provide toilet and wash-up facilities for Contractor’s work force within the designated site work area. No facilities shall be located on or along the site access road or any other location inside the boundaries of the delineated wetlands without the written authorization from the Construction Manager. The facilities shall comply with applicable laws, ordinances, and regulations pertaining to the public health and sanitation of construction sites.
1.06 TRASH DISPOSAL

A. The Contractor shall provide sufficient waste disposal receptacles for the project waste and provide for regular waste removal.

1.07 SITE SECURITY

A. Prior to construction, the Contractor shall install temporary chain-link fencing as necessary to maintain security at the site and prevent unauthorized entry, vandalism, or theft. Contracto shall ensure this fence does not restrict access to private property, utility easements or to outlet structure and inflow channel area (for Construction Manager’s maintenance personnel). The Contractor shall provide a gate with locking mechanism suitable for two padlocks. The mechanism shall allow for placement of two padlocks, one padlock shall be provided by the Contractor and the second padlock shall be provided by the Construction Manager. The gate shall be capable of being opened with removal of either padlock. Temporary fencing shall comply with the following:

1. Chain-link fabric shall be 2-inch mesh, 9-gauge wire, hot-dip galvanized after fabrication. Width of fabric shall be 8-feet 0inch (+3/4-inch) or match existing fence height. Fabric shall comply with the requirements of ASTM A392 and shall have a Class 2 zinc coating.

2. Line, corner, end, gate, and pull posts for temporary fencing shall be installed at the site in a manner to deter trespass onto the site, particularly into areas where fall hazards exist and where Contractor equipment and machinery is being used/stored.

3. Temporary fencing used as site security during construction shall be a minimum of 6-feet high, fastened together with removable mechanical fasteners, and shall be anchored using moveable concrete blocks. The fence shall be equipped with measures to deter unauthorized access to the site such as exposed tines along the fence top.

B. If, due to site restrictions, the Contractor cannot use the temporary chain-link fence as described above, Contractor shall propose alternate method for site protection. Submit to Construction Manager for review.

1.08 PROJECT SIGN

A. The Contractor shall provide a project sign to identify the work being performed at the site. The sign shall list the project name, the contractor contact information, the City’s contact information. Refer to the Reference Information provided with this section for a Project Sign standard detail. The project sign shall follow the dimensions and construction details shown on the Project Sign standard detail.

1.09 REFERENCE INFORMATION

A. The attachment listed below, following “End of Section,” is provided as reference only.

1. Project Sign Standard Detail.
PART 2–PRODUCTS
NOT USED

PART 3–EXECUTION
NOT USED

**END OF SECTION**
1. Locations: Signs shall be installed at the approximate location shown on the plans.

2. Painting: The face and edges of the 1/2" plywood sign board shall have one coat of primer and exterior enamel. The posts, braces, and back of sign board shall have one coat of primer and exterior enamel. The background color shall be white.

3. Letter types: The letter type shall be Calibri except the logos which will be provided by the city. All letters and numbers shall be black.

4. Letter size: 5" letters shall be 5/8" wide, 4" letters shall be 1/2" wide, 3" letters shall be 3/8" wide, 2" letters shall be 1/4" wide.

[Diagram of temporary project sign detail showing dimensions and materials used.]
PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 SITE MAINTENANCE

A. The Contractor shall keep the work site clean and free from rubbish and debris. Materials and equipment shall be removed from the site when they are no longer necessary. Contractor is advised that machinery or tools left onsite overnight or during off hours is at Contractor's sole risk.

B. Upon completion of the work and before final acceptance, the work site shall be cleared of equipment, unused materials, and rubbish to present a clean and neat appearance.

1.03 AIR POLLUTION CONTROL

A. The Contractor shall not discharge smoke, dust, and other contaminants into the atmosphere that violate the regulations of any legally constituted authority. Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary.

1.04 NOISE CONTROL

A. All construction devices used in construction and demolition activity shall be operated with a muffler if a muffler is commonly available for such constructing device.

B. Construction and demolition activity, excluding emergency work, shall not be performed between the hours of 9:00 p.m. and 7:00 a.m. on weekdays or between the hours of 9:00 p.m. and 9:00 a.m. on weekends and federal holidays.

C. Between 7:00 a.m. and 9:00 p.m., noise from Contractor's operations shall in no event exceed 86 dBA at a distance of 50 feet from the noise source or obtain a variance from jurisdiction.

D. Bypass and dewatering pumping require 24/7 operation. Equipment shall be selected, furnished, and installed so that when running together the noise does not exceed 75 dBA at a distance of 50 feet between the hour of 9:00 pm and 7:00 am.
1.05 SPILLS

A. Measures including containment booms, oil absorbent pads, and spill control kits shall be used to contain debris and materials within work areas. Spill control kits shall be available onsite at all times.

B. The Contractor shall prepare a Spill Prevention Countermeasures and Control (SPCC) Plan to be used for the duration of the project. The Plan shall be submitted to the Construction Manager prior to the commencement of any construction activities. A copy of the Plan with any updates shall be maintained at the work site by the Contractor.

1.06 DEBRIS

A. All debris or deleterious removal resulting from construction shall be removed and disposed of at an appropriate offsite location.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01605

SHIPMENT, PROTECTION, AND STORAGE

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 SUMMARY

A. Equipment, products, and materials shall be shipped, handled, stored, and installed in ways which will prevent damage to the items. Damaged items will not be permitted as part of the work except in cases of minor damage that have been satisfactorily repaired and are acceptable to the Construction Manager.

1.03 EQUIPMENT

A. PACKAGE AND MARKING:

1. All equipment shall be protected against damage from moisture, dust, handling, or other cause during transport from manufacturer’s premises to site. Each item or package shall be marked with the number unique to the specification reference covering the item.

2. Stiffeners shall be used where necessary to maintain shapes and to give rigidity. Parts of equipment shall be delivered in assembled or subassembled units where possible.

B. IDENTIFICATION: Each item of equipment shall have permanently affixed to it a label or tag with its equipment number designated in this contract. Marker shall be of stainless steel. Location of label will be easily visible.

C. SHIPPING:

1. Bearing housings, vents and other types of openings shall be wrapped, or otherwise sealed to prevent contamination by grit and dirt.

2. Damage shall be corrected to conform to the requirements of the contract before the assembly is incorporated into the work. The Contractor shall bear the costs arising out of dismantling, inspection, repair and reassembly.

D. FACTORY APPLIED COATINGS: Unless otherwise specified, each item of equipment shall be shipped to the site of the work with the manufacturer’s shop applied epoxy prime coating (except stainless steel). The prime coating shall be applied over clean dry surfaces in accordance with the coating manufacturer’s
recommendations. The prime coating will serve as a base for field-applied finish coats.

E. STORAGE:

1. During the interval between the delivery of equipment to the site and installation, all equipment, unless otherwise specified, shall be stored in an enclosed space affording protection from weather, dust and mechanical damage and providing favorable temperature, humidity and ventilation conditions to ensure against equipment deterioration. Manufacturer’s recommendations shall be adhered to in addition to these requirements.

2. Equipment and materials to be located outdoors may be stored outdoors if protected against moisture condensation. Equipment shall be stored at least 6 inches above ground. Temporary power shall be provided to energize space heaters or other heat sources for control of moisture condensation. Space heaters or other heat sources shall be energized without disturbing the sealed enclosure.

F. PROTECTION OF EQUIPMENT AFTER INSTALLATION: After installation, all equipment shall be protected from damage from, including but not limited to, dust, abrasive particles, debris and dirt generated by the placement, chipping, sandblasting, cutting, finishing and grinding of new or existing concrete, terrazzo and metal; and from the fumes, particulate matter, and splatter from welding, brazing and painting of new or existing piping and equipment. As a minimum, vacuum cleaning, blowers with filters, protective shielding, and other dust suppression methods will be required at all times to adequately protect all equipment. During concreting, including finishing, all equipment that may be affected by cement dust must be completely covered. During painting operations, all grease fittings and similar openings shall be covered to prevent the entry of paint.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 STRUCTURES

A. The Contractor shall take all precautions necessary to protect the integrity and usefulness of all existing work to be incorporated into the modifications as specified. If necessary, the Contractor may, with the approval of the Owner, remove existing structures, including curbs, pipelines and utility poles as may be necessary for the performance of the work, and shall rebuild the structures thus removed in as good a condition as found with the requirements specified. Contractor shall also repair existing structures which may be damaged as a result of the work under this contract.

1.02 ROADS AND STREETS

A. Unless otherwise specified, roads and streets in which the surface is removed, broken, or damaged, or in which the ground has caved or settled during the work under this Contract, shall be resurfaced and brought to the original condition. Roadways used by the Contractor shall be cleaned and repaired and re-striped where applicable.

1.03 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS

A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored as nearly as possible to their original condition. Restoration shall take place within one (1) week of damage or sooner as directed by the Construction Manager.

B. Existing plantings, pathways, and fences shall be protected and replaced if damaged.

C. Existing markers, monuments, signs and barriers shall not be removed, damaged, destroyed, or prevented from being used unless indicated in the Contract documents. The Contractor shall be responsible for locating and protecting all property subject to damage by the construction operations whether shown on the drawings or not.
1.04 PROTECTION OF EXISTING INSTALLATIONS

A. The Contractor shall protect all existing operating facilities and structures from damages. The Contractor shall immediately correct or replace existing equipment, controls, systems, structures, or facilities which are damaged in any way as a result of Contractor’s operations.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

NOT USED

**END OF SECTION**
SECTION 01720
CLOSEOUT PROCEDURES AND RECORD DRAWINGS

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
1. Section 01010 – Summary of Work
2. Section 01014 – Contract Time and Work Sequence
3. Section 01290 – Application for Payment
4. Section 01320 – Construction Progress Documentation

1.02 SUMMARY

A. Section includes:
1. Contract closeout requirements including:
2. Final cleaning.
3. Waste disposal.
4. Touch-up and repair.
5. Preparation and submittal of closeout documents.
6. Certificate of Substantial Completion.
7. Warranties

1.03 FINAL CLEANING

A. Perform final cleaning prior to inspections for Physical Completion as defined in General and Supplementary Conditions 00 72 00 and 00 73 00.

B. Employ skilled workers who are experienced in cleaning operations.

C. Clean grease, mastic, adhesives, dust, dirt, stains, fingerprints, paint, blemishes, sealants, plaster, concrete, and other foreign materials from sight-exposed surfaces, and fixtures and equipment.

D. Remove non-permanent protection and labels.

E. Removal all debris and construction materials.

F. Patch any holes, chips or defects in construction including finished surfaces.

G. Touch up painted surfaces that are soiled, chipped or otherwise flawed.
1.04 WASTE DISPOSAL
A. Arrange for and properly dispose of surplus materials, waste products, and debris off-site.

1.05 TOUCH-UP AND REPAIR
A. Touch-up or repair finished surfaces on structures, equipment, fixtures, and installations that have been damaged prior to inspection for Physical Acceptance. Owner will repaint equipment or patched portions of painted or coated surfaces following repair of finished surfaces by Contractor allowing for uniform texture to entire surface.

B. Refinish or replace entire surfaces which cannot be touched-up or repaired satisfactorily.

1.06 PROJECT RECORD DOCUMENTS
A. Maintain at Project site and update weekly, available to Owner and Construction Manager, one consolidated hard copy of the Contract Documents, shop drawings, and other submittals in good order:

1. Mark and record field changes and detailed information contained in submittals and change orders in accordance with Owner standards.

2. Record actual depths, horizontal and vertical location of underground pipes, duct banks, and other buried utilities. Reference dimensions to permanent surface features.

3. Identify specific details of conduit connections, location of existing buried features located during excavation, and the final locations of piping, equipment, electrical conduits, manholes, and pull boxes.

4. Identify the final installed equipment and instrument tags.

5. Make annotations with erasable colored pencil conforming to the following color code:

<table>
<thead>
<tr>
<th>Additions:</th>
<th>Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deletions:</td>
<td>Green</td>
</tr>
<tr>
<td>Comments</td>
<td>Blue</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>Graphite</td>
</tr>
</tbody>
</table>

B. Maintain documents separate from those used for construction:

1. Label documents "RECORD DOCUMENTS."

C. Keep documents current:

1. Provide photographic records with required information at the time the material and equipment is installed and before permanently concealing.
D. Deliver record documents with transmittal letter containing date, Project title, Contractor's name and address, list of documents, and signature of Contractor. Provide both electronically and on CD.

E. During progress meetings, record documents will be reviewed to ascertain that changes have been recorded.

1.07 MAINTENANCE SERVICE

A. Maintenance service as specified in technical specifications.

1.08 SUBSTANTIAL COMPLETION

A. In accordance with General and Supplementary Conditions 00 72 00 and 00 73 00, Section 6.07.

B. In accordance with Section 01014 – Contract Time and Work Sequence.

C. Submit AIA Document G704 Substantial Completion Certificate.

1.09 PHYSICAL COMPLETION

A. In accordance with General and Supplementary Conditions 00 72 00 and 00 73 00, Section 6.09.

B. When Contractor considers the Work is complete, submit written certification that:
   1. Work has been completed in accordance with the Contract Document.
   2. Punch list items have been completed or corrected.
   3. Work is ready for final inspection.

C. Construction Manager and Owner will make an inspection to verify the status of completion with reasonable promptness.

D. Should the Owner consider that the Work is incomplete or defective:
   1. Owner will promptly notify the Contractor in writing, listing the incomplete or defective work.
   2. Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification to the Owner that the Work is complete.
   3. Construction Manager and Owner shall re-inspect the Work.

1.10 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a final statement of accounting to the Owner at least seven days prior to final Application for Payment.

B. Statement shall reflect all adjustments to the Contract amount:
1. The original Contract amount.
2. Additions and deductions resulting from:
   a. Change Orders.
   b. Set-offs for uncorrected or incomplete Work.
   c. Set-offs for liquidated damages.
   d. Set-offs for reinspection payments.
   e. Extended engineering and/or inspection services and inspection overtime.
   f. Excessive shop drawings review cost by the Owner.
   g. Other adjustments.
3. Total Contract amount, as adjusted.
4. Previous payments.
5. Remaining payment due.

C. Owner will prepare a final Change Order reflecting approved adjustments to the Contract amount which were not previously made by Change Orders.

1.11 FINAL APPLICATION FOR PAYMENT
A. Contractor shall submit the final Application for Payment reflecting the agreed upon information provided in the final statement of accounting.

1.12 WARRANTIES
A. Submittal Time: Submit written warranties on request of City for designated portions of the Work where commencement of warranties Substantial Completion is indicated.
B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
   1. Warranties will be provided in paper PDF form and electronically. Provide one (1) paper warranty per warranty.
   2. Provide name, phone number, hours of operation, and point of contact for warranty issues.
D. Provide additional copies of each warranty to include in operation and maintenance manuals.

1.13 SUBMITTALS
A. Procedures: 01300 – Submittals
B. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements.
C. Record Drawings  
D. Submit AIA Document G704 Substantial Completion Certificate.  
E. Final Application for Payment  
F. Final statement of accounting  
G. Submit written warranties  

**END OF SECTION**
SECTION 01999

REFERENCE FORMS

The forms listed below and included in this section are referenced from other sections of the project manual. These forms shall be submitted via eBuilder as specified in Section 01315 – Web Based Construction Management.

<table>
<thead>
<tr>
<th>Form No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>01300-A</td>
<td>Submittal Transmittal Form</td>
</tr>
<tr>
<td>15121-A</td>
<td>Manufacturer’s Installation Certification Form</td>
</tr>
</tbody>
</table>
01300-A. SUBMITTAL TRANSMITTAL FORM:

Submittal Description: ____________________________ Submittal No.:1 ____________

Spec Section: ____________________________

<table>
<thead>
<tr>
<th>Item</th>
<th>Copies</th>
<th>Date</th>
<th>Section No.</th>
<th>Description</th>
<th>Review action&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Reviewer initials</th>
<th>Review comments attached</th>
</tr>
</thead>
</table>

<sup>a</sup>Note: RV = Reviewed; MCN = Make Corrections Noted; A&R = Amend and Resubmit; R = Rejected Attach additional sheets if necessary.

Contractor

Certify either A or B:

☐ A. We have verified that the material or equipment contained in this submittal meets all the requirements, including coordination with all related work, specified (no exceptions).

☐ B. We have verified that the material or equipment contained in this submittal meets all the requirements specified except for the attached deviations.

<table>
<thead>
<tr>
<th>No.</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Certified by: ____________________________
Contractor’s Signature

---

1See paragraph 01300-4.0 A, Transmittal Procedure.
11000-A. MANUFACTURER’S INSTALLATION CERTIFICATION FORM:

Contract No: ___________________________ Spec Section: ___________________________
Equipment name: ___________________________
Contractor: ___________________________
Manufacturer of equipment item: ___________________________

The undersigned manufacturer of the equipment item described above hereby certifies that he has checked the installation of the equipment and that the equipment, as specified in the project manual, has been provided in accordance with the manufacturer's recommendations, and that the trial operation of the equipment item has been satisfactory.

Comments: ____________________________________________
________________________________________________________
________________________________________________________
________________________________________________________

Date ___________________________ Manufacturer ___________________________

Signature of Authorized Representative

Date ___________________________ Contractor ___________________________

Signature of Authorized Representative
SECTION 02050

DESTRUCTION AND SALVAGE

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01060 – Health and Safety
   2. Section 01300 – Submittals
   3. Section 01560 – Environmental Controls

1.02 SUMMARY

A. This section specifies demolition and salvage. It is the Contractor’s responsibility to coordinate all demolition work with the Contract Drawings and Specifications.

1.03 QUALITY ASSURANCE

A. No products are included in this section.

1.04 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Contractor shall submit the following:
   1. Submit a short report, including drawings, that indicates the measures proposed for protecting existing structures to remain, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers. Include the following in Report.
      a. Sequence of demolition and removal work, with starting and ending dates for each activity. Ensure the Corporation's on-site operations are uninterrupted.
      b. Interruption of utility services. Indicate how long utility services will be interrupted.
      c. Coordination for shutoff, capping, and continuation of utility services.
      d. Submit a list of items specified to be removed and salvaged and which may potentially be removed and salvaged and deliver to the Construction Manager prior to start of demolition.
PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

3.01 GENERAL

A. STRUCTURES: Demolition and removal of structures consist of removal of abandoned superstructures, foundation walls, footings, slabs, and any other structures. Excavations caused by existing foundations shall be cleared of waste, debris, and loose soil, and refilled as specified.

B. SALVAGE: The Owner has the right to salvage any items scheduled for removal. The Contractor shall notify the Construction Manager five (5) days prior to any salvage or demolition work to determine the disposition of items to be removed. The Construction Manager will mark items to be salvaged that are not otherwise indicated as salvage items. Such items shall be properly disconnected, removed from their foundations, cleaned, and stored at a location as specified by the Construction Manager.

1. Remove and salvage to Owner:
   a. Controls Enclosure components
   b. Controls enclosure
   c. Level transducers (2)

2. Salvaged items shall be relinquished to the Owner and delivered to the City Shop at 2201 East Portland Avenue, Tacoma, WA 98421.

C. All demolition work shall be conducted in a manner which will protect the environment, promote public health and safety, and preclude nuisance conditions, in strict conformance with the requirements of specification Sections 01060 – Health and Safety, and 0156 – Environmental Controls. No demolition debris can be stored in the pump station, or in adjacent areas unless specifically approved as a Contractor staging area by Owner.

3.02 OPERATION PROCEDURES

A. Start and complete work in order or precedence as established by approved schedule. Operational procedures and sequence of work is Contractor means and methods.

B. Contractor shall execute work to protect occupants from injury and discomfort. Provide protection to persons and property.

C. Provide the following:

1. Substantial barricades and safety lights as required.

2. Temporary weather protection as necessary to prevent damage to existing facilities.
3.03 CUTTING AND REMOVAL

A. Neatly cut and remove materials and prepare openings to receive new work.
B. Remove masonry or concrete in small sections which will not damage adjacent work or existing structures to remain.
C. Provide shoring, bracing, and other supports to prevent movement, settlement, or collapse of adjacent wall areas, structures, or facilities. Arrange shoring, bracing, and supports to prevent overloading of structure.
D. Take precautions necessary to prevent damage to existing remaining work or to adjacent facilities. Execute work using methods that will prevent interference with use of remaining and adjacent facilities by the City.
E. Properly disconnect salvaged items, if applicable, and protect to retain their full salvage value.

3.04 MATCHING AND PATCHING

A. Where existing construction is cut or otherwise disturbed to permit installation of new work, match and patch existing disturbed construction.
B. Contractor shall use methods and materials similar in appearance and equal in quality to areas or surfaces being repaired.
C. Methods, materials, and finished work are subject to review by the Owner/Construction Manager. Contractor shall remove components, surfaces, or items which cannot be satisfactorily matched and/or patched and replace-in-kind with new materials. Replacement shall be completed at no additional expense to the City.

3.05 CLEANUP

A. Contractor shall remove debris, rubbish and materials resulting from cutting, demolition or patching operations. Materials shall be immediately transported offsite. All materials shall be legally disposed. Contractor shall leave site property and adjacent areas clean, and in a condition satisfactory to the Construction Manager.

**END OF SECTION**
SECTION 02100
SITE PREPARATION

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01062 – Permits and Easements
   2. Section 02050 – Demolition and Salvage
   3. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   4. Section 02280 – Wetland Mitigation Implementation

1.02 SUMMARY

A. SCOPE: This section specifies site preparation which consists of clearing, grubbing, and excavation of existing soils within limits of clearing.

B. EXISTING CONDITIONS: The Contractor shall determine the actual condition of the site as it affects this portion of work.

C. PROTECTION: Site preparation shall not damage structures, landscaping, or sensitive areas outside the clearing limits and vegetation adjacent to the site. The Contractor shall repair, or replace any damaged property.

1.03 PROTECTION

A. Protect existing trees, shrubs and bushes located outside the clearing limits from damage for the life of this contract.

B. See Section 02280 – Wetland Mitigation Implementation for wetland mitigation implementation requirements.

C. See Section 02270 – Erosion Control and Stormwater Pollution Prevention for erosion control requirements.

D. Protect existing overflow spillway structure noted in the drawings by distributing vehicle loads using 1-inch steel plates placed over sand bedding across the road over the spillway structure.
1.04 REQUIREMENTS OF REGULATORY AGENCIES

A. Comply with federal, state and local code requirements for work within delineated wetland areas and when disposing of trees, shrubs and all other materials removed under this specification section. Coordinate all clearing work with utility companies as necessary.

1.05 WASTE DISPOSAL

A. NONCONTAMINATED MATERIAL: With the exception of topsoil and excavated soil, no site has been identified for disposal of material from clearing operations. Disposal shall be offsite at locations that are approved by federal, state, and local authorities. The Contractor shall bear all expenses including but not limited to; obtain a suitable disposal area, haul to the disposal area, pay disposal and dump fees at the disposal area.

B. CONTAMINATED MATERIAL: Topsoil and excavated material is considered contaminated. Contaminated material shall be disposed of at the LRI Landfill, located at 30919 Meridian Street East, Graham, WA. The Contractor shall bear the expenses to haul to the disposal area. The City will be responsible to pay disposal and dump fees at the disposal area.

PART 2–PRODUCTS

2.01 MATERIALS AND EQUIPMENT

A. Provide all materials and equipment required to complete all clearing and grubbing in accordance with this Section.

PART 3–EXECUTION

3.01 CLEARING AND GRUBBING

A. Clear and grub the minimum area required to provide space for construction operations.

B. Clear and grub the work site within easement and/or clearing limit lines shown on the drawings or as shown elsewhere in the contract documents. Remove those items that are designated for removal or otherwise obstruct construction. This includes, but is not limited to; trees, downed timber, shrubs, bushes, vines, roots, stumps, undergrowth, rubbish, paving materials, debris, and all other objectionable materials. Site objects outside clearing limits shall not be removed. Only those portions of the construction area which are absolutely necessary and essential for construction shall be cleared. Minimize the length of time of ground disturbance as much as practical, especially within environmentally sensitive areas. Ground shall not be cleared and grubbed until immediately prior to construction.

C. Notify the Construction Manager of locations where additional trees and shrubs will interfere with installation of facilities. Do not remove additional trees or shrubs without written permission of the Construction Manager. Conduct operations to
minimize disturbance of trees and shrubs outside the clearing limits. Trim trees and roots in accordance with the best horticultural practices, including sealing cuts to preserve the tree.

D. Grub or otherwise prepare areas, including areas to be cleared, to receive construction or other improvements.

1. The Contractor shall notify the Construction Manager 48-hours prior to commencing any clearing and grubbing activities, including that intended for survey or other site investigation work.

2. Tree and brush removal: Prior to grading and hauling operations the following shall be completed in each designated area:
   a. Prior to beginning grading operations, trees and brush shall be removed from the site. Both merchantable and non-merchantable trees shall become the property of the Contractor and shall be disposed of offsite.
   b. Stumps, root mater, heavy sod, boulders, stones larger than 6-inches in any dimension, broken or old concrete, pavement, and debris of any description shall be removed and disposed of offsite.
   c. Where the Contractor employs chipping of brush and limbs, material shall not be discharged on the ground or stockpiled on the site. All wood chips shall be discharged to hoppers or trucks for disposal offsite.
   d. The upper 6 to 10-inches of forest “duff” consisting of decayed vegetation matter shall be removed and disposed at the LRI Landfill. “Duff” material shall not be incorporated in new embankments or fill areas.

3. The Contractor shall notify the Construction Manager when they are satisfied that clearing and grubbing operations, with the exception of “duff” removal have been completed and ready for site grading. The Construction Manager shall inspect the site for general acceptance of site conditions.

4. Material that is excavated shall not to be incorporated in the work and shall be disposed of at the LRI Landfill by the Contractor.

5. Provide protection devices, including barricades, fencing, warning signs, and other items necessary to ensure the security of, and safety within, the work site during this phase of the work.

3.02 DISPOSAL

A. Burning of logs, stumps, roots, and other material on the site is not permitted.
B. All materials obtained as a result of the clearing and grubbing operations shall be disposed of in accordance with the requirements of the applicable governing agencies at the expense of the Contractor.

C. Chipping of brush materials is permitted. However, the subcontractor shall bear all of the costs associated with chipping of brush material and disposal of the resultant chips at an approved location.

D. Refer to paragraph 02100.105 for additional requirements for disposal of contaminated material.

3.03 DEMOLITION AND REMOVAL

A. See Section 02050 – Demolition and Salvage for demolition and salvage requirements.

3.04 UTILITY INTERFERENCE

A. Where existing utilities interfere with the prosecution of the work, the Contractor shall relocate them in accordance with the General and Supplementary Conditions and as otherwise specified.

**END OF SECTION**
PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01015 – Contractor Use of Premises
   2. Section 01060 – Health and Safety
   3. Section 02100 – Site Preparation
   4. Section 02270 – Erosion Control Stormwater Pollution Prevention
   5. Section 02710 – Site Water Discharge
   6. Section 02715 – Dewatering System
   7. Section 02950 – Plants

1.02 SUMMARY

A. SCOPE: This section specifies earthwork which consists of excavation, filling, grading, and disposal of excess material. This section shall be used in conjunction with the 2023 Standard Specifications for Road, Bridge, and Municipal Construction as published by the Washington State Department of Transportation (WSDOT) and the City of Tacoma General Special Provisions.

B. DEFINITIONS:
   1. COMPACTION: The degree of compaction is specified as percent compaction. Maximum or relative densities refer to dry soil densities obtainable at optimum moisture content.
   2. EXCAVATION SLOPE: Excavation slope shall be defined as an inclined surface formed by removing material from below existing grade.
   3. WSDOT STANDARD SPECIFICATIONS: 2023 Standard Specifications for Road, Bridge, and Municipal Construction as published by the Washington State Department of Transportation (WSDOT).

1.03 CONTROL AND MANAGEMENT OF CONTAMINATED MATERIAL

A. Contaminated soils with concentrations of arsenic (As), lead (Pb), and heavy oil exceeding the levels listed in the Washington State Models Toxics Control Act (MTCA) cleanup regulations (Chapter 173-340 WAC) may be encountered on the
project site. The Contractor shall operate within and meet all applicable laws and regulations associated with working with regulated materials encountered during excavation activities. The Contractor is notified of the existence of cleanup standards for site soils developed according to the MTCA.

B. The Contractor is advised to review the applicable Washington Administrative Codes (WAC), Washington Department of Ecology (DOE), Washington State Department of Health (DOH), MTCA and Asarco Reports.

C. Websites for further information:

2. DOH: http://www.doh.wa.gov/
3. DOE: http://www.ecy.wa.gov/
5. Public Health Seattle and King County: http://www.kingcounty.gov/healthservices/health/ehs/toxic/ArsenicLead.as
6. Pierce County Health Department: http://www.tpchk.org/index.php
7. Environmental Protection Agency, Asarco Smelter Cleanup: http://www.epa.gov/region10

D. SOIL MANAGEMENT AND DISPOSAL: The extents and depths of the excavation are shown on the Drawings. Topsoil and excavated material is considered contaminated. Contaminated material shall be disposed of at the LRI Landfill, located at 30919 Meridian Street East, Graham, WA. The Contractor shall bear the expenses to haul to the disposal area. The City will be responsible to pay disposal and dump fees at the disposal area.

E. The Contractor shall load this contaminated material directly into trucks and dispose of it as contaminated material at LRI Landfill, located at 30919 Meridian Street East, Graham, WA. A Waste Disposal Authorization (WDA) for LRI will be supplied to the Contractor at the beginning of the Construction Activities. The Contractor shall follow all provisions of the WDA.

1.04 QUALITY ASSURANCE

A. REFERENCES:

1. This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.
2. Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, whether or not the document has been superseded by a version with a later date, discontinued or replaced.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C136</td>
<td>Standard Method for Sieve Analysis of Fine and Coarse Aggregates</td>
</tr>
<tr>
<td>ASTM D1556</td>
<td>Test Method for Density of Soil in Place by the Sand-Cone Method</td>
</tr>
<tr>
<td>ASTM D1557</td>
<td>Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.5-kg) Rammer and 18-in. (457-mm) Drop</td>
</tr>
<tr>
<td>ASTM D6938</td>
<td>Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)</td>
</tr>
</tbody>
</table>

B. TESTS:

1. The Owner’s Special Inspector will take samples and perform moisture content, gradation, compaction, and density tests during placement of backfill materials to check compliance with these specifications. Density tests shall be performed after placement of every 2-feet of fill. The Contractor shall remove surface material at locations designated by the Construction Manager and provide such assistance as necessary for sampling and testing. The Construction Manager may direct the Contractor to construct inspection trenches in compacted or consolidated backfill to determine that the Contractor has complied with these specifications.

2. Tests will be made in accordance with the following:

<table>
<thead>
<tr>
<th>Test</th>
<th>Standard Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture content</td>
<td>ASTM D6938</td>
</tr>
<tr>
<td>Gradation</td>
<td>ASTM C136</td>
</tr>
<tr>
<td>Density in-place</td>
<td>ASTM D1556, ASTM D6938</td>
</tr>
<tr>
<td>Moisture-density relationships</td>
<td>ASTM D1557</td>
</tr>
</tbody>
</table>
1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Samples of fill materials to be used shall be submitted two weeks in advance of use. Samples shall consist of 0.5-cubic foot of each type of material and shall be tagged with the name of source and pit number.

PART 2–MATERIALS

2.01 FILL MATERIALS

A. TYPE A: Type A material shall be CSBC per WSDOT Standard Specification 9-03.9(3).

B. TYPE B: Type B material shall be Gravel Borrow per WSDOT Standard Specification 9-03.14(1).

C. TYPE C: Type C material shall be Class B Foundation Material per WSDOT Standard Specification 9-03.17.

D. TYPE D: Type D material shall be Bedding Material conforming to the City of Tacoma gradation requirements in Standard Plan SU-16, meeting WSDOT Standard Specification 9-03.9(3) for CSBC.

E. TYPE E: Type E material shall be Gravel Backfill for Pipe Zone Bedding per WSDOT Standard Specification 9-03.12(3).


H. Landscape Materials: Landscape Materials including compost and topsoil shall be per Section 02920 – Soil Preparation, upland mulch shall be per Section 02950 – Plants.

2.02 SUBGRADE GEOTEXTILE

A. Subgrade geotextile fabric shall be used in conjunction with structural fill, over-excavation, under pavement and structures when conditions warrant the use of Class A, B or F fill. It shall be installed over the prepared subgrade prior to placing aggregate for road and pavement construction and structural fill, and installed when conditions warrant over-excavation. The filter fabric shall be a woven geotextile. Acceptable products include Amoco 2002, Mirafi 500X, or approved equal. Install in accordance with manufacturer’s recommendations.

2.03 DRAINAGE GEOTEXTILE

A. Drainage geotextile fabric shall be used in conjunction with footing drains and under drain systems as specified on the Drawings, or in locations determined by the Contractor during construction or dewatering. The filter fabric shall be a
nonwoven geotextile Amoco 4545, Mirafi 140N, or approved equal. Install in accordance with manufacturer’s recommendations.

PART 3–EXECUTION

3.01 GENERAL

A. OVER-EXCAVATION: Where the undisturbed condition of natural soils is inadequate for support of the planned construction, the Construction Manager will direct the Contractor to over-excavate to adequate supporting soils. The excavated space shall be filled to the specified elevation with Type B Material. The over-excavated space under footings may be filled with concrete. The quantity and placement of such material will be paid for as extra work.

B. SURPLUS MATERIAL: Unless otherwise specified, surplus excavated material shall be disposed of offsite in accordance with Section 02100 – Site Preparation.

C. HAULING: When hauling is done over highways or city streets, the loads shall be trimmed, and the vehicle shelf areas shall be cleaned after each loading. The loads shall be watered after trimming to eliminate dust. Hauling routes are provided in Section 01015 – Contractor Use of Premises.

D. FINISH GRADING:

1. Finished surfaces shall be smooth, compacted and free from irregularities.

2. Finished grade shall be as specified by the Contract Drawings plus or minus 0.05-foot except where a local change in elevation is required to match sidewalks, curbs, manholes and catch basins, or to ensure proper drainage.

3. When the work is an intermediate stage of completion, the lines and grades shall be as specified plus or minus 0.5-foot to provide adequate drainage.

4. If the soil is to be cultivated or straw is to be incorporated into the surface, rocks larger than 2½-inches in maximum dimension, roots and other debris on the surface of the slope shall be removed and disposed of prior to cultivation or placement of straw.

E. CONTROL OF EROSION: The Contractor shall maintain earthwork surfaces true and smooth and protected from erosion. Where erosion occurs, the Contractor shall provide fill or shall excavate as necessary to return earthwork surfaces to the grade and finish specified.

F. SUBGRADE GEOTEXTILE: Subgrade geotextile shall be installed according to manufacturer’s recommendations in locations specified on the Contract Drawings, as required by site and wet weather conditions, and as required by the
Construction Manager for earthwork stabilization. Joints shall be formed at edges and ends of the rolls by overlapping a minimum of 3-feet.

G. DRAINAGE GEOTEXTILE: Drainage geotextile shall be installed according to manufacturer’s recommendations in locations shown specifically on the drawings or as required in general applications for underdrains, silt fencing, and similar applications where structural support is not a consideration and in all temporary facilities.

3.02 CLASSIFICATION OF FILL

A. Fill material shall be placed in horizontal layers and compacted with power operated tampers, rollers, idlers, or vibratory equipment. Uncompacted layer thickness shall not exceed 8-inches for heavy duty compactors and 4-inches for hand-operated compaction devices. Material type, maximum layer depth, relative compaction, and general application are specified in Table A. Unless otherwise specified, fill classes shall be used where specified in Table A under general application. Materials shall be moisture conditioned to within 3 percent of optimum moisture content at the time of placement.
TABLE A. FILL CLASSIFICATIONS

<table>
<thead>
<tr>
<th>Fill class</th>
<th>Material type</th>
<th>Maximum uncompressed layer depth, inches</th>
<th>Minimum relative compaction, percent</th>
<th>General application</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>6</td>
<td>95</td>
<td>Capillary break gravel; slab on grade floors</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>8</td>
<td>95</td>
<td>Structural fill for foundation support, over-excavation fill</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>8</td>
<td>95</td>
<td>Pipe zone foundation</td>
</tr>
<tr>
<td>D</td>
<td>D</td>
<td>6</td>
<td>95</td>
<td>Thermoplastic pipe (conduit) bedding</td>
</tr>
<tr>
<td>E&lt;sup&gt;a&lt;/sup&gt;</td>
<td>E</td>
<td>6</td>
<td>95</td>
<td>Rigid pipe (conduit) bedding and subsequent pipeline backfill</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>-</td>
<td>-</td>
<td>Slope protection, construction entrances</td>
</tr>
<tr>
<td>G</td>
<td>G</td>
<td>-</td>
<td>-</td>
<td>Energy dissipation, slope protection</td>
</tr>
</tbody>
</table>

<sup>a</sup> Compaction of layers shall be accomplished in two passes of equipment with complete coverage across the width of the field.

3.03 EARTHWORK FOR STRUCTURES

A. STRUCTURE EXCAVATION:

1. The bottom shall not be more than 0.15-foot above or below the lines and grades specified. If the elevation of structure excavation is not specified, the excavation shall be not more than 0.15-foot above or below the elevation specified for fill material below the structure. Slopes shall vary no more than 0.5-foot from specified grade unless the excavation is in rock where the maximum variation shall be two feet.

2. Should the excavation be carried below the lines and grades specified on the drawings or should the bottom of the excavation be disturbed due to the Contractor's operations and require over-excavation and backfill, the Contractor shall refill such excavated space to the proper elevation in accordance with the procedures specified at no additional cost to the City. The cost of such work shall be borne by the Contractor.

3. Unless otherwise specified, excavations shall extend a sufficient distance from walls and footings to allow for placing and removal of forms, installation of services, and for inspection, except where concrete is specified to be placed directly against excavated surfaces.

4. Temporary slopes shall not exceed 1.5H:1V.

B. STRUCTURE BACKFILL:
1. Unless otherwise specified, structure backfill shall be Fill Class B. Structure backfill shall be placed and compacted in accordance with Section 2-03.3(14) C, Method C of the WSDOT Standard Specifications.

2. After completion of construction below the elevation of the final grade, and prior to backfilling, forms shall be removed, and the excavation shall be cleaned of debris.

3. Structure backfill shall not be placed until the subgrade portions of the structure have been inspected in accordance with paragraph 1.02 B. No backfill material shall be deposited against concrete structures until the concrete has developed a strength of not less than 2,500-pounds per square inch in compression, or until the concrete has been in place for 28 days, whichever occurs first.

4. Backfill material shall be placed in uniform layers and shall be brought up uniformly on all sides of the structure. Unless otherwise specified, backfill around and above pipelines within the excavation line of any structure shall be the same as that specified for structures.

3.04 PIPE ZONE FOUNDATION, BEDDING AND BACKFILL

A. Unless otherwise specified, pipe zone and conduit foundation and bedding shall be in accordance with Table A. Pipe zone and conduit bedding material and pipe zone and conduit backfill shall be brought up evenly in relatively horizontal lifts not exceeding 6-inches, and worked under the haunches of the pipe and conduit by slicing with a shovel, vibration, hand tamping, or other approved procedures per the Construction Manager. Pipe-zone and conduit bedding should be compacted to at least 95 percent of the maximum dry density determined in accordance with Section 2-03.3(14)D of the WSDOT Standard Specifications. Pipe-zone and conduit backfill located immediately above the crown should be lightly compacted with hand operated compaction equipment.

3.05 SUBGRADE PREPARATION FOR STRUCTURES AND PAVEMENT

A. Prepare subgrade by scarifying upper 12-inches of existing fill materials. Moisture condition to near optimum moisture content, and recompact to at least 95 percent of the maximum dry density as determined by Section 2-03.3(14)D of the WSDOT Standard Specifications.

**END OF SECTION**
SECTION 02270
EROSION CONTROL
AND STORMWATER POLLUTION PREVENTION

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Contract Time and Work Sequence
   3. Section 01300 – Submittals
   4. Section 01062 – Permits and Easements
   5. Section 01320 – Construction Progress Documentation
   6. Section 01720 – Closeout Procedures and Record Drawings
   7. Section 02200 – Earthwork
   8. Section 02280 – Wetland Mitigation Implementation
   9. Section 02710 – Site Water Discharge
   10. Section 02715 – Dewatering System
   11. Section 02920 – Soil Preparation
   12. Section 02930 – Seeding

1.02 SUMMARY

A. This Section specifies the minimum requirements for constructing and operating/maintaining the temporary surface water drainage facilities, and erosion and sediment control measures. Collectively, these elements are referred to as Erosion and Sediment Control (ESC) systems.

B. The section describes work consisting of the furnishing and delivery of required materials; installation and maintenance of erosion and sedimentation control procedures; and temporary covering of graded slopes, excavations, embankments, cleared, grubbed or disturbed areas as well as protecting undisturbed areas, and adjacent watercourses as shown on the Drawings, required by City of Tacoma (City of Tacoma Stormwater Management Manual (SWMM)), and as directed by the Construction Manager.

C. This Section also requires the Contractor to prepare, submit and obtain approval of an operating Construction Stormwater Pollution Prevention Plan (SWPPP). The SWPPP shall integrate the minimum measures described in this Section and shown on the Drawings with the Contractor’s work plan for executing and
sequencing the contract work. The SWPPP shall identify a qualified supervisor who shall be responsible for implementing all aspects of the SWPPP including emergency response measures.

1.02 REQUIREMENTS

A. The Contractor shall comply with the requirements of the related permits identified in Section 01062 – Permits and Easements and provide for the minimum control measures described in this Section and the Drawings. The SWPPP shall meet the content requirements specified in the City of Tacoma Stormwater Management Manual (SWMM).

B. The Contractor shall comply with the following prohibitions and limitations:

1. Discharge of materials other than stormwater to any storm drainage system is prohibited. Non-stormwater discharge includes groundwater from excavations, wheel washing, concrete washouts, and truck washing activities. Groundwater from excavations may be discharged per Sections 02715 – Dewatering and 02710 – Site Water Discharge, all other non-stormwater and process water discharges must be transported off site per Section 02710 – Site Water Discharge.

2. Stormwater discharges shall not cause or threaten to cause pollution, contamination (including sediment), or nuisance.

3. Stormwater discharges shall not contain a hazardous substance equal to or in excess of a reportable quantity as listed in 40CFR Part 117 and/or 40 CFR Part 302.

4. Stormwater discharge to surface or groundwater shall not adversely impact human health or the environment.

5. Stormwater discharge shall not cause or contribute to a violation of applicable water quality standard and shall meet applicable provisions of Sections 301 and 402 of the Clean Water Act (CWA).

1.03 EROSION CONTROL, SEDIMENTATION AND WATER QUALITY MONITORING LOG AND REPORTING

A. The Contractor shall maintain a Log Book on the job site for recording and documenting the following:

1. Weekly Erosion Control inspections;

2. Any required water quality sampling results detailed in Section 02710 Site Water Discharge.

B. The Contractor shall report the following:

1. Stormwater discharges equal to or exceeding turbidity or pH limits described in Section 02710 – Site Water Discharge

2. Spill of any hazardous materials;

3. Fish Kill or Distress;
4. Archaeological finds.

C. The Contractor shall identify phone numbers and requirements for reporting in the SWPPP.

1.04 PRESERVATION

A. Except in areas to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy trees or shrubs without the consent and permission of the Construction Manager.

1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. A check mark shall denote full compliance with a paragraph as a whole.

C. Stormwater Pollution Prevention Plan (SWPPP): The Contractor shall prepare and submit a SWPPP in accordance with the outline provided below. The SWPPP shall be acceptable to the City of Tacoma Building and Land Use Services prior to initiation of ground disturbing activities. In addition, the SWPPP will serve as the soil erosion and sediment control plan. Acceptance of the SWPPP does not relieve the Contractor from the responsibility for taking proper actions to prevent contaminants, including sediment, from entering any storm drainage system. The Contractor shall take immediate corrective action if directed by the Owner or Construction Manager, or if the Contractor observes contaminants, including sediment entering any storm drainage system.

1. Within 15 days after the Notice to Proceed (NTP), the Contractor shall submit the SWPPP in accordance with Section 01300 – Submittals and 01315 – Web Based Construction Manager. The Construction Manager will have 7 days to review the SWPPP. If revisions are required, the Contractor shall revise and resubmit the SWPPP within 7 days of receipt of the returned submittal. The Construction Manager will have 7 days to review the Contractor’s revisions. Upon acceptance of the SWPPP, 4 copies of the SWPPP, incorporating the required changes shall be submitted to the Construction Manager. In order for construction activities to proceed, the Construction Manager may conditionally approve the SWPPP while the Contractor completes minor revisions.

2. The Contractor shall amend the SWPPP, graphically and in narrative form, whenever there is a change in construction activities or operations that may affect the discharge of significant quantities or pollutants to surface waters, ground waters, storm drainage systems or when deemed necessary by the Construction Manager. The SWPPP shall be amended if the SWPPP is in violation of conditions of any permits or has not effectively achieved the objective of reducing pollutants in stormwater discharges. Amendments to the SWPPP shall be submitted for review and acceptance in the same
manner specified for the initially accepted SWPPP. Acceptable amendments shall be dated and logged in the SWPPP. Upon acceptance of the amendment, the Contractor shall implement the additional control measures or revised operations.

3. The SWPPP shall show, as it relates to the Contractor’s critical path schedule, the scheduling of installation, maintenance, phasing, and removal of construction of ESC systems. Unless the specified otherwise, work areas to be addressed in the SWPPP include as applicable:

   a. The Project Site identifying staging, storage, stockpiling, non-work boundaries, and any other construction related areas;

   b. Areas beyond the Project Site to be protected;

   c. Transportation plans including construction traffic routes and access/exit control areas on and off the Project Site;

   d. Pollution Sources: The SWPPP shall identify potential sources of stormwater pollution in addition to land disturbing activities, such as:

      (i) Temporary fuel storage and handling. Fuel storage tanks shall be placed within a secondary containment area of sufficient size and strength as to contain 150 percent of the volume stored. Refueling of equipment within the containment areas shall be addressed in the SWPPP.

      (ii) Material storage and hazardous material storage. Material safety data sheets (MSDS) shall be provided for materials stored and handled on-site.

      (iii) Equipment maintenance areas.

      (iv) Solid waste and hazardous waste disposal activities.

   e. Environmentally critical areas to be protected, within or near the Project Site, such as geologic hazard areas, flood prone areas, riparian corridors, wetlands, fish and wildlife habitat conservation areas, and abandoned landfills;

   f. Inlets, catch basins, ditches and channels whether dry or water filled, and other surface drainage facilities;

   g. Surface waters such as streams, lakes, and other bodies of water; and

   h. From October 1 to April 30, no soils shall remain exposed and unworked for more than two days. From May 1 to September 30, no soils shall remain exposed and unworked for more than seven days.

4. The SWPPP submittal shall include, but not be limited to, one or more of the following as the Contract Work may require, and as the Work is scheduled:

   a. Describe with drawings of sufficient scale and detail showing the Project Site, and the locations and types of ESC systems. As necessary, show by a series of time sequence drawings, how
ESC systems are to be installed, maintained, removed and coordinated with the Work and the progress schedule;

b. Describe how non-work areas will be identified and protected;

c. Describe how work will be phased to minimize the potential for erosion to occur;

d. Describe the details and continuing maintenance of entrance and exit equipment wash areas, including the Contractor’s method to prevent tracking of soils off site;

e. Show locations with cross-sections as applicable and describe control details of existing and proposed ditch, berm, culvert, pipe, sediment basin, basin outfall, scour control, inlet, catch basin, drain, bypass, subsurface drain and related feature;

f. Describe protections and covering practices for stockpile, muck, and related deposits;

g. Describe the controls to prevent sediment, debris, and other pollutants from entering surface waters and drainage features;

h. Provide Manufacturer’s Certificate of Compliance, certified laboratory test reports, catalog cuts, samples, and other information providing adequate description of Supplies and Material proposed for ESC system applications;

i. The name of the SWPPP Supervisor, qualifications, experience, and certifications directly related to construction stormwater controls;

j. A schedule of typical inspections ensuring timely maintenance and repair;

k. Identify and provide timelines for submitting permit required or related documentation;

l. Provide details of seed mix, amendment, mulch, and protections for placing and establishing temporary seeded erosion control areas;

m. Provide details of other ESC measures that may be used in the Work.

n. The Contractor shall maintain the SWPPP current for the duration of the project. During the course of the Work, the Contractor and SWPPP Supervisor shall be prepared to discuss with the Construction Manager the status of ESC controls in-progress and pending as they relate to the Work, to the progress schedule, to permits, to any Change Orders, and as may be required in the Contract.

o. When revisions to an approved SWPPP are required by the Construction Manager, the Contractor and the SWPPP Supervisor shall update the SWPPP and submit the updated SWPPP to the
Construction Manager within 5 Working Days unless the Construction Manager approves otherwise.

5. The SWPPP may utilize drawings, details, notes, and other information provided in the construction documents; however, such information shall not, in itself, be construed to meet the requirements of this section. The Contractor shall provide additional detail to ensure that the SWPPP accurately reflects the Contractor’s means and methods for construction, to include: construction sequencing, site layout, construction access, temporary facilities, specific structural and non-structural controls and project organization. Identify temporary and permanent erosion control best management practices (BMPs) that will be implemented as required by the City of Tacoma SWMM. Include product data, as applicable, for all materials that will be incorporated into the SWPPP.

6. Preparing and submitting revisions to the ESC and SWPPP to reflect erosion and sediment control measures that may differ from those shown in the Contract Plans.

7. Implementation of the SWPPP shall include costs associated with furnishing labor, materials, tools, equipment and incidentals for performing the work related to installing, constructing, inspecting, maintaining, removing and disposing of control measures associated with SWPPP.

D. The Contractor shall submit to the EPA’s Notice of Intent (NOI)

PART 2—PRODUCTS

2.01 MATERIALS

A. HYDROSEEDING

Hydroseeding shall be used as a method for denuded or newly backfilled and graded soils. Hydroseed mix shall be formulated and applied as specified in 02930 – Seeding.

B. COMPOSTED MULCH

Composted mulch shall be used as a method for denuded or newly backfilled and graded soils. Compost shall be formulated and applied as specified in 02920 – Soil Preparation.

C. QUARRY SPALLS:

1. Hard, sound, and durable, free from segregation, seams, cracks, and other defects tending to destroy its resistance to weather.

2. Size: Refer to Section 02200 – Earthwork, Fill Class F.

D. REINFORCED PLASTIC FABRIC:

1. Construed, copolymer laminate.
2. Reinforcing: Non-woven grid of high strength nylon cord submerged in a permanently flexible adhesive medium.

3. Equal tear resistance in all directions.


5. Ultraviolet light stabilized.

6. Material to be from a single manufacturer.

7. Physical strength requirements:
   a. Tear strength, lbs.: 130 per ASTM D1004.
   b. Elongation percent: 620 per ASTM D882.
   c. Minimum life expectancy: 2-1/2 years of normal outdoor exposure.

E. GEOTEXTILE FABRICS:

1. The material shall be a geotextile consisting only of long chain polymeric fibers or yards formed into a stable network such that the fibers or yards retain their position relative to each other during handling, placement, and design service life. At least 95 percent by weight of the material shall be polyolefins or polyesters. The material shall be free from defects or tears. The geotextile shall also be free of any treatment or coating which might adversely alter its hydraulic or physical properties after installation. The geotextile shall conform to the properties as indicated below for separation, soil stabilization, and temporary silt fence applications, as specified in the construction documents. In addition, provide geotextile that is inert to biological degradation and resistant to alkalis and acids found in soils within a pH range of 3 to 12.

2. Unless otherwise noted, for woven geotextile provide Mirafi 700X, or equal, which may be used for construction entrances, silt fence, subsurface drainage to cover exposed, barren, earthen, sloped surfaces, and stockpiled spoils to prevent turbid runoff.

3. Unless otherwise noted, filter fabric shall be a non-woven geotextile product as specified in Section 02200 – Earthwork. Phillips SUPAC 4NP, or equal and may be used to cover exposed, barren, earthen, sloped surfaces and stockpiled spoils to prevent turbid runoff. Provide geotextile that is a non-woven needle-punched fabric made from polypropylene.

4. Specifically, the geotextile uses included in this section and their associated tables of properties are as follows:
a. Application: Separation and Soil Stabilization:

<table>
<thead>
<tr>
<th>Geotextile property</th>
<th>Test Method (^b)</th>
<th>Geotextile property requirements (^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOS (apparent opening size)</td>
<td>ASTM D4751</td>
<td>Separation Woven/Nonwoven: 0.60 mm max. (#30 sieve), 0.43 mm max. (#40 sieve)</td>
</tr>
<tr>
<td>Water permittivity</td>
<td>ASTM D4491</td>
<td>0.02 sec(^{-1}) min. 0.10 sec(^{-1}) min.</td>
</tr>
<tr>
<td>Grab tensile strength, minimum, in machine and cross-machine direction</td>
<td>ASTM D4632</td>
<td>250 lb/160 lb min. 315 lb/200 lb min.</td>
</tr>
<tr>
<td>Grab failure strain, in machine and cross-machine direction</td>
<td>ASTM D4632</td>
<td>&lt;50% / &gt;50% &lt;50% / &gt;50%</td>
</tr>
<tr>
<td>Seal breaking strength</td>
<td>ASTM D4632 (^b)</td>
<td>220 lb/140 lb min. 270 lb/180 lb min.</td>
</tr>
<tr>
<td>Puncture resistance</td>
<td>ASTM D6241</td>
<td>495 lb/310 lb min. 620 lb/430 lb min.</td>
</tr>
<tr>
<td>Tear strength, minimum, in machine and cross-machine direction</td>
<td>ASTM D4533</td>
<td>80 lb/50 lb min. 112 lb/79 lb min.</td>
</tr>
<tr>
<td>Ultraviolet (UV) radiation stability</td>
<td>ASTM D4355</td>
<td>50% strength retained, min., after 500 hours in weatherometer 50% strength retained, min., after 500 hours in weatherometer</td>
</tr>
</tbody>
</table>

b. Application: Temporary Silt Fences:

<table>
<thead>
<tr>
<th>Geotextile property</th>
<th>Test Method (^b)</th>
<th>Geotextile property requirements (^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOS</td>
<td>ASTM D4751</td>
<td>Unsupported between posts: 0.60 mm max. for slit film wovens (#30 sieve), 0.30 mm max. for all other geotextile types (#50 sieve), 0.15 mm min. (#100 sieve) Supported between posts with wire or polymeric mesh: 0.60 mm max. for slit film wovens (#30 sieve), 0.30 mm max. for all other geotextile types (#50 sieve), 0.15 mm min. (#100 sieve)</td>
</tr>
<tr>
<td>Water permittivity</td>
<td>ASTM D4491</td>
<td>0.02 sec(^{-1}) min. 0.02 sec(^{-1}) min.</td>
</tr>
<tr>
<td>Grab tensile strength, minimum, in machine and cross-machine direction</td>
<td>ASTM D4632</td>
<td>180 lb min. in machine direction, 100 lb min. in cross-machine direction 100 lb min.</td>
</tr>
<tr>
<td>Grab failure strain, minimum, in machine direction only</td>
<td>ASTM D4632</td>
<td>30% max. at 180 lb or more</td>
</tr>
<tr>
<td>Ultraviolet (UV) radiation stability</td>
<td>ASTM D4355</td>
<td>70% strength retained, min., after 500 hours in weatherometer 70% strength retained, min., after 500 hours in weatherometer</td>
</tr>
</tbody>
</table>
The table below lists the geotextile property requirements. The notes explain that all geotextile properties are minimum average roll values, and the test procedures used are essentially in conformance with the most recently approved ASTM geotextile test procedures.

F. WIRE FABRIC:
   1. 2-inch x 2-inch mesh, 14 gage, or approved equal.
   2. Hot-dip galvanized.
   3. Height: As shown on Drawings.

G. JUTE MESH

Jute mesh shall be used as permanent cover for all disturbed areas indicated on the drawings. Jute mesh rolls shall be a uniform open plain weave of unbleached jute yarn. Jute mesh must comply with the following:

3. Average open area: 60 to 70 percent.
4. Minimum strands per foot in each direction: 14 to 20.
5. Minimum weight per square yard: 0.90 to 1.20 pounds.
6. Physical requirements in table below:

<table>
<thead>
<tr>
<th>Number Of nets</th>
<th>Net type</th>
<th>Matrix</th>
<th>Maximum &quot;C&quot; Factor</th>
<th>Minimum shear stress</th>
<th>Functional longevity (months)</th>
<th>Minimum tensile strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organic</td>
<td>Unbleached and undyed woven jute</td>
<td>0.25</td>
<td>1.5</td>
<td>12</td>
<td>50</td>
</tr>
</tbody>
</table>

Notes:

1 Universal Soil Loss Equation (USLE) C-Factor for a 1.5:1 (H:V) unvegetated slope.
2 lb/ft² under ASTM D 6460.
3 lb/ft under ASTM D 5035.

Fasteners must be 6-inch biodegradable stakes. Stakes must be manufactured from completely biodegradable substance derived from renewable agricultural resources leaving no residuals in the ground. Stakes must be T-shaped with a minimum 1.2-inch hooked head and 4-inch leg or 6-inch leg with serrations or barbs on its body.
H. CATCH BASIN INSERTS
   1. Drain Guard, Silt Sack or approved equivalent.

J. WATTLEs
   1. ACF West Inc. Fiber Roll
   2. PermaTex Straw Wattle
   3. ADS Straw Wattle
   4. HD Supply Straw Wattle Fiber Roll
   5. Approved Equal

PART 3—EXECUTION

3.01 GENERAL

A. Prior to commencement of site work, the Contractor shall obtain SWPPP approval and construct approved erosion and sediment control systems.

B. The Contractor shall exercise every reasonable precaution, including temporary and permanent measures, throughout the duration of the Project to control erosion and prevent or minimize pollution of rivers, streams, lakes and other receiving waters. Siltation control measures shall be applied to erodible material exposed by activity associated with the non-hazardous waste removal construction including, but not limited to, local material sources and haul roads.

C. The Contractor shall be responsible throughout the duration of the Project for installing, constructing, inspecting and maintaining the soil stabilization, sediment control, wind erosion, tracking control, non-stormwater management, and waste management and material pollution control BMPs included in the SWPPP and amendments thereto and for removing and disposing of the BMPs.

D. Unless otherwise directed by the Construction Manager, the Contractor’s responsibility for SWPPP implementation shall continue throughout temporary suspensions of work. As a minimum the Contractor shall:

   1. Install erosion and sediment control structures and devices as detailed in the SWPPP.
   2. Keep exposed soil areas as small as practical.
   3. Stabilize and protect disturbed areas as soon as possible. When exposed soils are at final grade or unworked for more than 7 days, prevent erosion by deploying temporary cover BMPs.
   4. Avoid washing, sloughing, or placing materials in waterways.
5. Stockpiles of topsoil and spoils shall be located away from wetlands and waterways.

6. Repair, replace, and maintain erosion and sedimentation controls for the duration of the project.

E. Temporary erosion and sedimentation control structures shall be maintained until permanent landscaping measures are completed and vegetation is established. Damaged structures shall be repaired or replaced. Sediment shall be removed on a regular basis and eroded areas shall be refilled as required for grade stabilization.

F. Site specific sediment controls shall include the following:

1. TEMPORARY COVER: Apply 3-inches of composted mulch to all exposed soil areas once at final grade or to areas that will remain unworked for more than seven days.

2. PERMANENT COVER
   a. Perform erosion control site seeding, mulching, and landscaping requirements immediately after earthwork is completed. Amend channel soil by tilling 3" of composted mulch (applied as temporary cover) to a depth of 6" into subgrade of channel area, including invert and side slopes. Once the soils are amended, including seeding of the channel invert, install netting. Netting shall be placed in accordance with City of Tacoma SWMM BMP C122 – Nets and Blankets, Volume 2, Chapter 3.
   b. Temporary seeding and mulching shall be in accordance with the measures specified for permanent landscaping. For seed mixes, application rates and procedures, refer to Section 02930 – Seeding.

3. PERIMETER FENCING: The Contractor shall delineate the project area using high visibility plastic fencing to ensure preservation of existing vegetation.

4. CONSTRUCTION ENTRANCE: Construction entrances shall be established at all transitions from disturbed areas to traveled ways, including compact gravel and paved areas, and as directed by the Construction Manager. Construction entrances shall be installed in accordance with the City of Tacoma SWMM.

3.02 SWPPP BEST MANAGEMENT PRACTICES

A. The Contractor’s SWPPP shall identify Best Management Practices (BMP) to prevent contamination of stormwater.

B. The Contractor’s BMPs shall include at a minimum:

1. Silt Fence: Silt fence shall be installed at locations and to the limits shown on the accepted SWPPP and as otherwise directed by the Construction
Manager. Soil disturbed areas shall be fully protected with soil stabilization and sediment control BMPs prior to the onset of precipitation. The Contractor shall maintain the alignment and condition of the silt fence, as necessary, throughout its use on the project. Upon completion and/or as directed by the Construction Manager, the Contractor shall remove the silt fence from the project. Silt fence shall be relocated as necessary for construction operations.

2. Dust Control: The Contractor shall employ construction means and methods that will minimize airborne dust. The Contractor shall be responsible for dust control and furnish labor, equipment, and other means required to carry out proper and efficient dust control measures. Dust control is necessary to prevent operations from producing dust damage, health impacts and nuisance to persons, environment and/or property. Claims from regulatory agencies or the public resulting from dust damage or nuisance shall be borne solely by the Contractor.

5. The Contractor shall provide spray water, using hoses, on the project, and on roads and other areas immediately adjacent to the project limits, wherever traffic, or buildings that are occupied or in use, are affected by such dust caused by the Contractor’s hauling or other operations. The materials and methods used for water spraying shall be included in the SWPPP and subject to acceptance by the Construction Manager. The Contractor shall provide for prompt and proper removal from existing roadways of dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by the Contractor’s hauling and/or other operations. Roadways surrounding demolition and construction areas, and along paved haul routes, shall be swept at least once per day. Erosion control measures; for example a silt fence, to prevent silt runoff to public roadways and to protect existing and newly installed drainage systems from soil migration into the drain storm system shall be installed.

3. Storm Drain Inlets. Install and maintain sediment traps in local stormwater inlets. Clean out storm drain inlets that become clogged with dust, debris, mud, and other materials.

4. Limit Vehicle Speed: Limit traffic speeds on unpaved roads to 10 miles per hour.

5. Construction Entrances: At points of vehicular access used for the site, the Contractor shall construct a construction entrance. The entrance shall be a minimum of 15-feet wide by 100 feet long. The construction entrance shall consist of a stabilized pad of 4-inch to 8-inch quarry spall material placed 12-inches thick overlaid on a layer of separation geotextile to prevent fine sediment from pumping up through the quarry spalls. The gravel entry shall be in place prior to excavation, earthmoving operations, or major deliveries. The Contractor shall inspect the entry daily. In the event that the construction entrance becomes clogged with soil, it shall be cleaned. At the completion of construction, the construction entrance shall be removed, and the area restored to its final condition.

6. Additional BMPs required:
a. Onsite vehicles shall be monitored for leaks; inactive equipment shall be stored with drip pans to contain fluid leaks. Drip pans containing oil shall be drained into waste oil drums on a regular basis.

b. Portable sanitary facilities and trash dumpsters shall be serviced regularly by licensed waste material handlers.

c. Hazardous material stored onsite shall be stored in secondary containment to prevent spills and leaks. The containment shall be covered with temporary covers or tarps to prevent stormwater contact.

d. Minimize wind and water erosion on temporary stockpiles by spraying with water during dry season and covering during the wet season. Cover and protect inactive stockpiles.

e. Minimize the area and length of time for clearing and grading.

f. Original labels and Material Safety Data Sheets (MSDS) shall be retained and filed in the jobsite office for periodic review by the Construction Manager, and to aid in the handling, usage and disposal of hazardous products.

7. Spill Prevention and Response: The Contractor shall be responsible for minimizing the potential for spills of pollutants stored onsite. Leaks and spills shall be minimized and if observed, shall be mitigated promptly. The following spill prevention and response measure, at a minimum shall be performed by the Contractor to maintain compliance with the NPDES permit:

   a. The Contractor shall be aware of potential spill areas and drainage routes in their work areas.

   b. Containers shall remain closed except when transferring contents.

   c. Employees shall not attempt to carry or move heavy containers of oil or hazardous material without assistance or the use of a drum dolly. This activity shall proceed in accordance with the Contractor’s Health and Safety Plan.

   d. Employees shall use funnels; pumps with closed hose systems, or other means to prevent spills while transferring material from large containers to small ones. When using a pump, the equipment shall not be unattended while in use.

   e. Hazardous materials shall be stored in designated areas that are away from vehicle/traffic areas. Prevent release of construction pollutants, such as cement, mortar, paints, solvents, fuel, and other materials.

   f. Contractor’s personnel shall immediately notify their supervisor of spills occurring in the work area. The supervisor shall direct the cleanup activities and contact necessary regulatory agencies. Necessary emergency telephone numbers shall be contained in
the SWPPP and posted at the construction site at a location accessible to personnel.

g. The Contractor’s personnel shall know the proper methods to clean up small spills in their work area, and how to manage and dispose of spent cleanup materials.

h. Spill cleanup material and equipment shall be readily available onsite during the construction, including emergency response equipment.

i. Steps taken to control spills in the field shall be recorded and documented.

3.03 HOUSEKEEPING

A. The Contractor is responsible for the following good housekeeping practices

1. Construction related material stored onsite shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a tarp or roof and off the ground.

2. Contractor’s personnel shall be responsible for the cleanup of their respective areas.

3. Contractor shall store only enough products required to complete the tasks at hand. Products shall be kept in their original containers with the original manufacturer’s label. Whenever possible, all of a product shall be used before disposing of the container. Unused or surplus products shall be evaluated by the Contractor to determine proper disposal.

4. Substances shall not be mixed with one another unless directed by the manufacturer.

5. Material and equipment shall be routinely inspected for leaks or conditions that could lead to discharges of pollutants to the storm drain system or possible contact with raw material, intermediate material or final product.
3.04 GENERAL INSPECTION PROCEDURES

A. The Contractor shall inspect all BMPs in place, including erosion and siltation control devices and measures for deficiencies weekly, prior to anticipated storm events, immediately after each rainfall event and at least daily during prolonged rainfall. Deficiencies shall be corrected immediately. Failure of the Contractor to maintain erosion and siltation control devices in a functioning condition is not acceptable. If the Contractor fails to correct or take appropriate actions to remedy deficiencies within 24 hours after receipt of notification, the Construction Manager may require the Contractor to discontinue work in other areas and concentrate efforts toward rectifying the specified deficiencies.

B. Inspection reports shall be filled out following the inspection event and copies shall be submitted to the Construction Manager on the same day. These records shall be maintained at the jobsite trailer for inspection if necessary.

3.05 REPORTING AND RETENTION OF RECORDS

A. SWPPP inspection reports, compliance certification, statements and correspondence shall be maintained. The Contractor shall retain copies of the SWPPP, reports required by the SWPPP and records of data, including logs and documentation described in this section, for a period of at least three years from the date the site is finally stabilized.

B. Copies of the SWPPP inspection reports shall be submitted daily to the Construction Manager with the application for progress payment.

C. Progress payment will be withheld if the Contractor fails to submit the SWPPP inspection reports.

3.06 NON-STORMWATER MANAGEMENT

A. The SWPPP shall discuss non-stormwater sources (i.e. landscaping irrigation, pipe flushing, road washing and groundwater dewatering). In addition, the SWPPP shall include standard observation measures and BMPs, including best available technologies economically achievable and best conventional pollutant control technologies that are to be implemented in order to reduce the pollutant loading to the waters.

3.07 NOTICE OF TERMINATION/COMPLETION

A. The Contractor shall submit to the EPA’s Notice of Intent (NOI) processing center prior to the beginning of any construction or any land disturbing activities. A Notice of Termination shall be completed upon completion of construction activities in accordance with the permit.

**END OF SECTION**
SECTION 02280
WETLAND MITIGATION IMPLEMENTATION

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Contract Time and Work Sequence
   3. Section 01062 – Permits and Easements
   4. Section 01126 – Bypass System
   5. Section 02200 – Earthwork
   6. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   7. Section 02710 – Site Water Discharge
   8. Section 02715 – Dewatering System

1.02 SUMMARY

A. This Section specifies the minimum requirements for implementing the required Wetland Mitigation Plan as approved by the U.S. Army Corps of Engineers and City of Tacoma Environmental Services. The primary goal of the Wetland Mitigation is to mitigate for the proposed wetland conversion through the creation of wetland area within the basin in areas where existing upland occurs. This Section describes required elements for a successful wetland mitigation. The Contractor is responsible to ensure wetland creation is conducted to plan and for providing warranty and maintenance services for a period of one year after substantial completion.

1.03 REQUIREMENTS

A. Creation of the converted wetland areas shall coincide with the construction of the proposed holding basin improvements. Upland areas that are not within the boundaries of the basin improvement channel shall be excavated and graded to elevations that are low enough to achieve adequate wetland hydrology. The surface area in the proposed emergent wetland area shall be amended with high organic content mulch after grading is complete. Emergent areas shall be hydroseeded with a native erosion control/wetland emergent seed mix as soon as construction is complete. All activities required as part of the wetland mitigation implementation shall be inspected and monitored by the Construction Manager to ensure the wetland creation is conducted per the approved plans.
B. The Contractor shall comply with the requirements of the related permits identified in Section 01062 – Permits and Easements and provide for the minimum control measures described in Section 02270 – Erosion Control and Stormwater Pollution Control and the Drawings.

1.04 PRESERVATION

A. Outside of the proposed converted emergent wetland area, the Contractor shall not remove, cut, deface, injure, or destroy trees or shrubs without the consent and permission of the Construction Manager.

1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. A copy of this specification section, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. A check mark shall denote full compliance with a paragraph as a whole.

C. The Contractor shall submit documentation to the Construction Manager that the specified plant materials have been ordered and secured for delivery as well as a list of supplier names, addresses, phone numbers, and the storage/growing location.

D. The Contractor shall inform the Construction Manager of the onsite staging area location and submit documentation of the species, size, and quantity to be delivered to the site.

E. The Contractor shall submit samples of material requested for substitution.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Fertilizer, if appropriate, shall be in the form of Agroform plant tabs or an approved like form. Fertilizer should be delivered in original, unopened, and undamaged containers showing weight, analysis, and name of manufacturer. They should be stored in a manner to prevent wetting and deterioration.

B. All precautions customary in good trade practice shall be taken in preparing plants for moving and storage. Workmanship that fails to meet industry standards will be rejected. Plants shall be packed, transported, and handled with care to ensure protection against injury and from drying out.

C. If plants cannot be planted immediately upon delivery they should be protected with soils, wet peat moss, or in a manner acceptable to the Construction Manager.

D. Stockpiling of plants shall be confined to upland areas and limited to a maximum duration of less than four weeks. Plants, fertilizer, and mulch not installed immediately upon delivery shall be secured on the site to prevent theft or tampering.
E. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Plants transported on open vehicles should be secured with a protective covering to prevent windburn.

1.07 PERFORMANCE STANDARDS/WARRANTIES

A. Performance standards provide a clear means of evaluating the success of a mitigation action. The performance standards included in Table 1 reflect the goals and functional objectives of the Mitigation Plan.

B. Success of the wetland mitigation plantings, in regard to species richness and enhancement of wildlife habitat, will be based upon the survival rate of planted emergent species.

C. Permanent vegetation sampling plots and transects shall be established to monitor survival rates and cover within each mitigation site plant community. The plots and transects shall be established by the owner at the time of the installation inspection. A figure identifying vegetation sampling plots and transects shall be provided. Volunteer native, non-invasive species shall be included as acceptable components of the mitigation plantings.

D. In the event the site fails a performance standard, the Construction Manager shall evaluate the potential causes for the failing performance standard(s) and determine an appropriate contingency action(s).

E. Plant warranties ensure that plant materials shall be grown locally and guaranteed to size, name, and variety. The Contractor shall guarantee survival of all plantings for a period of one year following Substantial Completion. This plant guarantee does not include damage outside the control of the Contractor, such as vandalism, herbivory, and natural disasters.
Table 1. Mitigation Performance Standards

<table>
<thead>
<tr>
<th>Mitigation goal</th>
<th>Functional objective</th>
<th>Performance standard</th>
<th>Year inspected</th>
<th>Sampling method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide enhanced vegetation diversity and habitat function.</td>
<td>Restore and convert 1.02 acres of temporarily disturbed wetland area.</td>
<td>1.A. The restoration/conversion area will be planted with an assortment of native emergent species according to the approved planting schedule.</td>
<td>0</td>
<td>Visual walk through</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.B. A minimum of 80% survival of planted emergent species each monitoring year.</td>
<td>0, 1, 2, 3, 5</td>
<td>Visual walk through</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.C. A minimum of 20% coverage during Year 1, 30% during Year 2, 40% during Year 3, and 60% during Year 5.</td>
<td>1, 2, 3, 5</td>
<td>Random Plot</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.D. A maximum of 10% non-native, invasive and noxious species coverage throughout the monitoring period.</td>
<td>0, 1, 2, 3, 5</td>
<td>Visual assessment and random plot</td>
</tr>
</tbody>
</table>

Notes:
1. Year 0 will have 100% survival.
2. In the event that monitoring staff is unable to distinguish planted and volunteer species during monitoring period, visual observations and coverage data will be used to assess survival and overall health of the restoration area.
3. Native volunteer species will be an acceptable component of this performance standard.
4. Random plot sampling will utilize a 0.25 meter quadrant to collect data at the monitoring points established in the compliance inspection.
5. Class A, B and C-listed species in the most current Washington State Noxious Weed List (as issued by the Washington State Noxious Weed Control Board).
6. Visual assessment and random plots will be used to evaluate non-native and noxious species coverage within the restoration area during Years 1, 2, 3, and 5. Year 0 will only evaluate non-native and noxious species through visual assessment only.
8. Inspections shall be performed by the owner. After the one-year warranty period, Contractor is no longer responsible for inspection results.
1.08 GUARANTEES

A. In addition to any special warranties provided elsewhere in the Contract Documents, the Contractor warrants to the Owner that the Wetland Mitigation Work will conform to the requirements of the approved U.S. Army Corps of Engineer Permit and the requirements of this Section. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and may be rejected.

B. If, prior to the expiration of one year after the date of final acceptance plant survival is less than required by the documented Performance Standards, as determined by the Construction Manager, the Contractor shall be responsible for replacing dead plants to achieve the required survival at no additional cost to the Owner. If the Contractor does not promptly comply with the notification issued by the Owner to replace dead plants, the Owner may have the plants removed and replaced and all direct and indirect costs of such removal and replacement, including costs of all professional services, shall be paid by Contractor as provided for herein.

C. Actual or alleged knowledge by the Owner, Construction Manager and/or inspector(s), prior to acceptance of all work by the Owner, of defects or deficiencies in the Work shall not, in any way, affect or diminish the guarantee by the Contractor. The guarantee shall apply to all elements and parts of the Work, regardless of knowledge by the Owner, Construction Manager and inspector(s) of defects or deficiencies and regardless of failure of the Owner, Construction Manager and/or inspector(s) to inform the Contractor of known or suspected defects or deficiencies prior to final acceptance of the Work by the Owner.

PART 2–PRODUCTS

2.01 MATERIALS

A. PLANTING LIST

1. The sizes, species and numbers of each plant on the plant schedule included on the contract drawings must be obtained as specified. Substitutions must be approved by the Construction Manager prior to installation to ensure that the replacement is suitable for the mitigation site.

2. All plant materials to be used on the site shall be native to the Puget Sound lowlands and shall consist of nursery grown stock from a reputable, local dealer. Only native species specified in the approved plant schedule are to be used; no hybrids will be allowed. Plant substitutions must be approved by the Construction Manager and the regulatory agencies if specified species are not commercially available.

3. Plant material provided shall be typical of their species or variety; they shall exhibit normal, densely-developed branches and vigorous, fibrous root systems. Plants shall be sound, healthy, vigorous plants free from defects and all forms of infestation. Container stock shall have been grown in its delivery container for not less than six (6) months but not more than two years. Plants shall not exhibit rootbound conditions. Under no
circumstances shall container stock be handled by their trunks, stems, or tops.

4. The seed mixtures used shall contain fresh, clean, and new crop seed mixed by an approved method. The mixture is to be mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

5. All plant material shall be inspected by the Construction Manager upon delivery. Plant material not conforming to the specifications above will be rejected. Rejected plant materials shall be immediately removed from the site.

6. Mulch (to be applied only in the upland planting area) shall conform to the requirements in Section 02950 – Plants.

PART 3–EXECUTION

3.01 GENERAL

A. Plant installation shall be performed in accordance with the specifications outlined in this Section. Any alterations to the planting plan due to site conditions will require prior approval from the Construction Manager and appropriate regulatory agencies.

B. The placement of vegetation within the mitigation areas shall be based on the spacing identified on the contract drawings. Final placement and configuration shall be at the discretion of the Construction Manager based on site conditions.

3.02 PREPARATION AND INSTALLATION OF PLANT MATERIALS

A. The Contractor shall verify the location of all elements of the landscape plan prior to installation. The Construction Manager may adjust the locations of landscape elements during the installation period as necessary.

B. Circular plant pits with vertical sides shall be excavated for all container stock. The pits should be at least twice the diameter of the root system and the depth of the pit should accommodate the entire root system. The bottom of each pit shall be scarified to a depth of 4-inches, and the pit should be thoroughly wetted prior to plant insertion to prevent capillary stress. The planting hole shall be amended with a mixture of topsoil and organic material if necessary to provide appropriate rooting media.

C. Broken roots should be pruned with a sharp instrument and rootballs should be thoroughly soaked prior to installation. Set plant material upright in the planting pit to proper grade and alignment. Water plants thoroughly midway through backfilling and add Agroform tablets. Water plants again upon completion of backfilling. No filling should occur around the stems. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water, and install a 2½-inch layer of mulch around the base of each container plant.
3.03 INSTALLATION SCHEDULE
A. All planting shall occur under the supervision of the Contractor representative or Construction Manager. Seeding and planting/mulching of disturbed areas shall occur as soon after site grading as is practical, to prevent erosion.
B. A fall plant installation (October – November) schedule is preferred to reduce mortality. Plants should not be installed during or immediately before freezing weather.

3.04 IRRIGATION REQUIREMENTS
A. Supplemental water may be required during the summer months (June – October) in the first year after planting to ensure plant survival. Supplemental watering (above-ground, temporary sprinkler system, watering truck, etc.) shall be supplied, as needed, for a minimum of one growing season following planting. Refer to Section 02910 – Irrigation. It shall be the responsibility of the Construction Manager to determine if further irrigation is required.

3.05 PLANT MAINTENANCE
A. Maintenance of the mitigation planting areas shall be provided by the Contractor for a period of one-year after Substantial Completion, as specified in Section 02950 – Plants.
B. During each site visit, the Contractor’s landscape maintenance professional shall remove all litter including paper, plastic, bottles, construction debris, yard debris, etc., as well as all non-native, invasive and noxious vegetation including blackberry varieties, thistles, tansy ragwort, scotch broom, reed canary grass, etc. All material removed shall be disposed of off-site and in an appropriate manner.
C. Work to be completed during this period within the mitigation areas includes replacement of dead or failed plant materials with plantings of the same species, size and location as original plantings. Replacement plantings are to be installed during the dormant period.

3.06 MONITORING AND CONTINGENCY PLAN
A. A monitoring program shall be established for the project in order to regularly evaluate site construction, mitigation plantings, and site hydrology. Monitoring inspections and reports shall be prepared by a qualified biologist (provided by the Owner) and Construction Manager, and follow the Monitoring Schedule.
   1. Grading and erosion control inspection immediately after site grading is complete and prior to hydroseed application;
   2. At the time of plant installation.
   3. Early in the growing season of the first year after plant installation (post construction inspection).

3.07 INSTALLATION MONITORING
A. Installation monitoring shall require coordination between the project team in
order to ensure that the mitigation site is properly excavated, and mitigation plantings are installed in an appropriate manner, as outlined in this Section. A pre-planting and construction meeting shall be held to discuss the mitigation plan.

B. A landscape architect shall be present onsite during installation to ensure that the plantings are conducted as outlined in the planting plan. The landscape architect shall inspect and approve the planting stock, and review the plans with the field crew to ensure they both recognize the species selected for installation and understand the staking.

C. The landscape architect shall assist the Contractor in making any final adjustments in the planting schedule, as needed, in response to field conditions.

3.08 COMPLIANCE MONITORING/ POST-CONSTRUCTION INSPECTION

A. Compliance monitoring shall consist of a walk-through survey, serving as the “as-built survey”, including inspections of all planted vegetation by the owner to verify the mitigation plan has been correctly and fully implemented. Any changes made in the field shall be consistent with the overall objective of the plan.

B. Compliance monitoring shall be conducted by a qualified biologist (provided by the Owner) using evaluation standards and criteria discussed below. Cover and abundance of the vegetation within the mitigation areas shall be recorded along permanent sampling transects and plots. Fixed points shall be established and permanently marked within the mitigation site to be used as transect-ends for vegetation monitoring and photo-points during long-term monitoring. The transect end-points (also photo-points) shall be permanently marked with capped rebar, and surveyed during the as-built survey. These transects shall constitute baseline conditions for comparison during long-term monitoring.

C. A summary technical memorandum shall be prepared by the qualified professional (provided by the Owner) verifying that all design features have been correctly implemented. Any changes to the planting plan shall also be discussed in the technical memorandum. The memorandum and subsequent monitoring reports shall be submitted to both the Washington State Department of Ecology and the USACE following the Monitoring Schedule discussed above.

**END OF SECTION**
SECTION 02710
SITE WATER DISCHARGE

PART 1—GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Contract Time and Work Sequence
   3. Section 01126 – Bypass System
   4. Section 01300 – Submittals
   5. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   6. Section 02715 – Dewatering System

1.02 SUMMARY

A. The Contractor shall be responsible for developing and implementing a Site Water Management Plan to treat and dispose of water generated to complete the Work.

B. The water quality resulting from the implementation of the Water Management Plan shall meet the requirements of the permits applicable to this Section per Section 01062 – Permits and Easements.

C. Site water discharged to the receiving water shall be in accordance with the NPDES-CSWGP and other applicable standards.

D. If treatment system components are not in place prior to commencing work, site water shall be transported off site and disposed of in accordance with the Contingency Plan described in this Specification.

E. Activities associated with this Section shall be documented in the Site Log Book. Submit to the Construction Manager when requested.

F. Conduct work in accordance with the Water Quality Monitoring and Protection Plan and applicable federal, state, and local statutes, regulations, and standards.

1.03 REFERENCED STANDARDS

A. This Section incorporates by reference the latest revisions of the embedded standard referenced herein. In case of conflict between the requirements of this
Section and those of a listed document, the requirements of this Section shall prevail.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 CFR Part 131.36</td>
<td>National Toxics Rule</td>
</tr>
<tr>
<td>Chapter 173-50 WAC</td>
<td>Accreditation of Environmental Laboratories</td>
</tr>
<tr>
<td>Chapter 173-200 WAC</td>
<td>Water Quality Standards for Groundwaters of the State of Washington</td>
</tr>
<tr>
<td>Chapter 173-201A WAC</td>
<td>Water Quality Standards for Surface Waters of the State of Washington</td>
</tr>
<tr>
<td>NPDES-CSWGP</td>
<td>Ecology Construction Stormwater General Permit</td>
</tr>
<tr>
<td>SMMWW</td>
<td>Washington Department of Ecology (Ecology), Stormwater Management Manual for Western Washington</td>
</tr>
</tbody>
</table>

1.04 DEFINITIONS

A. Authorized Discharges:
   1. Site Water discharged to Receiving Water that complies with the NPDES-CSWGP and other applicable standards identified in this Section.

B. Background Level: Levels of chemical or physical agents normally found in the environment.
   1. In Receiving Water, it is the chemical or physical agent level found at the time of sampling at a location nearest to the point of Site Water discharge where the Receiving Water has not been affected by the chemical or physical agents in the Site Water discharge.

C. Contaminated Water: Stormwater and groundwater containing metals and petroleum hydrocarbons that exceed discharge standards specified in this Section and in the permits.

D. Contingency Plan: As required in this Section.

E. Dischargeable Water: That portion of Site Water that meets the definition of Authorized Discharges.

F. General Use Level Designation (GULD): Ecology decision to permit use of a specific process for treatment of water prior to discharge to Receiving Waters subject to conditions.

G. Ground Water Body: Water in a saturated zone or stratum beneath the land surface or a surface water body.

H. Non-dischargeable Water: The portion of Site Water that may not be discharged to Receiving Water because:
1. Authorized Discharge limits are not met.
2. Treatment components are not working or have not been installed.

I. Process Water:
1. Process water discharges include, but are not limited to: truck wash water, tire bath wastewater, wheel wash water, equipment wash water, petroleum products, and chemical wastes.
2. Water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
3. Water that comes in contact with uncured concrete.
4. Decant water from excavated spoils stockpile.
5. Untreated sump pump discharge from excavation.

J. Receiving Water: The surface water body or ground water body at the point of discharge. For this contract, the Receiving Waters are considered fresh Waters.

K. Reportable Event
1. Exceedance of Washington State Water Quality Standards and other applicable standards in this Section including, but not limited to:
   a) Turbidity:
      (1) When sampling turbidity in the Receiving Water shows a 5 Nephelometric Turbidity Units (NTU) increase in turbidity downstream of the discharge over the Background Level when that level in the Receiving Water is 50 NTU or less.
      (2) When sampling turbidity in the Receiving Water shows a 10 percent increase in turbidity downstream over the Background Level when that level in the Receiving Water is 50 NTU or more.
   b) Discharges of Site Water above 250 NTU.
   c) Discharges of Site Water with pH less than 6.5 or greater than 8.5.

L. Site Water: Site Water refers to water from the Site that requires discharge or disposal. Depending on NPDES-CSWGP requirements for the project and the initial water quality testing, this may refer to the dewatering groundwater only.

M. Surface Water Body: Lakes, rivers, ponds, streams, inland waters, salt waters, constructed surface water body conveyance systems, and other water bodies and water courses within the jurisdiction of the state of Washington.


O. Uncured Concrete: Concrete that has not been cured for a minimum of 21 days since placement.
1.05 SUBMITTALS

A. Procedures: 01300 – Submittals
B. Qualifications of the trained technician and analytical laboratory as described in paragraph 1.05.
C. Water Management Plan
D. Monthly Monitoring Reports
E. Certification of Offsite Transport and Disposal documentation for Non-dischargeable Water.
F. Reportable Event Notification
G. Written Approvals from Ecology for:
   a. General Use Level Designation (GULD).
   b. GULD Operating Period Information
H. Site Logbook

1.06 QUALITY ASSURANCE

A. Qualifications:
   1. Trained technician(s) are required when using a TAPE or C-TAPE approved stormwater treatment technology:
      a. Certified through an Ecology approved training program according to the GULD issued for the stormwater treatment technology.
      b. At least one year’s minimum operating a Chitosan Enhanced Sand Filtration (CESF) or Electrocoagulation Subtractive Treatment System (ECST). Current certification as a Certified Erosion and Sediment Control Lead (CESCL) through an Ecology approved CESCL training course.
   2. Analytical Laboratory: Accredited in accordance with Chapter 173-50 WAC.

1.07 WATER MANAGEMENT PLAN

A. Work plan and procedures for conveyance, treatment, monitoring, testing, and discharge of site water. Plan shall be prepared, stamped, dated and signed by a Professional Engineer licensed in the state of Washington. At a minimum, include:
   1. Schedule of activities related to the treatment systems.
   2. Site layout of components and associated piping, pumps, valves, treatment systems, sampling locations, and appurtenances for proper operation and monitoring of Site Water discharge.
   3. Schematics and process flow diagrams specific to the proposed systems.
4. Operation sequence and maintenance requirements of Site Water discharge systems.

5. Treatment methods to meet:
   a. NPDES
   b. Water Quality Monitoring and Protection Plan requirements
   c. Washington State Water Quality Standards

6. Start-up procedure that includes analytical testing to confirm water treatment system performance prior to initial discharge.

7. Design criteria and calculations used to size tanks, pumps, and piping.

8. Design criteria and methods to monitor flow, turbidity, and pH levels.


10. Sampling and analysis plan including, but not limited to: sampling responsibilities, discharge permit compliance requirements, and inadvertent releases of non-dischargeable substances.

11. Collection and treatment of surface water prevented from entering storm drain system.

12. Procedures for documenting compliance with permit requirements.

13. Contingency Plan

1.08 MONITORING REPORTS

A. Submit Discharge Monitoring Reports and Self-Monitoring Reports as required by the permits on the forms provided by the Construction Manager no later than seven (7) days following the end of the sampling period for discharges.

B. If required by the permits, report contents are to include, but are not limited to: date, time, monitoring location, turbidity observations, name of the personnel doing the monitoring, weather conditions at the time of monitoring, and Certifications, as indicated in this Section.

C. When a pollutant is monitored more frequently than required, include in data calculations and reporting.

D. Include Certifications as indicated in this Section.

1.09 MONITORING EQUIPMENT

A. Field equipment to be used shall meet the requirements in Table 1.

| Parameter | Range   | Accuracy | Resolution |
|-----------|---------|----------|------------|------------|
|           |         |          |            |            |

Table 1 – Field Equipment Specification
Table 1 – Field Equipment Specification

<table>
<thead>
<tr>
<th></th>
<th>pH</th>
<th>0 – 14 units</th>
<th>+/- 0.5 pH units</th>
<th>0.5 pH units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity</td>
<td>0 – 1,000 NTU, with range selection of 0 – 9.99, 0 – 99.9, 0 – 1000 NTU</td>
<td>+/- 2% of reading, +/- 3% if turbidity is 500 NTU or more</td>
<td>0.01 NTU on lowest range</td>
<td></td>
</tr>
</tbody>
</table>

1.10 REPORTABLE EVENT NOTIFICATION AND RESPONSE

A. Provide immediate verbal notification to the Construction Manager upon becoming aware of a Reportable Event.

B. Comply with all permit requirements regarding actions following a Reportable Event.

C. Submit a written report of the Reportable Event:
   1. The report shall include the following information:
      a. A description of the Event.
      b. Exact dates and times.
      c. Any sampling data taken associated with the Reportable Event.
      d. The steps taken or planned to be taken to reduce, eliminate, and prevent reoccurrence of the Reportable Event.
   2. Submit written notification to the Construction Manager within two (2) days of the initial Event occurrence.

1.11 ECOLOGY TAPE OR C-TAPE APPROVED STORMWATER TREATMENT TECHNOLOGY SYSTEMS

A. Sizing of treatment processes to be coordinated with the flow rates anticipated for each location.

B. Provide documents if required by Ecology to receive formal approval.

C. Use only chemicals and treatment systems with a current GULD.

D. Submit monitoring records and operating period information weekly for CESF and ECST as outlined in the GULD.

1.12 CERTIFICATION STATEMENT

A. When required on reports, provide the following signed certification:

   1. “I certify under penalty of law, that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I
am aware that there are significant penalties for submitting false information for knowing violations."

B. Required for:
   1. Discharge Monitoring Reports
   2. Self-Monitoring Reports
   3. Reportable Event Notifications
   4. Monitoring records and operating period information for TAPE or C-TAPE approved stormwater treatment systems with a current GULD.

1.13 CONTINGENCY PLAN

A. Describes actions to be implemented in the event of Non-dischargeable Water following treatment and if treatment components are not in place.
B. Procedures for revising and adjusting the water treatment system to treat water to meet discharge requirements.
C. Procedures for storage of water.
D. Procedures for off-site legal disposal of the water including identification of the transporter(s) of the water and location of disposal.
E. Be responsible for all actions of the Contingency Plan when implemented.

PART 2—PRODUCTS

NOT USED

PART 3—EXECUTION

3.01 GENERAL

A. See the Draft Water Quality Monitoring Plan (WQMP) provided as an appendix to the Contract Documents for additional general requirements.
B. Discharge only allowed downstream of the basin outlet structure as shown in the Drawings
C. If discharge of Site Water sampling and analysis shows that the discharge does not meet Dischargeable Water requirements after revision of treatment systems per WQMP, implement Contingency Plan.
D. Be responsible for control of surface water, including on roadways where active work occurs, during both dry and wet weather. In the area of active work, water flow is prohibited from entering the storm drain system and is the responsibility of the Contractor to collect, treat, and discharge or haul from Site.
E. Uncured Concrete that is placed in direct contact with water or water used to wash concrete handling equipment and tools will become toxic to aquatic life. Do not directly discharge water that has come into contact with Uncured
Concrete to surface water bodies or conveyance systems. See Section 02270 – Erosion Control and Storm Water Pollution Prevention.

F. Prevent construction wastes such as, but not limited to, paper, wood, garbage, sanitary wastes, and fertilizer, from leaving the Site and entering waterways. Dispose of wastes off site at a legal disposal site authorized for such wastes in such a manner that it cannot enter a waterway or cause water quality degradation.

G. Process water shall be transported off site to a legal authorized disposal site.

3.02 COMPLIANCE WITH STANDARDS

A. Site Water discharges shall comply with following standards as applicable:
   1. Chapter 173-201A WAC.
   2. Chapter 173-200 WAC.
   4. Facilities that discharge either directly or indirectly via a stormwater conveyance system to waters listed as impaired by the State under Section 303(d) of the Clean Water Act, shall comply with Washington State Water Quality Standards of the named pollutants.
   5. Only discharges meeting the definition of Authorized Discharges are allowed.

3.03 SAMPLING AND ANALYSIS OF SITE WATER DISCHARGES TO RECEIVING WATER

A. Unless otherwise indicated, perform turbidity and pH sampling and analysis at points of discharge as required by the NPDES-CSWGP to confirm compliance with water quality requirements.

B. Perform sampling and analysis at the discharge at representative times and locations when the Contractor becomes aware of a situation when Washington State Water Quality Standards are not being met.

C. Sampling and analysis of NPDES-CSWGP covered discharges from a TAPE or C-TAPE approved stormwater treatment system with a current GULD shall be in accordance with the Ecology approved GULD per the Water Management Plan.

D. For non-TAPE and non-C-TAPE discharges, Site Discharges covered by the NPDES-CSWGP shall be 25 NTU or less. If 25 NTU is exceeded in any sample, the following steps shall be followed:
   1. Ensure all BMPs as specified in the SWPPP (per Section 02270) are installed and functioning as intended.
   2. Assess whether additional BMPs shall be implemented and document the modified BMPs in the SWPPP as necessary.
   3. Sample discharge twice daily at the point of discharge until the discharge is:
a) 25 NTU or lower.

b) Washington State Water Quality Standards are met.

3.04 TREATMENT FOR DISCHARGE TO RECEIVING WATERS

A. Use Ecology approved stormwater treatment technology systems when sediment tanks, ponds, traps, or filtration systems are not sufficient to prevent the discharge from causing an exceedance of standards in this Section.

B. Use appropriate treatment technology to reduce contaminant concentrations to meet NPDES-CSWGP criteria, requirements of the permits, SMMWW, and other standards in this Section.

C. Perform treatment in accordance with Ecology approval and the GULD issued for the treatment process.

3.05 FINES

A. The Contractor shall be responsible for fines from governing authorities incurred from noncompliance with regulations and permit requirements.

**END OF SECTION**
SECTION 02715
DEWATERING SYSTEM

PART 1–GENERAL

1.01  RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01010 – Summary of Work
   2. Section 01014 – Contract Time and Work Sequence
   3. Section 01062 – Permits and Easements
   4. Section 01126 – Bypass System
   5. Section 01300 – Submittals
   6. Section 02200 – Earthwork
   7. Section 02270 – Erosion Control and Stormwater Pollution Prevention
   8. Section 02280 – Wetland Mitigation Implementation
   9. Section 02710 – Site Water Discharge

1.02  SUMMARY

A. This Section specifies the requirements for lowering or controlling groundwater including design, installation, operation and maintenance, and removal of dewatering wells and monitoring wells and abandoning contractor installed wells. It also requires maintaining existing monitoring wells identified in the Drawings.

B. Dewatering can affect improvements in the work area and in surrounding areas. Take adequate precautions in the implementation of the dewatering plan to protect existing improvements and avoid damage thereto.

C. Provide and operate any and all machinery, appliances, and equipment necessary to keep excavations free from water during construction.

D. Dewater and dispose of the water so as not to cause injury to public, private, or other property, or to cause a nuisance or a hazard to the public.

E. Have on hand sufficient pumping equipment and machinery in good working condition for all ordinary emergencies, including power outage and flooding, and have available for the continuous and successful operation of the dewatering and monitoring systems.

F. Dewatering systems shall be in operation before excavation commences for a sufficient period so that the water, and the associated pore pressure, in the soil to be excavated is drained.
G. Dewatering systems shall not be shut down between shifts, on holidays, or weekends, or during work stoppages, without written permission from the Construction Manager.

H. The control of groundwater shall be such that softening of the sides or bottom of excavations, or formation of "quick" conditions or "boils" during excavation shall be prevented.

I. Operate dewatering systems to prevent removal of in situ soils.

J. Draw down water levels to a sufficient depth below the proposed excavation depths to maintain a stable subgrade and prevent migration of soil into the excavation.

K. Excavations shall be kept free of water during excavation, construction of structures, installation of improvements including seeding, plugs, pipelines, placement of gravel working base, structure and trench backfill, and the placement and setting of concrete below grade.

L. Control surface runoff so as to prevent entry or collection of water in excavations or in other isolated areas of the site.

M. Employ the services of a contractor who is experienced in the field of dewatering design, installation, operation, and maintenance.

N. Do not use open and cased sumps as a means of dewatering.

O. Be solely responsible for proper design, installation, operation, maintenance, and any failure of any component of the dewatering system.

P. If the excavation subgrade or sidewalls are compromised as a result of the Contractor's dewatering methods, restore the integrity of the subgrade to pre-existing conditions.

Q. The development, drilling, and decommissioning of wells shall comply with Chapter 173-160 WAC.

R. Competent personnel shall operate the dewatering system.

S. Perform testing as required to assure a properly functioning dewatering system.

T. Dispose of water per the requirements of Section 02270 – Erosion Control and Storm Water Pollution Prevention and 02710 – Site Water Discharge.

U. The dewatering system shall include tanks and filters to reduce turbidity of the discharge and include the provision to inject chemicals approved by the Construction Manager/ Engineer to reduce turbidity.

V. Provide professional services as specified under paragraph 02715.1.07 to design the dewatering system.
1.03 REFERENCED STANDARDS

A. This Section incorporates by reference the latest revisions of the embedded standard referenced herein. In case of conflict between the requirements of this Section and those of a listed document, the requirements of this Section shall prevail.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAC Chapter 173-160</td>
<td>Minimum Standards for Construction and Maintenance of Wells</td>
</tr>
<tr>
<td>AWWA A100</td>
<td>Standard for Water Wells</td>
</tr>
</tbody>
</table>

1.04 RELATED DOCUMENTS

A. Subsurface conditions encountered during the project geotechnical investigation are described in the Geotechnical Data Report, dated February 2023, prepared by Anchor QEA, LLC provided as an appendix to the Contract Documents.

1.05 DEFINITIONS

A. Aquifer: Rock or sediment in a formation, group of formations, or part of a formation that is saturated and sufficiently permeable to transmit water to pumped wells, well points and sumps.

B. Confined groundwater: Groundwater under pressure that is greater than atmospheric pressure. Confined groundwater is separated from direct contact with atmospheric pressure because of overlying impermeable or relatively low permeability layers (confining layers) of soils, sediments, or rock.

C. Confining layer: A body of material of lower hydraulic conductivity/permeability that is stratigraphically adjacent to one or more aquifers. It may lie above or below the aquifer and is less permeable than the adjacent aquifer.

D. Dewatering system: A system that will lower the water table, piezometric, or potentiometric surface adequately to improve excavation and excavation subgrade stability for work to be performed.

E. Dewatering System Designer: Professional Engineer or Licensed Hydrogeologist, specializing in dewatering system design, and who performs the design of and is responsible for the direct operation of the dewatering system.

F. Dewatering System Geotechnical Engineer: Professional Engineer, specializing in geotechnical engineering, and who performs analyses of impacts of dewatering system groundwater drawdown on nearby properties, structures, utilities, and facilities, and who provides recommendations and designs to mitigate effects of groundwater drawdown.

G. Groundwater: Water that is found in fully saturated soils, sediments, and rocks below the ground surface, and which flows primarily in response to gravitational forces or differences in pressure head.
H. Groundwater table: A particular potentiometric surface for an unconfined aquifer.

I. Incidental sump pumping: Sump pumping of perched or pocketed groundwater in an excavation where the static groundwater table has already been lowered below subgrade using wells or vacuum well points.

J. Hydrostatic head: The difference in elevation between the surface of the static head of groundwater in a confined or unconfined confined aquifer and the elevation of target drawdown.

K. Perched groundwater: Groundwater that is separated from an underlying body of groundwater by unsaturated or relatively low permeability soil.

L. Potentiometric surface/piezometric level: Theoretical (imaginary) surface of the static head of groundwater in an aquifer. The water table is a particular potentiometric surface for an unconfined aquifer.

M. Sand/gravel pack: A sand or gravel material which is placed in the annular space between a drilled hole and the well casing and/or well screen.

N. Screen (well screen): A cylinder, typically steel or plastic material with slots or perforations used to allow water to enter a well while preventing the sand/gravel pack and sediment or rock particles from entering the well.

O. Specific capacity: The volume in gallons per minute of a pumped well’s discharge divided by the concurrent drawdown of the pumped well’s water level in feet during pumping.

P. Piezometric level/head: The level representing the total hydraulic head of groundwater in a confined aquifer.

Q. Piezometric pressure: Pore water pressure at a specific point.

R. Pumped well: A hole in the ground with a casing and screen that includes its own motorized pump in the casing or screen to lift water to the surface.

S. Pumping level: The level of water in a well casing or screen when pumping is in progress.

T. Observation well: A non-pumping well used to observe changes in the elevation of the water table or the potentiometric surface/piezometric head.

U. Specialty Dewatering Subcontractor: A contractor specializing in the installation and operation of dewatering systems, including pumped wells, vacuum well points, and filtered sumps.

V. Subgrade: The finished grade level of an excavation below any slab or pipe invert including excavation for foundation materials.

W. Sump: A shallow hole in the ground adjacent to or in excavation trench with a slotted or perforated casing containing a pump and surrounded by filter sand or gravel to prevent the pumping of formation material.

X. Target drawdown: The groundwater level that the dewatering system shall attain to facilitate construction.

Y. Unconfined groundwater: Water in an aquifer that has a water table that is at atmospheric pressure.
Z. Well points: Small-diameter wells installed in 6- to 8-inch-diameter jetted or drilled holes typically less than 25-feet deep (constrained by the limits of the vacuum to suck water out of the ground). Well points typically have a 3- to 5-foot length of slotted well screen at the bottom and are spaced 2- to 10-feet apart with the closer spacing for finer grained soils (i.e., silt and clay). Well points are connected to a common vacuum header and typically operate using a single pump for the whole system.

AA. Vibrating Wire Piezometer (VWP): A pressure transducer installed in a borehole used to measure groundwater piezometric pressure to determine groundwater elevation or potentiometric surface/piezometric head.

BB. Well development: The method of using swabbing, surging, jetting, resonance, and/or pumping techniques to: clean drilling debris from the well and the surrounding formation, repair damage done by drilling to the formation, remove biological or chemical biofouling and encrustation from the well screen and enhance the hydraulic connection between the well screen and the formation, and maximize the well efficiency.

CC. Well efficiency: Describes the effectiveness of a well in yielding water and is the ratio of the theoretical drawdown in the formation to the actual drawdown in the well. The difference between the two is caused by frictional energy losses of the water as it moves from within the formation to the pump intake.

1.06 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Qualifications as specified in paragraph 02715.1.07.

C. Work Plan and Methods Statements.

D. Drawings and complete design data stamped by a licensed Professional Engineer in the State of Washington:
   1. Proposed methods and equipment for utilization in:
      a. Dewatering.
      b. Relief of hydrostatic head.
      c. Maintaining the excavation in a dewatered and in a hydrostatically stable condition.

E. Documentation for well installations including permits, well reports, locations and well tag ID numbers.

F. Documentation in support of filter grain size determination.

G. Certificate of gravel pack's material quality and gradation.

H. Sand content measurements.

I. Weekly monitoring reports.

J. Decommissioning records.

K. Calibration documentation of flowmeters.
L. Daily report of locations and numbers of dewatering wells in operation, total flow indicated on the flow meters, groundwater elevations within dewatering and observation wells, and the rate of flow at the time of recording.

M. Plan for decommissioning wells and site restoration.

1.07 QUALITY ASSURANCE

A. The Contractor shall provide the professional services listed herein.

B. Qualifications:

1. Dewatering System Designer:
   
a. Construction dewatering design experience on at least five projects of similar size and scope within the previous three years.
   
b. Professional Engineer or Hydrogeologist licensed in the state of Washington.

2. Dewatering System Geotechnical Engineer:

   a. Specializing in geotechnical engineering, and who performs analyses of impacts of dewatering system groundwater drawdown on nearby properties, structures, utilities, and facilities, and who provides recommendations and designs to mitigate effects of groundwater drawdown.

   b. Professional Engineer licensed in the state of Washington.

3. Specialty Dewatering Subcontractor: Dewatering experience on at least five projects of similar size and scope within the previous three years.


C. The Dewatering System Designer and Dewatering Systems Geotechnical Engineer may be the same individual if the individual is qualified as specified above.

1.08 DESIGN REQUIREMENTS

A. Contractor shall be responsible for design of dewatering systems including, but not limited to: deep wells, wellpoints, pumps, vacuum lines, discharge lines, and other equipment, appurtenances, and related earthwork necessary to perform the function.

B. Determine existing groundwater elevations, patterns, and potential fluctuations and design the dewatering system to be adequate for maintaining the groundwater level so that a stable subgrade is established and migration of soil into the excavations is prevented.

C. Achieve a target drawdown elevation that facilitates a stable subgrade and excavation slopes during construction. Where a confining layer is present near the excavation subgrade, lower the groundwater level in the underlying confined aquifer to achieve a factor of safety of at least 1.2 against hydrostatic uplift on the excavation subgrade.
D. Limit dewatering to localized areas for specific structures so that existing structures, including the existing dam on the south side of the project, are not impacted by the proposed dewatering system.

E. Conduct dewatering efforts to not negatively impact existing municipal and private water supply wells within the zone of influence of the dewatering system.

F. At a minimum, provide the following design data:
   1. Results of pumping test
   2. Drawings indicating the location and size of all wells, monitoring wells, well points, berms, dikes, ditches, sumps, and vacuum and discharge lines.
   3. Capacities of pumps and standby equipment.
   4. Design calculations proving adequacy of system and selected equipment.
   5. Design calculations estimating impacts of groundwater drawdown on nearby properties, structures, utilities, and facilities, including recommendations and designs to mitigate effects of groundwater drawdown.

G. The development, drilling, and decommissioning of all wells shall comply with WAC Chapter 173-160.

H. Be solely responsible for design and effectiveness of dewatering systems.

I. Design dewatering systems to prevent removal of the natural soils and such that natural or engineered foundation soils shall not be subject to fines removal upon pumping.

J. Design dewatering systems to limit turbidity in the discharge water.

K. Maintain the excavation in a dewatered and in a hydrostatically stable condition.

1.09 WORK PLAN AND METHODS STATEMENTS

A. Description of work plan, drawings, layout, design calculations and assumptions, materials and equipment. Include description of methods to be used for installing dewatering and observation wells, sumps, materials, and equipment, proposed approach for conducting pre-construction pumping tests to establish and confirm the proposed dewatering system design, and procedures required for deactivating and abandoning the dewatering and groundwater observation system.

B. Drawings and complete design data that have been prepared, stamped, dated, and signed by the dewatering system designer.

C. Location and dimensions of wells, discharge piping, discharge points, valves, flow meters, settlement tanks, and other dewatering equipment.

D. Information supporting the design of the dewatering wells, well points, filter/gravel packs, and water treatment systems. Information shall reference data collected for the site conditions in the Geotechnical Data Report and/or additional information collected at the site by the Contractor.
E. Calculations showing the magnitude of drawdown and lateral extent of impact of dewatering on groundwater regimes within aquifers and soil units.

F. Calculations of magnitude of total and differential settlement and lateral extent of settlement that may result from dewatering.

G. Measures to be implemented to mitigate dewatering induced impacts to nearby properties, structures, utilities, and existing improvements.

H. Settlement observation plan that includes anticipated drawdowns with distance from the dewatering system, observation schedules, and a contingency plan including action items if settlement is detected.

I. Types and locations of groundwater elevation and potentiometric level monitoring devices to be installed to monitor groundwater drawdown at and beyond the limits of excavations; and description of monitoring plan and how data will be used to control dewatering and mitigate impacts of dewatering.

J. Types and locations of survey points and monitoring equipment and methods to be installed and used to monitor ground surface, structure, utility, and other existing facilities for groundwater lowering-related settlement and movement; description of monitoring plan and how the data will be used to control dewatering and mitigate impacts of dewatering; and description of dewatering system components that allow for control of dewatering drawdown.

K. The location of settlement monitoring points and a photo log of all structures including walls, slabs, and exposed piping that might be affected by settlement due to lowering of the groundwater.

L. Depth and locations of dewatering equipment and facilities, conveyance and capacities.

M. Type and capacities of pumps and standby equipment.

N. Design calculations proving adequacy of system and selected equipment.

O. Time period that the dewatering system must be operated prior to excavation.

P. Description of primary and standby electrical services.

Q. Detailed description of the dewatering schedule, operation, maintenance, and decommissioning procedures.

R. Projected water level drawdown and elevation in dewatering wells, wellpoints, and monitoring wells for relief of hydrostatic head.

S. Indicate permeability of the soil units to be dewatered.

T. Plan view drawing showing the estimated zone-of-influence and resulting groundwater elevations during dewatering. Show the influence at all adjacent structures and utilities.

U. Estimated dewatering system discharge flow rates: Start-up and steady state.

V. Monitoring program, including records of flow rates of dewatering system at each point of discharge, locations and depths of monitoring wells, that provides for the evidence that improved areas affected by the dewatering system are within the Action Levels indicated.
W. Integrate dewatering flow treatment and discharge with requirements of Section 02270 – Erosion Control and Storm Water Pollution Prevention and Section 01062 – Permits and Easements.

X. Integrate with requirements of Section 02200 – Earthwork.

1.10 PERMIT REQUIREMENTS
A. See Section 01062 – Permits and Easements

1.11 EXISTING OBSERVATION POINTS
A. Locations of any existing observation, monitoring wells and vibrating wire probes are indicated on the Contract Drawings and in the Geotechnical Data Report. Contractor may use these for additional data collection if Contractor assumes full responsibility for suitability and function.

1.12 CONSTRAINTS
A. Tacoma Leach Creek Stormwater Holding Basin
   1. See Section 01014 – Contract Time and Work Sequence
   2. See Section 01015 – Contractor Use of Premises
   3. See Section 01062 – Permits and Easements
   4. See Section 01560 – Environmental Controls
   5. See Section 02200 – Site Preparation

1.13 ELECTRICAL SUPPLY FOR INSTALLATION OF DEWATERING SYSTEMS
A. Supply the electrical service used for dewatering separate from all other Contractor electrical requirements and dedicated solely to the operation of the dewatering systems.

1.14 AVAILABLE SOIL DATA
A. Refer to Leach Creek Geotechnical Data Report, dated March 2023, prepared by Anchor QEA, LLC, for existing soil and groundwater data.
B. The Geotechnical Data Report is limited in scope and does not cover the entire site. Use of information available in the Geotechnical Data Report in no way relieves the Contractor from its responsibility for design, installation, and operation of a properly functioning dewatering system.

PART 2–PRODUCTS

2.01 FILTER MATERIAL
A. For wells and well points the filter material shall be clean, rounded, washed select silica gravel and sand, free from silt, clay and other deleterious material.
B. FILTER PACK
1. Determine the filter pack sizes per industry standards.

2. The filter pack shall be designed to maximize the flow of water into the wells and minimize the amount of fine-grained material removed from the formation.

3. Provide sufficient filter material for initial filter packing of the well and such additional filter material as the well may take during development.

4. Provide a certificate of filter pack material quality and gradation prior to having filter delivered to the site.

C. WELL SCREENS

1. Factory-slotted and seized appropriately for the filter pack and formation to prevent the removal of fines from the filter pack and formation.

2. Groundwater entrance velocities through the well screen shall equal 0.02-feet per second less.

D. FILTER GRAIN SIZE

1. Determine by taking 70 percent retained grain size of the producing formation to be filtered and multiplying it by 4, 5 or 6.

2. This is the 70 percent retained grain size of the filter material to be used.

E. The uniformity coefficient (the size of sieve that retains 40 percent of the sample divided by the size that retains 90 percent) shall not be greater than 2.5.

F. The gradation of the filter material shall form a smooth and gradual grain size distribution curve when plotted.

G. Utilize information from the soils investigations to determine the grain size of the filter pack; however, be prepared to alter, at no extra cost to the Owner, the sizes of filter pack material as necessary in accordance with the grain size distribution of the materials encountered during installation of the dewatering system.

H. Submit documentation in support of the filter grain size determination.

2.02 STANDBY EQUIPMENT

A. Maintain on site sufficient equipment and materials to ensure continuous and successful operation of the dewatering and monitoring systems.

B. Provide emergency pump. Size pump as required to handle flows. If using electric pumps, provide 100 percent standby electrical generating capacity.

C. Manifold each diesel or electrically-powered centrifugal pump to a diesel pump of equal or greater performance capability.

D. Maintain standby pumps that are fueled and operational.

E. Test, at a minimum of weekly all standby pumps and generators to ensure their immediate availability.
F. Maintain on site a minimum of 100 feet of each size and type of header or discharge pipe used in the system.

G. Maintain on site a sufficient number of valves, tees, elbows, connections, tools, recorder charts and parts or other system hardware to ensure immediate repair or modification of any part of the system as necessary.

PART 3–EXECUTION

3.01 DISCHARGE POINTS

A. Dewatering discharge area must occur downstream of the basin outlet structure. Areas must be included within the limits of disturbance indicated on the contractor finalized SWPPP TESC Drawings.

B. Coordinate dewatering system route to discharge point with City staff.

C. All water discharged shall meet any permit requirements per Section 01062 – Permits and Easements and comply with Section 02710 – Site Water Discharge.

3.02 DEWATERING SYSTEM PROTECTION

A. Take all reasonable precautions necessary such as marking of all well, pump, and pipeline locations to ensure continuous, successful operation of the system.

B. Wherever dewatering wells, vacuum headers or discharge lines are to be crossed for access and egress outside the right of way, use steel ramps to protect the system from vehicular traffic. All ramps shall be capable of supporting the heaviest equipment on site and shall provide at least one foot of clearance between the dewatering system element and the underside of the ramp.

C. Ramped pipelines shall be valved on both sides of the ramp.

D. Clearly identify with brightly colored or flagged 8-foot-high poles on each side of the access point, all vehicular access points across the dewatering system.

E. Routings affecting normal site operations, including regular vehicular traffic patterns within, into and out of the site, shall be approved before installation.

F. Shut off dewatering system at such a rate to prevent a quick upsurge of water that might weaken the subgrade.

G. The return of groundwater to its static level shall be performed in such a manner as to maintain the undisturbed state of the natural foundation soils and supported soils, prevent disturbance of compacted bedding and backfill, and prevent flotation or movement of structures, underground utilities and pavements.
3.03 WELL DEVELOPMENT

A. Develop all wells and wellpoints after installation to remove all fines from jetting, drilling, and installation.

B. Dispose of development discharge per the requirements of Section 02710 – Site Water Discharge.

C. Develop the wells until the sand content of the discharge water does not exceed 10 parts per million (ppm) per AWWA A100, Appendix E.

3.04 PROTECTION AND DISCHARGE QUALITY MONITORING

A. Install the dewatering system such that natural or engineered foundation and subgrade soils will not be subject to fines removal upon pumping.

B. Eliminate or minimize sediment transport during dewatering operations. If sediments or solids are present in the dewatering water, employ best management practices to remove settleable and suspended solids as required to meet permit and water quality requirements.

C. Sand content:
   1. Monitor discharge from all parts of the system to ensure that the sand content of the discharge water does not exceed requirements of this Section (10 PPM PER AWWA A100).
   2. Provide all of the equipment and fittings for monitoring sand content.
   3. Provide 24 hours’ notice prior to taking measurements.
   4. Submit results of sand content measurements to the Construction Manager immediately after measurement.
   5. Perform monitoring for sand content for each dewatering discharge on a weekly basis.
   6. In the event pumping operations result in the removal of fines from the formation, cease all pumping operations and remediate the conditions leading to fines removal at no cost to the City.

3.05 MONITORING SYSTEM

A. Ensure that an accurate and continuous record of water level, quality and flow information is maintained. Submit weekly to the Construction Manager.

B. Consistency is an important factor in ensuring that water level data is accurate. Assign and make known to the Construction Manager member(s) of the Contractor’s work force responsible for collecting and reporting the required information.

C. Monitoring wells within excavations:
   1. May be removed and replaced as the work requires.
   2. Be responsible for the water level information provided by removed wells and any consequences from the lack of that information.
3. Shall consist of a minimum 6-inch diameter drilled or jetted hole.
4. Have installed gravel packed wellpoint to the directed depth.
5. Seal the well with a cement grout or bentonite plug well seal and an orange 6-inch diameter PVC surface casing installed.
6. Mark all monitor wells by an adjacent minimum 6-foot orange pole or flag.
7. Monitor wells daily and submit data weekly to the Construction Manager.

D. Additional monitoring wells:
1. Install any additional monitoring wells deemed necessary by Contractor to adequately monitor groundwater levels.
2. Number and obtain location coordinates and ground surface elevations for all monitoring wells.
3. Measuring points on wells shall be permanently marked and elevations surveyed and tied to project’s vertical and horizontal datum.
4. Monitor wells daily and submit data weekly to the Construction Manager.

E. Flowmeters:
1. Install flowmeters with accuracy greater than 5 percent on all dewatering system discharge pipes near each discharge point.
2. Where diversions of discharge occur, install additional flowmeters to ensure that all water pumped from excavations is metered.
3. Meters shall show gallons per minute and total flow in gallons passing through the meter continuously and record total volume from the start of discharge.
4. Install all meters to manufacturer’s specifications and submit calibration documentation.
5. Use type and size that best match the amount of flow to be measured.
6. Daily monitoring: Submit the location and number of dewatering wells in operation, total flow indicated on the flow meters, and the rate of flow at the time of recording.

3.06 DAMAGES

A. Repair any damage to work in place, existing structures and features including on adjacent property, other contractor’s equipment and the excavation, including damage to the sides and bottom due to heave and removal of material and pumping out of the excavated area, that may result from negligence, inadequate or improper dewatering system installation, maintenance and operation of the dewatering system, and any mechanical or electrical failure of the dewatering system.
3.07 MAINTAINING EXCAVATION IN DEWATERED CONDITION

A. Maintain the dewatering systems in operation. Dewatering shall be a continuous operation and interruptions due to outages or other reasons shall not be permitted.

B. Provide:
   1. Competent personnel skilled in the operation, maintenance, and replacement of system components.
   2. Standby and spare equipment of the same capacity and quantity
   3. Other work, components, and materials required to maintain the systems.

C. If the excavation subgrade or sidewalls are compromised as a result of the Contractor’s dewatering method, Contractor shall evaluate the cause of the compromise, modify their means and methods to prevent similar occurrences in the future, and restore the integrity of the subgrade to pre-existing conditions.

3.08 SYSTEM REMOVAL

A. Well Decommissioning:
   1. Includes wells installed by the Contractor and the City (as indicated in the Drawings).
   2. Notify the Construction Manager a minimum of seven days prior to each decommissioning.
   3. Unless otherwise required in writing by the Construction Manager, decommission all types of Contractor installed wells and City installed wells.
   4. Dispose of dewatering pumps, pipes, and other system hardware.
   5. Performed by the Well Driller.
   6. Shall include at a minimum: pressure injection of bentonite/cement grout slurry into the void spaces of the gravel pack. If cased, follow the requirements of WAC 173-160-381.
   7. Remove the well casings and top off the holes with a bentonite/grout and gravel mixture.
   8. Ensure that the bentonite or grout penetrates the voids in the gravel pack.
   9. When complete, submit well decommissioning record of the tasks performed including a section and sketch of the restoration, a record of materials used and where, and documentation submitted to Ecology.

3.09 RESTORATION

A. Restore each site impacted by the dewatering system and any decommissioning activities to match surrounding area and to meet the
requirements of the City. This includes site improvements made since the
dewatering system was installed.

B. Be responsible for restoration as required by the City for all dewatering
   systems.

**END OF SECTION**
SECTION 02910

IRRIGATION

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02200 – Earthwork
   3. Section 02270 – Erosion and Sediment Control
   4. Section 02930 – Seeding
   5. Section 02950 – Plants

1.02 DESCRIPTION

A. Supplemental water may be required during the summer months (June through October) in the first year after planting to ensure plant survival. Supplemental watering will be supplied, as needed, for a minimum of one growing season following planting via one of the following measures: an above-ground, temporary sprinkler system; watering truck; hand watering; or similar method.

B. Irrigation shall be provided along with the landscape maintenance services for a one-year period after Substantial Completion.

1.03 SYSTEM DESCRIPTION

A. The following irrigation systems may be used provided they adhere to all other project requirements:
   1. Above-ground, temporary sprinkler system
   2. Watering truck
   3. Hand watering
   4. Similar method as approved by the Construction Manager

B. Included will be all labor, equipment, and materials necessary for the satisfactory operation of an irrigation system.

C. System will provide adequate irrigation coverage for all plantings associated with the project.
1.04 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Proposed irrigation plan shall be provided to the Construction Manager for approval prior to implementation. If an above-ground irrigation system is to be installed and used, the proposed irrigation plan must demonstrate how the system will be removed from the site after the growing season.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

3.01 PREPARATION

A. The proposed irrigation method shall be approved by the Construction Manager prior to implementation.

3.02 DAMAGE TO PROPERTY AND PLANTS

A. Damage to City property, including but not limited to soil erosion, washouts, disturbed and/or destroyed plantings or other items affected by the Contractor’s work and/or irrigation measures, in the course of work and throughout the warranty period shall be replaced or repaired by the Contractor in a manner satisfactory to the City.

**END OF SECTION**
SECTION 02920

SOIL PREPARATION

PART 1–GENERAL

1.01 RELATED DOCUMENTS
   A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.
   B. Related Sections include the following:
      1. Section 01300 – Submittals
      2. Section 02200 – Earthwork
      3. Section 02270 – Erosion and Sediment Control
      4. Section 02930 – Seeding
      5. Section 02950 – Plants

1.02 SUMMARY
   A. Site soils may require preparation to receive planting and seeding. This section shall be used in the event that soil preparation is required.

1.03 QUALITY ASSURANCE
   A. All materials and workmanship shall comply with applicable state and local regulations and as specified in the Contract Documents.

1.04 SUBMITTALS
   A. Procedures: 01300 – Submittals
   B. Submit to Construction Manager or Designee a one-gallon size sample along with certification from an independent testing lab showing compliance with standard certifications.

PART 2–PRODUCTS

2.01 RECOMMENDED IMPORT ORGANIC MATERIAL / FINE COMPOST
2.02 RECOMMENDED IMPORT TOPSOIL

A. Manufactured blend of 25 percent fine compost as specified above and 75 percent sand with less than 10 percent passing a #200 sieve. Furnish 0.5 cubic foot sample with state and local standard certified test results from an accepted lab showing soil lab certification of suitability for intended purpose for the project. Topsoil must be free of deleterious elements and approved by the Construction Manager prior to use.

PART 3–EXECUTION

3.01 SUBGRADE VERIFICATION

A. Prior to beginning incorporation of soil amendments, remove invasive species as required by permit documents and federal, state, and local agencies. Verify that subgrade has been accepted by the Construction Manager.

3.02 PLACEMENT AND INCORPORATION

A. Furnish and incorporate no less than 3-inches of compost and/or imported topsoil for the seeding planting areas as determined necessary by site conditions and approved by the Construction Manager or designee.

3.03 FINAL GRADING AND CLEAN UP

A. In all areas, provide finished conditions as accepted by the Construction Manager.

B. Following final grading of prepared soil and seeding or planting operations, remove all excess materials from the site or dispose of onsite as accepted by the Construction Manager.

C. Sediment-laden runoff shall not be allowed to enter Leach Creek, the associated wetlands, vegetated ditches and swales, inlets, or pipes.

**END OF SECTION**
SECTION 02930
SEEDING

PART 1–GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.
B. Related Sections include the following:
   1. Section 02200 – Earthwork
   2. Section 02270 – Erosion and Sediment Control
   3. Section 02241 – Irrigation
   4. Section 02920 - Soil Preparation

1.02 DEFINITIONS
A. Finish Grade: Elevation of finished surface of soil as accepted by the Construction Manager.
B. Imported Topsoil: Soil produced off-site by homogeneously blending mineral soils and sand with stabilized compost and organic soil amendments.
C. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. Regulatory approval must be obtained for use of pesticides within the wetland and all areas less than 150-feet away from the wetland. It is anticipated that manual/mechanical pest control will be required.
D. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), mammals, rodents (gophers, moles, and mice), unwanted invasive plants (weeds), fungi, bacteria, and viruses.
E. Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
F. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or top surface of a fill or backfill before planting soil is placed.
G. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
H. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed vegetated areas, the surface soil is typically topsoil, but in graded and disturbed areas, the surface soil can be subsoil.
1.03 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Certification of Seed
   1. Seed must be supplied by a vendor recognized as an industry supplier for native wetland and marsh seeds. Include identification of source, name and telephone number of supplier.
   2. Provide documentation of seed mixture composition stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the month and year date of collection for wetland and marsh seeds.
   3. Seed will be entirely furnished and installed by Contractor.

C. Product Certificates from the manufacture shall be provided for mulch and tackifier, if used.

1.04 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape seed installer whose work has resulted in successful applications and establishment in like conditions.
   1. Professional Membership: Installer shall be a member in good standing of either the Washington Association of Landscape Professionals or the American Nursery and Landscape Association.
   2. Experience: Minimum of five years of experience in similar seeding installations in addition to requirements in Section 01400 – Quality Control.
   3. Installer’s Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

B. Pre-installation Conference: Conduct conference at project site.

1.05 JOB CONDITIONS

A. Field Measurements: Verify actual grade elevations, service and utility locations, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.

B. Planting Restrictions: Seed during seasons under conditions recommended by seed supplier for optimum results – typically during the months of September and March.

C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit successful seeding, when beneficial and optimal results may be obtained. Apply products during favorable weather conditions according to manufacturer’s written instructions.

D. Hydrologic Limitations: Site preparation and seeding shall occur before the temporary bypass is removed.
1.06 ORDERING, DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Order seed within two weeks of contract award to ensure timely harvest and delivery of wetland and marsh seeds. Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable. Store all seed per seed source instructions, fully protected to ensure viability and germination.

B. Bulk Materials:
   1. Do not dump or store bulk materials near structures, utilities, or existing plants.
   2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
   3. Accompany each delivery of bulk mulches and soil amendments with appropriate certificates.

PART 2–PRODUCTS

2.01 SEED

A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.

B. The mixture is to be mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

C. Seed Species: State-certified seed of grass species called out on plans, certified to be of Western Washington native stock.

D. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic and free of plant-growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.

E. Non-asphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for hydroseed slurry application; nontoxic and free of plant-growth or germination inhibitors.

F. All seeding components shall be free of detrimental elements.

PART 3–EXECUTION

3.01 EXAMINATION

A. Examine areas to be planted for compliance with requirements and other conditions affecting performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.
3.02 PREPARATION
A. Protect trees, shrubs, and plantings from damage caused by seeding operations.
   1. Protect and shield conifers from hydroseeding and hydromulching overspray.
   2. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
   3. Protect grade stakes set by others until directed to remove them.
   4. Restore, repair and re-seed areas until full coverage is established and accepted by the Construction Manager.

3.03 SEEDED AREA PREPARATION
A. Seeding and planting/mulching of disturbed areas shall occur as soon after site grading as is practical, to prevent erosion.
B. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
C. The Contractor shall finish grading and soil preparation before seeding occurs.

3.04 HAND SEEDING STANDARDS
A. Broadcast Seeding: Mix specified seed with seed vendor recommended sand to facilitate broadcast during favorable conditions using accepted "whirlybird", broadcast seeding equipment specifically designed for even, manual application during favorable conditions.
   1. Apply seed uniformly to all areas to be seeded in a one-step process. Deposit seed at the specified seed-sowing rate.
   2. Within 30 minutes of seeding, lightly rake seed into erosion matting and surface soil/topsoil to 1/8-inch depth. Protect erosion matting from damage using light rakes and light action.
   3. Immediately following raking (within 60 minutes of seeding), roll seed, raked soil and erosion control (i.e. jute mat or erosion fabric) with a 200 to300 pound water-weighted roller. Apply even pressure to lightly compact raked soil and bind seed.

3.05 HYDROSEEDING STANDARDS
A. Hydroseeding: Mix specified seed, fertilizer, if applicable, and fiber mulch in water, using equipment specifically designed for hydroteed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
   1. Mix slurry with fiber mulch and tackifier.
   2. Apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.
3. Install erosion control blankets over hydroseeded slopes within 48 hours of seeding as shown in the Drawings.

3.06 CLEANUP AND PROTECTION

A. Promptly remove any hydro-mulch overspray and soil and debris created by seeding work from evergreen plants, railings, paved areas, and other areas not designated for seeding. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

**END OF SECTION**
SECTION 02950

PLANTS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02200 – Earthwork
   3. Section 02910 – Irrigation
   4. Section 02920 – Soil Preparation
   5. Section 02930 – Seeding
   6. Section 02960 – Landscape Maintenance

1.02 SUMMARY

A. This section includes furnishing and installing:
   1. Plants
   2. Planting soils
   3. Planting, mulching, staking
   4. Invasive Species Control

1.03 DEFINITIONS

A. Backfill: The earth used to replace or the act of replacing earth within an excavation.

B. Container Grown Stock: Healthy, vigorous plants grown in a container, with a well-established root system reaching the sides of the container and maintaining a firm ball when removed from the container. The containers should be rigid enough to hold a ball shape and protect the root mass during shipping and be sized as the larger of industry standard or according to ANSI Z60.1 for type and size of plant required.

C. Finish Grade: Elevation of finished surface of planting soil.

D. Noxious weed: A plant that when established is highly destructive, competitive, or difficult to control by cultural or chemical practices. The Washington State Noxious Weed Control Board divides noxious weeds into three classes: Class A Noxious weeds consist of those noxious weeds not native to the state that are of
limited distribution or are unrecorded in the state and that pose a serious threat to the state; Class B Noxious Weeds consists of those noxious weeds not native to the state that are of limited distribution or are unrecorded in a region of the state and that pose a serious threat to that region; and Class C consists of all other noxious weeds. Noxious Weed lists are maintained by Washington State and Pierce County.

E. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides and molluscicides. Agency approval must be documented for use within the wetland as well as within 150 feet of the wetland.

F. Pests: Living organisms where they are not desired or that cause damage to plants, animals, or people. These include insects, mites, grubs, mollusks (snails and slugs), beaver, geese, rodents (gophers, moles, and mice), and invasive species such as plants, fungi, bacteria, and viruses.

G. Planting area: Area to be planted.

H. Planting Soil: Standardized topsoil; existing, native surface topsoil; existing, in-place surface soil; imported topsoil; or manufactured topsoil that is modified with soil amendments to produce a soil mixture that is best for plant growth.

I. Plant, Plants, Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, ground covers, ornamental grasses, bulbs, corms, tubers, or herbaceous vegetation.

J. Root flare: The area at the base of the plant’s stem or trunk where the stem or trunk broadens to form roots; the area of transition between the root system and the stem or trunk. This term is also commonly referred to as “trunk flare”.

K. Stem girdling roots: Roots that encircle the stem (trunks) of trees below the plant surface.

L. Subgrade: Surface or elevation of subsoil remaining after excavation is completed or the top surface of a fill or backfill before planting soil is placed.

M. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

N. Surface Soil: Soil that is present at the top layer of the existing soil profile at the project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.

O. Invasive Weeds: Invasive Weeds are species of weeds that are not regulated as noxious weeds by Pierce County but are still likely to disrupt the growth of installed mitigation plants and should be controlled within planting areas. Manual/mechanical control of these species, as opposed to the use of pesticide or herbicides, is commonly required within and directly adjacent to wetlands and other critical areas. Common Invasive weed species for this area include: Himalayan blackberry, English Ivy, Butterfly Bush, Scots Broom, and Knotweed.
1.04 QUALITY ASSURANCE

A. Qualifications

1. Planting must be conducted by a qualified landscape installer whose work has resulted in successful establishment of plants in similar wetland, marsh, and habitat projects. In the event that pesticide application is necessary and approved by the review agencies, application must be conducted by a state licensed pesticide applicator certified to apply herbicides in wetlands and sensitive areas.

2. Professional Membership: Plant installer shall be a member in good standing of either the Washington Association of Landscape Professionals or the American Nursery and Landscape Association.

3. Experience: Five years of experience in landscape installation in addition to any other requirements identified within other sections of these Plans and Specification documents.

4. Installer’s Field Supervision: The installer is required to maintain an experience full-time supervisor on the Project site when work is in progress.

5. Personnel Certifications: The installer’s field supervisor shall be certified as a landscape technician with the Washington Association of Landscape Professionals.

B. Provide quality, size, genus, species, and variety of plants as indicated. Pre-inspection of plants will be made by the Contractor prior to site delivery. Additional review by the City or designee may occur at any point during and/or after planting and within the maintenance program.

1.05 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Compliance with Qualifications as provided in Section 1.03 Quality Assurance. For qualified landscape Installer include list of similar projects completed by Installer demonstrating Installer's capabilities and experience. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.

C. The landscape contractor shall submit documentation to the Construction Manager that the specified plant materials have been ordered and secured for delivery as well as a list of supplier names, addresses, phone numbers, and the storage/growing location.

D. Product Data: For each type of product indicated, including soils.


2. Plant Photographs: Include color photographs in digital format of each required species and size of plant material as it will be furnished to the Project. Take photographs from an angle depicting true size and condition of the typical plant to be furnished. Include a scale rod or other measuring device in each photograph. For species where more than 20 plants are
required, include a minimum of three photographs showing the average plant, the best quality plant, and the worst quality plant to be furnished. Identify each photograph with the full scientific name of the plant, plant size, and name of the growing nursery.

E. Samples for Verification:
   1. Trees and Shrubs: Three samples of each variety and size delivered to the site for review. Maintain approved samples on-site as a standard for comparison.

F. Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:
   1. Manufacturer’s certified analysis of standard products.

G. Document the on-site staging area.

1.06 JOB CONDITIONS

A. Field Layout Measurements and Adjustments: Verify actual grade elevations, hydrology, vegetation to remain and resultant relocation of new plantings, and receive acceptance from the Construction Manager before proceeding with planting work.

B. Planting Restrictions: Planting shall occur during the first planting season directly after project construction is completed. Planting shall not occur during periods of freezing or heavy rain. A continuous maintenance period following planting shall be provided. Refer to Section 02960 – Landscape Maintenance.
   1. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer’s written instructions and warranty requirements.
   2. Hydrologic Limitations: Site preparation and planting shall occur before the temporary bypass is removed.

C. Trees and shrubs shall be planted after finish grades are established. If seeding occurs prior to the installation of trees and shrubs and results in damage to the seeding area, repair shall occur promptly.

1.07 DELIVERY, STORAGE AND HANDLING

A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws if applicable.

B. Bulk Materials:
   1. Bulk materials shall be stored in construction staging areas. Do not dump or store bulk materials near utilities, roadways, existing planted areas or plants being stored prior to installation.
2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties or water conveyance systems.

3. Accompany each delivery of plants and soil amendments with appropriate certificates.

C. Trees and shrubs shall not be pruned before delivery. Protect bark, branches, buds, evergreen leaves and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.

D. Plant stock shall be handled by the container and not by stems or foliage.

E. Deliver plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

1. Do not remove container-grown stock from containers before time of planting.

2. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Watering shall occur as often as necessary to maintain root systems in a moist, but not overly wet condition.

F. All precautions customary in good trade practice shall be taken in preparing plants for moving and storage.

G. Plants will be packed, transported, and handled with care to ensure protection against injury and from drying out. If plants cannot be planted immediately upon delivery they should be protected with soil, wet peat moss, or in a manner acceptable to the landscape architect. Stockpiling of plants shall be confined to upland areas and limited to a maximum duration of less than four weeks.

H. Plants, fertilizer, and mulch not installed immediately upon delivery shall be secured on the site to prevent theft or tampering.

PART 2–PRODUCTS

2.01 PLANT MATERIAL

A. General: Furnish nursery-grown plants true to genus, species, variety and other features indicated in Plant Schedule or Plant Legend shown on Drawings; complying with ANSI Z60.1. All plant materials to be used on the site will be native to the Puget Sound lowlands and will consist of nursery grown stock from a reputable, local dealer. All plant materials shall have vigorous fully formed healthy root systems developed by transplanting or root pruning. Provide high industry standard fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.
1. Trees with damaged, crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs or with stem girdling roots will be rejected.

2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery.

3. Only native species specified in the approved plant schedule are to be used; Hybrids shall not be used.

4. Container stock shall have been grown in its delivery container for not less than six months but not more than two years.

5. Plant substitutions must be approved by the landscape architect and the regulatory agencies if specified species are not commercially available.

B. Provide plants of sizes, grades, and ball or container sizes complying with ANSI Z60.1 for types and form of plants required and high industry standard in size and quality as determined by the landscape architect. Plants of a larger size may be used if with a proportionate increase in size of roots or balls.

C. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which shall begin at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

D. Labeling: Label one of every 50 plants of each species. Label with a securely attached, waterproof, permanent tag bearing legible designation of common name or full scientific name (including genus and species), as identified on Plant Schedule.

E. Any alterations to the planting schedule (may also be referred to as the planting plan) due to site conditions, plant availability, etc. will require prior approval by the Construction Manager and appropriate regulatory agencies.

PART 3–EXECUTION

3.01 EXAMINATION

A. Examine areas to receive plants for compliance with requirements and conditions affecting installation and performance.

1. Verify that no foreign or deleterious material or liquid has been deposited in soil within a planting area.

2. Uniformly moisten excessively dry soil that is not workable and which is too dusty.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Construction Manager and replace with new planting soil.
D. The landscape contractor shall verify the location of all elements of the landscape plan prior to installation. The Construction Manager may adjust the locations of landscape elements during the installation period as necessary.

E. All plant material shall be inspected by the Construction Manager and/or landscape contractor upon delivery. Plant material not conforming to the specifications above will be rejected and replaced by the landscape contractor. Rejected plant materials shall be immediately removed from the site.

3.02 PREPARATION

A. Protect structures, utilities, and other facilities from damage caused by planting operations. Irrigation system, if installed, is to be fully functional before planting.

B. Adjust plant quantities as necessary to match field conditions and achieve equal to or greater than plant densities specified and required by the permit documents or Plant Schedule, whichever is greater.

3.03 PLANTING SOIL PREPARATION

A. Planting Pits: Confirm that soil preparation, plant layout, and other conditions including but not limited to grading, subsoil densities and adjustments have been accepted by the landscape architect before proceeding.

B. Excavate circular planting pits with outward sloping sides. The pit should be at least twice the diameter of the root system, and the depth of the pit should accommodate the entire root system. Excavations with vertical sides are not acceptable. The bottom of each pit will be scarified to a depth of 4-inches, and the pit should be thoroughly wetted prior to plant insertion to prevent capillary stress. The planting hole shall be amended with a mixture of topsoil and organic material if necessary to provide appropriate rooting media.

C. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation. Remove excess excavated soil, stones larger than 2-inches in any dimension, sticks, roots, rubbish, and other extraneous matter. These materials must be disposed of legally and off-site.

D. To prepare planting pits on slopes and within restoration planting areas within native plantings to remain, remove excess excavated soil, stones larger than 4“ in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off the City’s property. Mix one part compost to two parts native soil and blend thoroughly to 12-inch depth and to full specified width required. Firmly tamp blended topsoil and ensure that root ball sits on well-compacted topsoil to prevent settling.

E. Water plants thoroughly midway through backfilling. Water pits again upon completion of backfilling. No filling should occur around stems. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water, and install a 21/2-inch layer of mulch around the base of each container plant.
3.04 TREE AND SHRUB PLANTING

A. Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.

B. Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.

C. Set container-grown stock plumb and in center of planting pit with root flare 1-inch above adjacent finish grade unless soil moisture and hydrology dictate higher or lower planting for best survival and plant vitality.
   1. Plant in prepared soil.
   2. Carefully remove root ball from container without damaging root ball or plant. Tease and loosen roots to prevent root bound girdling.
   3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Root flare to be 1-inch minimum to 2-inch maximum above finish grade.

D. When planting on a slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

E. The placement of vegetation within the mitigation areas will be based on the spacing identified in the planting plan. Final placement and configuration will be at the discretion of the Construction Manager and landscape contractor based on site conditions. Final placement of the plants shall be documented if it varies from the planting plan.

F. Mulch (to be applied only in the upland planting area) will consist of sterile wheat straw or clean recycled wood chips approximately ½-inch to 1-inch in size and ½-inch thick, and will be applied around the base of the plantings upon installation to prevent them from drying out.

3.05 TREE STABILIZATION

A. Provide a single 2-inchx2-inchx48-inch wood stake and chain-lock tie for each tree over 36" tall.

B. All tree stabilization stakes must be removed at the end of the maintenance period.

3.06 INVASIVE SPECIES CONTROL

A. Invasive species control is only required within the boundaries of the project area.

B. Invasive species shall be control by manual/mechanical means. Herbicides may also be used as specified if approved by all regulatory agencies with jurisdiction.

C. All existing and new plantings shall be protected during invasive species control.
D. No more than 10 percent areal coverage by invasive weed species will be allowed within the project area during monitoring year.

3.07 PLANT MAINTENANCE
A. Contractor shall provide landscape maintenance services for a one-year period after Substantial Completion, as specified in Section 02960 – Landscape Maintenance.

3.08 CLEANUP AND PROTECTION
A. Protect plants from damage due to herbicide application, landscape operations, and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.

3.09 REUSE, RECYCLING, AND DISPOSAL
A. Recycle or return pots where applicable.  
B. Remove waste material including excess soil, rubble, trash and debris, and legally dispose of them off of the subject property.

**END OF SECTION**
SECTION 02960
LANDSCAPE MAINTENANCE

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

1.02 SUMMARY

A. Contractor shall provide landscape maintenance services for a one-year period after Substantial Completion.

B. Landscape maintenance program includes but is not limited to monthly maintenance review and control of invasive species, trimming and/or removing grass that crowds new plantings, controlling of pests, weekly monitoring of plant health, and making adjustments to irrigation systems (if utilized) and adjusting root crown elevations, preparing and submitting monthly reports detailing all dates and times including names of staff, equipment, tasks performed, supervision and actions taken to keep all plants in vigorous, continuous optimum plant health throughout.

C. Submit maintenance and quality standards for the Construction Manager review before start of required maintenance periods.

1.03 INSPECTIONS

A. Conduct project walk through with the Construction Manager every March, July, and September during maintenance program. Create list of deficiencies, complete list, and verify with the Construction Manager.

B. Replace all plants that are unhealthy as determined by the Construction Manager following project walk through, each October and April with specified size and species unless directed otherwise by the Construction Manager.

1.04 MAINTENANCE PROGRAM

A. PLANT REPLACEMENTS: Installer agrees to replace plantings that do not show vigorous health and address materials and workmanship that are found to be unacceptable by the Construction Manager.

1. Failures include, but are not limited to, the following:
   a. Death and unsatisfactory plant growth, except for defects resulting acts of God and conditions accepted by the Construction Manager that are beyond Contractor's control (such as vandalism, herbivory, and natural disasters).
b. Structural failures including plantings falling or blowing over.

2. Include the following remedial actions as a minimum:
   a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
   b. Replace all plants that have stems or portions comprising more than 25 percent of the total plant that are in an unhealthy condition at review dates of March, July, and September during the one-year landscape maintenance program.
   c. Replacement plantings may be of another species if the Construction Manager determines an increased probability of plant vitality during the one-year landscape maintenance program.
   d. A limit of one replacement of each plant per year will be required except for losses or replacements due to failure to comply with requirements.
   e. Provide extended warranty for period equal to original one year landscape maintenance program, for replaced plant material.

PART 2–PRODUCTS

NOT USED

PART 3–EXECUTION

3.01 MAINTENANCE SERVICE

A. INITIAL MAINTENANCE SERVICE FOR TREES AND SHRUBS: Provide maintenance by skilled employees of landscape Installer. Maintenance shall begin immediately after plants are installed and continue until plantings are acceptably healthy and well established but for not less than maintenance period below.

   1. Maintenance Period: 12 months from date of Substantial Completion or final planting, whichever is greater.

3.02 INVASIVE SPECIES CONTROL

A. Invasive species control is only required within the boundaries of the project area.

B. Manual/mechanical control for all invasive species within the project area is anticipated. If herbicide use is proposed, it must be accepted by all regulatory agencies withstanding and used in a manner suited for forested wetland setting.

C. All existing and new plantings shall be protected from invasive species control measures.
D. Invasive species control shall result in no greater than a 10 percent areal coverage within the project area.

3.03 PLANT MAINTENANCE

A. Plantings shall be maintained by monitoring plant health at least weekly during dry periods and watering, adjusting irrigation, providing pest control, removal of invasive plants monthly, weeding at least monthly during the growing season, mulching, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.

B. Utilize fill as necessary to address soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.

3.04 SEEDED AREA MAINTENANCE

A. Provide maintenance and an establishment warranty to achieve dense established cover. Remove invasive species and trim grass that extends into drip lines of new plantings and interferes with new shrub and tree growth. Reseed as needed each March and September of the one-year landscape maintenance program, with all replacement seed, mulch, and other items required to be furnished and installed by Contractor.

**END OF SECTION**
SECTION 03252
ANCHORS, INSERTS, AND EMBEDDED PRODUCTS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals

1.02 SUMMARY

A. This Section specified concrete anchors, adhesives for doweling of anchor bolts and threaded rod anchors.

1.03 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Manufacturer’s Data for all anchors and embedded products.

PART 2–PRODUCTS

2.01 MATERIALS

A. Expansion Anchors:
   1. Stainless Steel:
      a. Stud: Stainless steel bar conforming to ASTM A276 with chemical composition of either AISI 304 or 316.
      b. Wedge: Manufactured from either AISI 304 or 316 stainless steel.
      c. Nut: Stainless steel conforming to ASTM F594 with chemical composition of either AISI 304 or 316 and meeting dimensional requirements of ANSI B18.2.2
      d. Washer: AISI 304 or 316 stainless steel conforming to ASTM A240.
   2. Expansion anchors shall be Hilti Kwik bolts or approved equal.

B. Adhesive Anchors:
   1. Adhesive for setting dowels and anchoring connection/base plate bolts shall be an injectable tow-component epoxy adhesive. Adhesive shall be approved for intended use per the product ICC Report Adhesive shall be:
      a. Hilti, HIT-RE 500v3
      b. Simpson Strong Tie, SET XP Anchoring Adhesive.
      c. Approved Equal (equivalent product must have ICC approval for use in cracked concrete in areas with high seismic risk).
PART 3–EXECUTION

3.01 GENERAL

A. Adhesive and expansion anchors to be installed in holes drilled with carbide tipped drill bits. Anchors shall be installed per manufacturer’s installation instructions. In case of interference with reinforcing bars or steel objects, notify the Engineer.

**END OF SECTION**
SECTION 03510
PRECAST MANHOLES, FRAMES AND COVERS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02100 – Site Preparation
   3. Section 02200 – Earthwork
   4. Section 03252 – Anchors, Inserts, and Embedded Products

1.02 SUMMARY

A. Furnish all labor, materials and equipment required to install precast concrete manholes, grade rings, frames and covers, and appurtenances as shown on the Drawings and as specified herein.

1.03 SUBMITTALS

A. Procedures: 01300 – Submittals

B. Shop drawings, product data, materials of construction, and details of installation. Submittals shall include the following:
   1. Design calculations, sealed by a Professional Engineer licensed in the State of Washington, indicating adequate strength to resist the vertical and lateral (hydrostatic and seismic) loadings and buoyancy forces.
   2. Riser section, with notarized certificate indicating compliance with ASTM C478.
   3. Concrete mix design.
   4. Detail of pipe connection(s) to manhole.
   5. Method of repair for minor damage to precast concrete sections.

C. Design data for precast concrete structures: sectional plan(s) and elevations showing dimensions, reinforcing steel placement and accessories.

D. Test reports for precast concrete structures: concrete test cylinder reports from an approved testing laboratory certifying conformance with specifications.

E. Manufacturers Installation (or Application) Instructions

F. Operation and Maintenance Data

1.04 REFERENCE STANDARDS

A. Occupational Safety and Health Administration (OSHA).
1.05 QUALITY ASSURANCE

A. All material shall be new and unused.

B. Materials' quality, manufacturing process and finished sections are subject to inspection and approval by Construction Manager. Inspection may be made at place of manufacture, at work site following delivery, or both.

C. Materials will be examined for compliance with ASTM specifications, these Specifications and approved manufacturer's drawings. Additional inspection criteria shall include: appearance, dimensions(s), blisters, cracks and soundness.

D. Materials shall be rejected for failure to meet any Specification requirement. Rejection may occur at place of manufacture, at work site, or following installation. Mark for identification rejected materials and remove from work site immediately. Rejected materials shall be replaced at no cost to Construction Manager.

E. Repair minor damage to precast concrete sections by approved method, if repair is authorized by Construction Manager.

1.06 WARRANTY

A. All materials supplied under this section shall be warranted for a period of 2-years by the manufacturer and the Contractor. Warranty period shall commence upon formal acceptance of the project by the Construction Manager.

B. The materials shall be warranted to be free from defects in workmanship, design and materials. If the materials should fail during the warranty period, it shall be replaced or restored to service at no expense to the Construction Manager.

C. The manufacturer's warranty period shall run concurrently with the Contractor's warranty period. No exception to this provision shall be allowed.

PART 2–PRODUCTS

2.01 GENERAL

A. Reference to a manufacturer's name and model or catalog number is for the purpose of establishing the standard of quality and general configuration desired.

B. Like items of materials/equipment shall be the end products of one manufacturer in order to provide standardization for appearance, operation, maintenance, spare parts and manufacturer's service.

C. Provide lifting lugs for proper handling and installation.

2.02 PRECAST CONCRETE MANHOLE SECTIONS

A. Precast concrete base and riser, shall be a single section shall conform to ASTM C478, be 60-inch inside diameter, a single section, and meet the following requirements:
1. Bottom slab thickness shall be equal, or greater than the riser wall.
2. Manhole shall be cured by an approved method.
3. Ship precast concrete manhole only after concrete has attained 3,000 psi compressive strength.
4. Contractor to design precast concrete manhole wall thickness, bottom thickness, and attachment to existing structure, to resist buoyancy, vertical and horizontal forces for the condition where water level outside the riser is at top of manhole.
5. Provide a factory knockout or opening at the correct location to match the existing pipe. Knockout shall take into account any grout required around the existing pipe and under the manhole to make the manhole level and plumb.
6. Mark date of manufacture, name and trademark of manufacturer on the inside of each precast section.
7. Install precast concrete manhole as shown on the Drawings. Contractor shall field verify elevations and provide elevation to set top of manhole as shown on the Drawings.
8. Portland cement shall be ASTM C150, Type II or Type III.

2.03 PIPE CONNECTIONS TO MANHOLE

A. Connect pipe to manhole in the following ways:
1. Precast manhole connections shall be watertight in accordance with ASTM C-923. Connect the existing pipe to the riser with non-shrink grout to fill the annular space within the provided knockout.

PART 3–EXECUTION

3.01 GENERAL

A. All silt and debris removal, surface preparation, and grout required to install the manhole as shown on the Contract Drawings shall be provided.
B. Removed materials shall be disposed of by the Contractor as described in Section 02100 – Site Preparation.
C. All work to install the manhole shall be performed in dry conditions. Contractor shall ensure water is diverted around the manhole location.

3.02 PRECAST MANHOLES

A. Precast concrete manhole shall be installed plumb and true on the concrete outlet structure base as shown on the Contract Drawings. Use grout as required to level manhole. Care shall be taken when lowering the precast unit into position that no damage occurs to existing concrete structure or debris falls onto the joining surface. If underlying concrete slab is damaged, repair and replace as required, leveled concrete surface.
B. Contractor shall field verify elevations and slab conditions to confirm the required height of the manhole to set the top of manhole at the elevation shown in the Drawings.
C. Pipe openings shall be cast into the unit at the time of manufacture.
3.03 CLEANING

A. Thoroughly clean all new manholes of all silt, debris and foreign matter of any kind, prior to final inspections.

**END OF SECTION***
SECTION 05500
METAL FABRICATIONS

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals

1.02 SUMMARY

A. This Section specifies fabricated metal items and other miscellaneous metalwork and metal grating.

1.03 QUALITY ASSURANCE

A. Materials, Fabrication, and Erection: Conform with the latest editions of "Aluminum Construction Manual" and all applicable standards and data as set forth by the Aluminum Association.

B. Welding: By operators qualified by tests as prescribed by the AWS in Standard Qualification Procedure for performance of the type of work required. Structural welding will require all welders to be certified by WABO.

C. Grating Fabrication: "Metal Bar Grating Manual" by National Association of Metal Manufacturers (NAMM).

D. Comply with OSHA and IBC (International Building Code) requirements.

1.04 SUBMITTALS

A. Procedures: 01300 - Submittals

B. Shop Drawings: All fabricated metals illustrating dimensions, erection details, cuts, copes, connections, holes, threaded fasteners, and welds. Base dimensional data on actual field measurements where connections interface with other materials required.

C. Mill Test Reports: Submit mill test reports for each shipment of materials or products.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle materials in such a manner as to prevent damage to finished surfaces.

B. Store above grade in clean dry locations. Protect from corrosive elements.
C. Handle and store during construction to prevent overstressing any elements.

PART 2–PRODUCTS

2.01 MATERIALS

A. Stainless Steel:

<table>
<thead>
<tr>
<th>Material</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets and plates</td>
<td>ASTM A240, Type 316L</td>
</tr>
<tr>
<td>Shapes, bars, and similar items</td>
<td>ASTM A276, Type 316L</td>
</tr>
<tr>
<td>Pipe</td>
<td>ASTM A312, Type 316L</td>
</tr>
<tr>
<td>Bolts</td>
<td>ASTM A193 or A320, Type 316</td>
</tr>
<tr>
<td>Nuts</td>
<td>ASTM A194, Type 316</td>
</tr>
<tr>
<td>Washers</td>
<td>Type 316</td>
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</table>

B. Aluminum:

<table>
<thead>
<tr>
<th>Material</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets and plates</td>
<td>ASTM B209, Type 6061-T6</td>
</tr>
<tr>
<td>Bars, flats and similar items</td>
<td>ASTM B211 or B221, Type 6061-T6</td>
</tr>
<tr>
<td>Shapes</td>
<td>ASTM B221 or B308, Type 6061-T6</td>
</tr>
<tr>
<td>Round tubing and pipe</td>
<td>ASTM B210 or B221, Type 6061-T6</td>
</tr>
<tr>
<td>Square and rectangular tubing</td>
<td>Type 6063-T52</td>
</tr>
</tbody>
</table>

2.02 ALUMINUM GRATING

A. Aluminum Grating Bearing Bars: ASTM B221, alloy 6061-T6.

B. Aluminum Grating Cross Bars: ASTM B221 (extrusions) or B210 (drawn).

2.03 FABRICATION

A. Fabricate in accordance with the Drawings and additional requirements specified in this section.

B. Shop Assembly:

1. Fabricate units in as large parts and sections as practicable.
2. Holes in Members: Punch or drill as necessary to receive bolts and similar items. Do not cut holes with a torch.

C. Grating:

1. Field measure areas to receive grating and fabricate to dimension required for specified clearances.
2. Swage locked grating, size indicated on the plans. Both bearing bars and cross bars shall be continuous.
3. Fabricate complete with edge banding, fasten each section to existing supporting steel frame using a minimum of four stainless steel j-bolts or saddle clips. Fasten grating panel joints with stainless steel Z-clips as indicated on the Plans. All perimeter edges and openings/cutouts shall be banded with bars having the same dimensions as the bearing bars and flush at the top and bottom surfaces of the grating.

4. Grind smooth rough weld beads and sharp metal edges on gratings.

5. Weld Connections: Not permitted on grating except at banding bars.

6. Acceptable Manufacturers:
   a. Swage locked aluminum grating, rectangular bar type slip-resistance finish, as manufactured by:
      1) Grating Pacific, Inc.; Flush Top, Type 19-SGF-4.
      2) IKG Industries; Type BS S-19-4.
      3) Ohio Gratings, Inc.; Flush Top, Type 19-SGF-4.
      4) Approved Equal.

2.04 FINISHES

A. Aluminum Surfaces
   1. Surface-condition aluminum before finishes is applied. Remove roll marks, scratches, rolled-in scratches, kinks, stains, pits, orange peel, die marks, structural streaks, and other defects which will affect uniform appearance of finished surfaces.

   2. Provide aluminum items with a standard mill finish.

B. Stainless Steel Passivation
   1. Stainless steel to be cleaned, descaled, and passivated after fabrication in accordance with ASTM A380. Passivate to remove iron compounds from the surface of the stainless steel.

PART 3–EXECUTION

3.01 ERECTION

A. Set and secure accurately to the required lines and levels shown on Drawings.

B. Protect the finish from scratches, nicks, and dents during erection.

C. Grating:
   1. Anchor to supports with approved fastening devices.
   2. Top of grating and supports set flush with adjacent surface.
   3. Anneal any grating with distortion that prevents true flat surface and continuous bearing on supports.

3.02 FIELD QUALITY CONTROL

A. Electrolytic Protection
1. Protected Aluminum in contact with dissimilar metals, other than stainless steel, from galvanic corrosion by means of pressure tapes, coatings, or isolators. Aluminum in contact with concrete or grout shall be protected with a heavy coat of bituminous paint.

B. Thread lubricant for stainless steel fasteners:
   1. Apply anti-seizing lubricant to the threads prior to making up the connections in accordance with manufacturer's instructions.
   2. Lubricant: manufactured and labeled for use with stainless steel and shall contain substantial amounts of molybdenum disulfide, graphite, mica, talc or copper.
   3. Manufacturers and Products:
      a. Bostik; Neverseez.
      b. Saf-T-Eze Div., STL Corp.; Anti-Seize.
      c. Approved Equal.

**END OF SECTION**
SECTION 15121
FLEXIBLE INLINE CHECK VALVE

PART 1–GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions, Supplemental Conditions and Divisions 0 and 1 Specification Sections, apply to work of this Section.

B. Related Sections include the following:
   1. Section 01300 – Submittals
   2. Section 02100 – Site Preparation
   3. Section 02200 – Earthwork
   4. Section 03252 – Anchors, Inserts, and Embedded Products

1.02 SUMMARY

A. SCOPE: This section specifies eccentric, elastomeric, flexible inline check valve for slip-in application and downstream flanged thimble for installation in a wall-mounted pipe segment at the stormwater flow control outlet structure.

B. The valve assemblies shall be provided pre-assembled for installation into the wall. Valve assembly shall be provided with anchor bolts as required to resist the weight of the valve full with water.

C. DESIGN CONDITIONS: Flexible inline check valve shall regulate the outflow from a stormwater holding basin through one 42-inch pipe located at the outflow structure.

D. Flexible inline check valve shall be designed for continuous exposure to storm water and open-air environments. Valve are expected to be partially submerged and exposed to the various air and water temperatures, including freezing. Valve will be fully submerged under high-flow conditions.

1.03 QUALITY ASSURANCE

A. REFERENCES

This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those
documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued or replaced.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASME</td>
<td>American Society of Mechanical Engineers</td>
</tr>
<tr>
<td>ASTM A276</td>
<td>Stainless and Heat-Resisting Steel Bars and Shapes</td>
</tr>
<tr>
<td>ANSI B36.19M</td>
<td>Stainless Steel Pipe</td>
</tr>
<tr>
<td>ASTM A240</td>
<td>Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications</td>
</tr>
<tr>
<td>ASTM A312/A312M</td>
<td>Seamless and Welded Austenitic Stainless Steel Pipes</td>
</tr>
<tr>
<td>ASTM A778</td>
<td>Welded, Unannealed Austenitic Stainless Steel Tubular Products</td>
</tr>
<tr>
<td>ASTM D 1418</td>
<td>Rubber and Rubber Lattices-Nomenclature</td>
</tr>
<tr>
<td>ASTM D2000</td>
<td>Rubber Products in Automotive Applications</td>
</tr>
</tbody>
</table>

1.04 FACTORY TESTS

A. Factory tests shall be performed according to the manufacturer’s standard test procedures. Certified test results shall be provided as product data.

1.05 SUBMITTALS

A. Procedure: 01300 – Submittals

B. The following information shall be provided:

1. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements or those parts which are to be provided by the Contractor or others.

2. Manufacturer’s product literature, including dimensioned drawings, materials of construction, flow and headloss data, and pressure rating.

3. Preliminary Operating and Maintenance information, Manufacturer’s recommended installation instructions shall be included.

4. Manufacturer's Installation Certification Form

PART 2–PRODUCTS

2.01 MANUFACTURERS

A. The Owner and Construction Manager believe the following candidate manufacturer is capable of producing equipment and/or products that will satisfy the requirements
of this Section. This statement, however, shall not be construed as an endorsement of a particular manufacturer’s product, nor shall it be construed that a named manufacturer’s standard product will comply with the requirements of this Section.

B. Candidate manufacturers include Tide-Flex Technologies (Series CheckMate). The Owner and Construction Manager are not aware of an equal manufacturer.

2.02 MATERIALS

A. Materials for the components shall be as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check valve body</td>
<td>ASTM D2000, Neoprene</td>
</tr>
<tr>
<td>Pipe segment</td>
<td>Type 304 Stainless Steel, min. Sch. 10</td>
</tr>
<tr>
<td>Clamps, bolts, and</td>
<td>Type 316 Stainless Steel</td>
</tr>
<tr>
<td>nuts</td>
<td></td>
</tr>
</tbody>
</table>

B. Materials specified are considered the minimum acceptable for the purposes of durability, strength, and resistance to erosion and corrosion. The Contractor may propose alternative materials for the purpose of providing greater strength or to meet required stress limitations. However, alternative materials must provide at least the same qualities as those specified for the purpose.

2.03 EQUIPMENT

A. TYPE:

1. The flexible inline check valve shall be of one-piece reinforced rubber construction and the entire valve shall be ply reinforced. The valve shall not use separate means to attach the disc or bill to the valve body, and a separate housing or body shall not be acceptable.

2. The valve shall be self-draining at a low pressure to eliminate standing water upstream. No outside energy sources shall be required to operate the valve. The valve’s sealing capabilities shall provide effective compression around trapped solids to prevent backflow.

3. The port area of the check valve shall contour down, which shall allow passage of flow in one direction while preventing reverse flow. The sleeve shall close positively without backflow pressure.

4. The check valve shall be designed for minimum 3-psig back pressure.

B. CONFIGURATION

1. The valve shall be designed to slip into a flanged pipe segment. The pipe segment shall be provided as part of the valve and shall be as shown in the structural Drawings. The pipe segment length shall be coordinated such that the entire body of the check valves is installed inside the pipe segment. Stainless steel pipe segment shall be manufactured from ASTM A240 annealed and pickled sheets and plates in accordance with ASTM A778 or ASTM A409 HT-0. Only extra-low carbon (ELC) materials with 0.030 percent maximum carbon shall
be used. Pipe shall be manufactured to nominal pipe sizes as listed in ANSI B36.19.

2. Flexible inline check valve shall be provided with expansion clamps or retaining rings to secure the valve inside the pipe at both ends of the valve. Clamps shall be installed in the outer segment of the body length (shoulder or cuff) and expand outwards using turnbuckles. Two clamp segments shall be used for each retaining device and the turnbuckles shall be installed 180 degrees apart.

3. Pipe segment, valve body, and each clamp shall be pre-drilled to allow the valves and clamps to be bolted to the pipe segment. A minimum of four pre-drilled holes for each clamp shall be provided and installed with equal spacing around the valve and pipe.

2.04 ANCHOR BOLTS

1. Bolts and nuts shall be provided as part of the valve assembly. An anti-seize or anti-galling compound shall be applied to all threads prior to installing nuts on bolts.

2. Anchor bolts shall be designed for lateral forces for both pullout and shear. Unless otherwise stated in the individual equipment specifications, anchor bolt materials shall conform to the provisions of Section 03252 – Anchors, Inserts, and Embedded Products.

3. Anti-seize or anti-galling compound shall be a molybdenum disulfide and graphite combination in an aluminum complex base grease conforming to MIL-PRF-907E. Acceptable products include Jet Lube 550 by Jet Lube, Inc., E-Z Break by LA-CO, or equal.

PART 3–EXECUTION

3.01 INSTALLATION

A. Unless otherwise specified, flexible inline check valves will be installed in accordance with manufacturer's instructions and as shown on the drawings. Manufacturer shall certify the installation on Form 15121-A (form will be included in the installation contract in Section 01999). Manufacturer shall provide one trip for one day to inspect, certify the installation, and provide testing and startup.

B. All silt and debris removal, surface preparation, and grout required to install the valves and pipe support as shown on the Contract Drawings shall be provided.

C. Removed materials shall be disposed of by the Contractor as described in Section 02100 – Site Preparation.

D. All work to install the valve and pipe support shall be performed in dry conditions. Contractor shall ensure water is diverted around the valve and pipe support location.
3.02 FIELD TESTING

A. Manufacturer shall provide field testing and inspection to ensure proper operation of the check valves.

**END OF SECTION**
APPENDIX A

PLANS
GENERAL NOTES:
1. SEE SPECIFICATION SHEETS FOR DEMOLITION AND SALVAGE REQUIREMENTS.

KEY NOTES:
1. REMOVE EXISTING CONDUIT.
2. REMOVE EXISTING EQUIPMENT ENCLOSURES.
3. REMOVE EXISTING PRESSURE LEVEL TRANSDUCERS.
4. REMOVE EXISTING PIPE TRUNKS.
5. REMOVE EXISTING CONDUIT.

SOURCE: 1995 RECORD DRAWINGS
FOR LEACH CREEK HOLDING
ENVIRONMENTAL SERVICES
OUTLET STRUCTURE DEMOLITION PLAN
GENERAL NOTES:
1. ALL MATERIAL REMOVED FROM THE HOLDING BASIN AND CHANNELS SHALL BE HAULED TO THE LANDFILL LOCATED AT 2000 WASHINGTON STREET EAST, GRAMMAR WA.

KEY NOTES:
1. ECOLOGY BLOCKS, SEE CLASS FOR EXTENTS OF INSTALLATION.
2. BACKFILL SURFACE TO TOP OF ECOLOGY BLOCKS.
3. EXCESS MATERIAL TO BE REMOVED FROM HOLDING BASIN ESTIMATED TO BE 150 CY.
4. INSTALL RIPRAP OUTLET PROTECTION. 14 FEET DOWNSTREAM OF RISER C-300.
APPENDIX B

SUMMARY OF GEOTECHNICAL CONDITIONS
March 2023
Tacoma Leach Creek Holding Basin Modifications

Geotechnical Data Report

Prepared for Brown and Caldwell
March 2023
Tacoma Leach Creek Holding Basin Modifications

Geotechnical Data Report

Prepared by
Anchor QEA, LLC
1201 3rd Avenue, Suite 2600
Seattle, Washington 98101

Cole Bales, PE
Senior Managing Engineer
cbales@anchorqea.com

Andrew Barrett
Professional Staff II
abarrett@anchorqea.com
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>bgs</td>
<td>below ground surface</td>
</tr>
<tr>
<td>DB</td>
<td>dam boring</td>
</tr>
<tr>
<td>DCP</td>
<td>Dynamic Cone Penetrometer</td>
</tr>
<tr>
<td>HA</td>
<td>hand auger boring</td>
</tr>
<tr>
<td>NGVD29</td>
<td>National Geodetic Vertical Datum of 1929</td>
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<tr>
<td>Project</td>
<td>Leach Creek Holding Basin Modification Project</td>
</tr>
<tr>
<td>STA</td>
<td>Station, as presented in Figure 2</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Project Description
Anchor QEA, LLC has been retained by Brown and Caldwell to provide geotechnical support for the Leach Creek Holding Basin Modification Project (Project). The Leach Creek Holding Basin is impounded by an earthen dam, owned by the City of Tacoma, that may be used to facilitate equipment access and staging during construction (no modifications to the dam are planned for this Project). The site is located south of 991 Holly Drive and is shown in Figure 1.

The Project will include the following:
- Improvements to the existing storm drain inlet area
- Excavation of a channel to reestablish capacity within the holding basin and facilitate outflows
- Modifications to the existing outlet structure
- Surface/vegetation mitigation and improvements
- Operational system improvements

1.2 Purpose and Scope
The purpose of this report is to describe the subsurface conditions at the site, including soil units and their geotechnical properties as well as groundwater levels. Geotechnical source data for this information include publicly available records, historical geotechnical investigations completed at the site, and a 2022 investigation program completed for this Project.

This report is organized as follows:
- Regional Setting
- Subsurface Conditions, including data sources as well as summaries of encountered geotechnical and groundwater conditions
- Limitations
2 Regional Setting

2.1 Geology

Local geologic mapping identifies surface and near surface units as being primarily Vashon glacial deposits and Pre-Vashon non-glacial deposits, except where fill materials (Qf) are identified. The site is mapped within a channel of recessional outwash (Qgo) generally bounded by Vashon Till (Qgt) to the east and west. At the eastern boundary between the recessional outwash and the Vashon Till, a thin band of advance outwash (Qga) deposits are mapped as being exposed. Other mapped units in the near vicinity include recessional outwash ice-contact deposits (Qgoi) to the north-northeast and Steilacoom Gravel (Qgog). Abbreviated descriptions of the relevant units are provided in the following list (Schuster et al. 2015), and a regional geologic map is provided in Figure 5:

- **Qgo**: Recessional outwash
  Silt, clay, sand, and gravel deposited by meltwater from a receding glacier; sand and gravel deposited by streams; sand and silt deposited in proglacial lakes; rich in northern-source plutonic and metamorphic clasts; variably sorted; loose to compact; massive to well stratified; horizontal to steeply dipping beds; forms drumlins, eskers, kettles, kames, and deltas; stratigraphically overlies Vashon Till. (Schuster et al. 2015)

- **Qgt**: Vashon Till
  Clay, silt, sand, and gravel; deposited directly by glacial ice and characterized by the presence of northern-provenance clasts; gray to brown, yellowish brown where oxidized; unstratified and highly compact; finer sand grains within matrix are angular; rare angular to subrounded glacial erratic boulders; surface features include moraines, drumlins, striations, and flutes; commonly 2 to 10 ft thick, however, thicknesses of 30 ft have been mapped; sharp contact with underlying units; low permeability and porosity causes poor drainage. (Schuster et al. 2015)

- **Qga**: Advance outwash
  Sand and pebble to cobble gravel; almost completely devoid of silt or clay, except near base of unit; typically light gray to light brown; generally unoxidized; poorly to well sorted; very compact; locally as much as 300 ft thick; deposited by streams flowing from the advancing ice sheet. Unit Qga is fairly widespread. Detrital wood sampled from this unit on the east side of Nisqually Reach... produced a radiocarbon age of 13,410 ±80 years BP. (Schuster et al. 2015)
2.2 Topography and Surface Conditions

The site is located immediately south of the town of Fircrest in Pierce County, Washington. The site is regionally situated in the South Basin of the Puget Sound, with a local slope generally trending down toward the south and the west along the path of Leach Creek. The holding basin is impounded by an earthen dam to the south, which also serves as an access road, and naturally higher ground to the east (where the access road continues to the north), north and west. Within the holding basin, the conditions are wet and the vegetation is very dense. Surficial materials within the holding basin include soft sediments with abundant organic materials, whereas the access roads consist of compacted aggregate base materials with very low permeability.

The elevation of the access road at the connection to the proposed improvements is approximately 224 feet,\(^1\) which is approximately 6 feet higher than the typical dam crest elevation. Within the planned excavation channel, the existing ground surface elevation at channel Station (STA) 8+93.8 (center channel furthest east) is approximately 214 feet, and at channel STA 1+00 (the west end of the channel), the existing ground surface elevation is approximately 209.4 feet. Site features, spot elevations, and topographic contours are all presented in Figure 2.

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\(^1\) All elevations with reference to vertical datum National Geodetic Vertical Datum of 1929 (NGVD29).
3 Subsurface Conditions

3.1 Data Sources

In order to facilitate the preparation of this report, a review of site-specific and publicly available data was completed. In addition to regional geologic mapping, the following site-specific data sources were provided by Brown and Caldwell for review:

- Geotechnical Explorations and Analyses: City of Tacoma Leach Creek Detention Pond Pipeline and Dam Safety Review, prepared by Shannon & Wilson for Brown and Caldwell in March of 1991 (Shannon & Wilson 1991)
- Letter from Roberts Engineering, Ronald M. Roberts, PE, SE, regarding Leach Creek dam overflow structure and spillway, from February 4, 2021 (Roberts Engineering 2021)

Summaries of these data sources are provided in the following subsections.

3.1.1 Historical Investigation Data

3.1.1.1 Shannon & Wilson 1991

In 1991, Shannon & Wilson prepared a geotechnical report (Shannon & Wilson Report) containing summaries of geotechnical exploration programs completed in 1990 and 1991 for both the dam and the Leach Creek stormwater pipeline, as well as a review of boring and monitoring well data obtained by others at the site prior to 1990. These collected data have been included within Appendix C.

The Shannon & Wilson Report includes logs for six borings completed on the dam, which are the primary geotechnical data source informing the dam stability analysis completed as described in a separate report. In five of six dam borings (DB-2 to DB-6), approximately 7 to 9 feet of medium-dense to dense sandy gravel, labeled Dam Fill, was encountered overlying a very dense (native) sand, silt, and gravel layer that extended to the full depth of exploration; the deepest advanced to a depth of 50 feet below the ground surface. The boring log for DB-1 was not included in the copy of the report made available for review.

In addition to the noted geotechnical borings, five test pits were completed, as well as in situ permeability testing in one boring (DB-3). Permeability testing yielded an approximate average coefficient of permeability of 1.0 x 10^-3 centimeters per second for the 10 feet of boring depth tested; note that a single test was completed and fill conditions across the dam site are anticipated to vary. Along with these explorations and in situ test, four monitoring wells were installed at borings DB-1, DB-2, DB-4, and DB-6. The well in DB-6 was subsequently abandoned due to reported artesian conditions.
3.1.1.2 Roberts Engineering 2021
In 2021, Roberts Engineering was retained to review and inspect the overflow structure and the emergency spillway. No direct geotechnical data were obtained during this review and inspection; however, the report does discuss the apparent type and surface condition of the emergency spillway as well as corresponding recommendations for protection during construction.

The letter notes that the emergency spillway appears to comprise a concrete-filled fabric bag system, though construction records were not available for review. The letter recommends that the emergency spillway be considered similar to a cobblestone road with the discrete, concrete-filled bags able to displace relative to each other when subject to loading, introducing cracking and potentially preferential seepage paths. Accordingly, utilization of 1-inch-thick steel street plates placed on top of a sand bed across the area would help distribute vehicle and/or equipment loads across this area and would limit the risk for potential cracking.

3.1.2 Current Investigation Program

3.1.2.1 Program Summary
A subsurface geotechnical investigation program was completed by Anchor QEA on September 14 and October 11, 2022. The exploration and testing program included the following components:

- Complete four hand auger borings (LC-HA-01, -02, -03, -04) to facilitate sample collection for visual-manual classification and laboratory testing.
  - Refer to Appendix A for all hand auger boring logs.
- Complete three Dynamic Cone Penetrometer (DCP) tests (LC-DCP-01, -02, -03) to estimate the relative consistency/density of the subsurface materials.
  - Refer to Appendix A for all DCP logs.
- Install two 1.75-inch diameter piezometer wells, each with a slotted stem, at locations Piezometer 1 and Piezometer 2.
  - Refer to Figures 3-1 and 3-2 for graphical summaries of the piezometer data collected to date.
- Submit selected hand auger samples for laboratory testing.
  - Refer to Table 3-1 and Appendix B for the results of the laboratory testing program.

3.1.2.2 In Situ Testing and Sample Collection
As noted in the previous section, both hand auger borings and DCP testing were completed as part of this investigation program, the locations of which can be seen in Figure 2. Hand auger borings were advanced to the following respective depths: LC-HA-01 to 2.5 feet below ground surface (bgs), LC-HA-02 to 5 feet bgs, and both LC-HA-03 and -04 to 6 feet bgs. DCP tests were advanced to the
following respective depths: LC-DCP-01 to 7 feet bgs, LC-DCP-02 to 14 feet bgs, and LC-DCP-03 to 11 feet bgs.

3.1.2.3 Laboratory Testing
A total of eight soil samples were selected from the completed hand auger borings for laboratory testing at Geotesting Express. Laboratory testing completed included the following:

- Atterberg limits (ASTM D4318): 4x (ASTM 2017)
- Specific Gravity (ASTM D854): 4x (ASTM 2016)

A summary of the laboratory test results is provided in Table 3-1. The full laboratory test reporting, including testing procedures as well as both graphical and tabular presentation of test results, is provided in Appendix B.

Table 3-1
General Lab Data Summary

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Moisture Content (%)</th>
<th>Specific Gravity</th>
<th>Liquid Limit</th>
<th>Plastic Limit</th>
<th>Plasticity Index</th>
<th>Liquidity Index</th>
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</tr>
</tbody>
</table>

3.2 Geotechnical Conditions
The following provides a list of the geotechnical units encountered at the site, advancing from the ground surface down, as well a discussion of the key characteristics of those units.

3.2.1 Dam Fill
The Shannon & Wilson Report states that the only construction information related to the dam is a plan sheet note indicating it was constructed of "compacted fill." Based upon historical boring logs and probing records, dam fill materials are recorded as being relatively uniform and consisting of "medium dense to very dense silty, gravelly sand with some cobbles" (Shannon & Wilson 1991).
3.2.2 **Topsoil and Soft Sediments**

Within the holding basin, historical test pits (Shannon & Wilson 1991) and hand augers completed as part of the current investigation program all encountered soft, compressible materials near the ground surface. The surface material within the holding basin was noted as being consistent with a topsoil. This material was recorded as being a very soft, black, organic silt or peat material, with abundant vegetation and roots, and very high water contents (up to 583%). At the east edge of the holding basin this layer was underlain by very soft to soft silts and clays, with lesser organic material and lower water contents (e.g., 49%), that were encountered to the full depth explored (maximum of 5 feet at LC-HA-02); however, in the middle of the holding basin, these silts and clays were noted as being relatively thin (e.g., 1 to 3 feet thick) and were again underlain by very soft, organic silt or peat materials.

3.2.3 **Glacial Deposits**

Borings along the dam (Shannon & Wilson 1991) encountered very hard/dense silts, sands and gravels immediately below the dam fill. DCPs completed as part of the current investigation program, encountered test refusal in these materials at about 7 feet bgs (elevation 207 feet; LC-DCP-01) and 11 feet bgs (elevation 200 feet; LC-DCP-03). Some historical boring logs appear to record several feet of recessional outwash deposits above the Vashon Till; however, others appear to record Vashon Till immediately below the dam fill. For the sake of simplicity, we have here combined the units under the term “glacial deposits”; however, it should be noted that these units are quite distinct and have significantly different hydraulic conductivity values associated with them (i.e., much higher for the recessional outwash than the Vashon Till).

3.3 **Groundwater Conditions**

Groundwater levels at the site were recorded at the time of investigation as well as at regular intervals following the investigation at two piezometers installed near STA 1+00 (north of the outlet structure; Piezometer 2) and STA 8+93.8 (northwest of the storm drain inlet; Piezometer 3), respectively. The piezometer locations were selected to capture groundwater variability across the site, with a particular focus on the area of planned excavations during construction. In order to correct the barometric readings from these piezometers, a third data recording device was placed on the access road near ground level to record the site barometric pressure, named Piezometer 1. Piezometric data were collected and collated between September and November 2022, and are presented graphically in Figures 3-1 and 3-2.

The data recorded at Piezometer 2 appear to reflect groundwater levels consistently near the ground surface, with no appreciable variation during the period of record. Shannon & Wilson noted that the monitoring well installed at DB-6, almost due south of Piezometer 2 near the east end of the dam, was “abandoned due to artesian conditions causing the well to flow continuously when uncapped”
Based on these observations, it is unclear whether the readings at Piezometer 2 simply reflect locally elevated water levels at the holding basin inlet area, approximately corresponding to the ground surface when inflows are present, or more broadly elevated groundwater conditions.

The data recorded at Piezometer 3 appear to indicate relatively stable groundwater levels through mid-October (approximately 2.5 feet bgs), after which abrupt changes in readings corresponding to moderate rain events occur (e.g., 0.47 inch of rain at the Seattle Tacoma International Airport on October 25, 2022; Climate Data Online 2022). Readings showing water levels above the ground surface appear to indicate ponded water in the vicinity of Piezometer 3 during and immediately after the rain event. Following each rain event, though, the readings appear to stabilize at approximately elevation 208.5 feet, approximately 1 foot bgs.
Figure 3-1
Water Elevation vs. Time at Piezometer 2

Note: Ground surface elevation is approximately 214.0 feet.
Figure 3-2
Water Elevation vs. Time at Piezometer 3

Note: Ground surface elevation is approximately 209.5 feet.
4 Limitations

Anchor QEA completed this work in general accordance with our Scope of Work. This report has been prepared for use by the design team (Anchor QEA, Brown and Caldwell, and the City of Tacoma), as well as bidding contractors, for specific application to the Tacoma Leach Creek Holding Basin Project. This work has been performed in accordance with generally accepted geotechnical engineering practices in the same or similar localities, at the time the work was performed. The recommendations discussed in this report were prepared based on observations from the exploration locations shown; subsurface conditions may vary at other locations at the project area due to inherent subsurface variability. No warranty is made, expressed, or implied.

This report is intended to be used only as a geotechnical data report. Therefore, it does not include engineering design recommendations, environmental site characterization, or other associated environmental studies, which are outside the scope of this report. This report was developed with the assumption that a proper level of field observation and construction review will be provided during construction.

Please do not hesitate to contact Anchor QEA should there be any questions or comments, or if any clarification of the information provided is required. Anchor QEA appreciates the opportunity to continue to support Brown and Caldwell on this project and looks forward to fulfilling your geotechnical needs on future projects.
5 References


Figure 1
Vicinity Map
Leach Creek Holding Basin

SOURCE: Aerial provided by Bing.
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: MLLW

SOURCE: Aerial provided by Bing.
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: MLLW
Figure 5
Regional Geologic Map
Leach Creek Holding Basin
Appendix A

Hand Auger and DCP Logs (This Study)
**Boring Location:**
Approximately 5 feet west, 3 feet south of Station 8+93.8

**Project**
Tacoma Leach Creek Holding Basin Mods

**Excavated By**
A. Barrett

**Logged By**
S. Giannakos

**Excavation Method**
Hand Auger

**Sampling Method**
Grab

**Bottom of Hand Auger**
2.5 feet

**Groundwater Depth**
Not Measured

**Vertical Datum:**
N/A

**Elevation (feet):**
N/A

---

**SAMPLE ID**

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<tr>
<th>LL</th>
<th>PL</th>
<th>PI</th>
<th>Moisture Content (%)</th>
<th>Depth (feet)</th>
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<td>583.0</td>
<td>(0-1.5) Very soft, wet, brown, SILT (OL), substantial organic material</td>
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<td>11</td>
<td>48.9</td>
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**Notes:** 1) LL: Liquid limit, PL: plastic limit, PI: plasticity index
Boring Location: Approximately 8 feet Northwest of Station 8+47.47

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<td>3.0</td>
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</table>

DESCRIPTION: Den., moist., color, minor, MAJOR CONSTITUENT, NON-SOIL SUBSTANCES: Odor, staining, sheen, scrag, slag, etc.

(0-2.5) Very soft, wet, brown, SILT (OL), substantial organic material

(2.5-3.5) Very soft, wet, light grey with orange mottling, SILT (MH)

(3.5-5.0) Very soft, wet, light grey with orange mottling, CLAY (CL)

@ (4.0) Trace sand

End of Boring at 5.0 feet

Notes: 1) LL: Liquid limit, PL: plastic limit, PI: plasticity index
### Boring Location:
Approximately located at Station 1+00, located along centerline of proposed creek allignment

### Project Details:
- **Project:** Tacoma Leach Creek Holding Basin Mods
- **Project No.:** 220035-01.01
- **Excavated By:** A. Barrett
- **Logged By:** S. Giannakos
- **Excavation Method:** Hand Auger
- **Sampling Method:** Grab
- **Bottom of Hand Auger:** 6 feet
- **Groundwater Depth:** 4 feet
- **Vertical Datum:** N/A
- **Elevation (feet):** N/A

### Atterberg Limits Table:
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### Moisture Content Table:
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<td>58.4</td>
</tr>
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<td>LCHA03-3.5-5</td>
<td>163.6</td>
</tr>
</tbody>
</table>

### Description:
- **(0-1.5) Soft, dry, brown, SILT with sand (ML), moderate organic material (topsoil)**
- **(1.5-2.5) Soft, moist, dark brown, SILT (ML), substantial organic material, low plasticity**
- **(2.5-3.5) Very soft, moist, light grey, SILT with sand (MH), trace organic material, medium to high plasticity**
  - @ (2.5) Lens of medium sand
- **(3.5-6.0) Soft, moist to wet, dark brown, PEAT (PT), substantial organic material, moderate organic odor**
  - @ (4.0) Water table observed
- **(5.5-6.0) No recovery, groundwater washes the material out of hand auger**
- **End of Boring at 6 feet**

### Notes:
1) LL: Liquid limit, PL: plastic limit, PI: plasticity index
**Boring Location:** Approximately 2 feet west of Station 1+50, 3 feet from river bed

**Sample ID**

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<tr>
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**Notes:** 1) LL: Liquid limit, PL: plastic limit, PI: plasticity index
## Dynamic Cone Penetrometer Exploration Log

**Location ID:** DCP-01  
**Performed By:** S. Giannakos, A. Barrett  
**Vert. Datum:** Ground Surface  
**Horiz. Datum:** -  
**Easting:** -  
**Northing:** -  
**Groundwater Depth:** -  
**Cone Area:** 10 sq. cm  
**Hammer Weight:** 35 lbs.  
**Surface Elevation:** -  
**Start Date:** 10/11/22  
**End Date:** 10/11/22

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<th>Depth (ft)</th>
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<th>Resistance (kg/cm²)</th>
<th>Dynamic Cone Resistance (kg/cm²)</th>
<th>Correlated SPT N-Value</th>
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*Anchor QEA, LLC*  
1201 3rd Ave Suite 2600  
Seattle, WA 98101  
Page 1 of 1  
DCP Exploration Logs
## Dynamic Cone Penetrometer Exploration Log

**Location ID:** DCP-02  
**Performed By:** S. Giannakos, A. Barrett  
**Vert. Datum:** Ground Surface  
**Horiz. Datum:** -  
**Easting:** -  
**Northing:** -  

**Surface Elevation:** -  
**Groundwater Depth:** -  
**Hammer Weight:** 35 lbs.  
**Cone Area:** 10 sq. cm  
**Start Date:** 10/11/22  
**End Date:** 10/11/22

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**Location ID:** DCP-03  
**Performed By:** S. Giannakos, A. Barrett  
**Vert. Datum:** Ground Surface  
**Groundwater Depth:** Ground Surface  
**Hammer Weight:** 35 lbs.  
**Cone Area:** 10 sq. cm  
**Start Date:** 10/11/22  
**End Date:** 10/11/22

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<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7.7</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7.7</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>11.6</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>11.6</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7.7</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>11.6</td>
<td>V. Loose</td>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>19.3</td>
<td>V. Loose</td>
<td>M. Stiff</td>
<td>M. Stiff</td>
</tr>
<tr>
<td>6 ft</td>
<td>5</td>
<td>19.3</td>
<td>V. Loose</td>
<td>M. Stiff</td>
<td>M. Stiff</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>30.9</td>
<td>V. Loose</td>
<td>M. Stiff</td>
<td>M. Stiff</td>
</tr>
<tr>
<td>2 m</td>
<td>9</td>
<td>34.7</td>
<td>V. Loose</td>
<td>M. Stiff</td>
<td>M. Stiff</td>
</tr>
<tr>
<td>7 ft</td>
<td>9</td>
<td>30.8</td>
<td>V. Loose</td>
<td>M. Stiff</td>
<td>M. Stiff</td>
</tr>
<tr>
<td>8 ft</td>
<td>19</td>
<td>65.0</td>
<td>V. Dense</td>
<td>V. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>9 ft</td>
<td>16</td>
<td>54.7</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>10 ft</td>
<td>20</td>
<td>68.4</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>75.2</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>11 ft</td>
<td>24</td>
<td>82.1</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>12 ft</td>
<td>24</td>
<td>82.1</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>13 ft</td>
<td>24</td>
<td>82.1</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>4 m</td>
<td>30</td>
<td>91.8</td>
<td>V. Dense</td>
<td>M. Stiff</td>
<td>V. Stiff</td>
</tr>
<tr>
<td>14 ft</td>
<td>50</td>
<td>153.0</td>
<td>V. Dense</td>
<td>Dense</td>
<td>Dense</td>
</tr>
<tr>
<td>15 ft</td>
<td>50</td>
<td>153.0</td>
<td>V. Dense</td>
<td>Dense</td>
<td>Dense</td>
</tr>
<tr>
<td>16 ft</td>
<td>50</td>
<td>153.0</td>
<td>V. Dense</td>
<td>Dense</td>
<td>Dense</td>
</tr>
</tbody>
</table>

**Anchor QEA, LLC**  
1201 3rd Ave Suite 2600  
Seattle, WA 98101  
Page 1 of 1  
DCP Exploration Logs
Appendix B
Laboratory Reports
## Moisture Content of Soil and Rock - ASTM D2216

<table>
<thead>
<tr>
<th>Boring ID</th>
<th>Sample ID</th>
<th>Depth</th>
<th>Description</th>
<th>Moisture Content,%</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>LCHA01- 0-1.5</td>
<td>---</td>
<td>Moist, very dark brown silt with organics</td>
<td>583.0</td>
</tr>
<tr>
<td>---</td>
<td>LCHA01- 1.5-2.5</td>
<td>---</td>
<td>Wet, gray sandy silt</td>
<td>48.9</td>
</tr>
<tr>
<td>---</td>
<td>LCHA02- 2.5-3.5</td>
<td>---</td>
<td>Moist, gray silt</td>
<td>48.6</td>
</tr>
<tr>
<td>---</td>
<td>LCHA02- 3.5-5</td>
<td>---</td>
<td>Wet, olive gray clay</td>
<td>37.2</td>
</tr>
<tr>
<td>---</td>
<td>LCHA03- 0.3-1.5</td>
<td>---</td>
<td>Moist, very dark brown silt with sand</td>
<td>75.3</td>
</tr>
<tr>
<td>---</td>
<td>LCHA03- 2.5-3.5</td>
<td>---</td>
<td>Moist, dark grayish brown silt with sand</td>
<td>58.4</td>
</tr>
<tr>
<td>---</td>
<td>LCHA03- 3.5-5</td>
<td>---</td>
<td>Moist, very dark brown silt with organics</td>
<td>163.6</td>
</tr>
<tr>
<td>---</td>
<td>LCHA04- 1-2.5</td>
<td>---</td>
<td>Moist, very dark brown silt with organics</td>
<td>443.3</td>
</tr>
</tbody>
</table>

Notes: Temperature of Drying : 60° Celsius
### Specific Gravity of Soils by ASTM D854

<table>
<thead>
<tr>
<th>Boring ID</th>
<th>Sample ID</th>
<th>Depth</th>
<th>Visual Description</th>
<th>Specific Gravity</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>LCHA01- 1.5-2.5</td>
<td>---</td>
<td>Wet, gray sandy silt</td>
<td>2.56</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>LCHA02- 2.5-3.5</td>
<td>---</td>
<td>Moist, gray silt</td>
<td>2.60</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>LCHA03- 0.3-1.5</td>
<td>---</td>
<td>Moist, very dark brown silt with sand</td>
<td>2.26</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>LCHA03- 3.5-5</td>
<td>---</td>
<td>Moist, very dark brown silt with organics</td>
<td>2.15</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Specific Gravity performed by using method B (oven dried specimens) of ASTM D854

Moisture Content determined by ASTM D2216.
Atterberg Limits - ASTM D4318

Plasticity Chart

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Sample ID</th>
<th>Boring</th>
<th>Depth</th>
<th>Natural Moisture Content, %</th>
<th>Liquid Limit</th>
<th>Plastic Limit</th>
<th>Plasticity Index</th>
<th>Liquidity Index</th>
<th>Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LCHA01-1.5-2.5</td>
<td>---</td>
<td>---</td>
<td>49</td>
<td>38</td>
<td>27</td>
<td>11</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Sample Prepared using the WET method

Dry Strength: HIGH
Dilatancy: SLOW
Toughness: LOW
Atterberg Limits - ASTM D4318

Sample Prepared using the WET method

Dry Strength: VERY HIGH
Dilatancy: SLOW
Toughness: LOW
Client: Anchor QEA, LLC  
Project: Leach Creek  
Location:  

<table>
<thead>
<tr>
<th>Boring ID:</th>
<th>Sample Type:</th>
<th>Tested By:</th>
<th>Sample ID: LCHA02-3.5-5</th>
<th>Test Date:</th>
<th>Checked By:</th>
<th>Test Id:</th>
<th>Depth:</th>
<th>Sample ID:</th>
<th>Boring ID:</th>
<th>Sample Type:</th>
<th>Tested By:</th>
<th>Sample ID: LCHA02-3.5-5</th>
<th>Test Date:</th>
<th>Checked By:</th>
<th>Test Id:</th>
</tr>
</thead>
</table>

Test Comment:  
Visual Description: Wet, olive gray clay  
Sample Comment:  

---

Atterberg Limits - ASTM D4318

**Plasticity Chart**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Sample ID</th>
<th>Boring</th>
<th>Depth</th>
<th>Natural Moisture Content, %</th>
<th>Liquid Limit</th>
<th>Plastic Limit</th>
<th>Plasticity Index</th>
<th>Liquidity Index</th>
<th>Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LCHA02-3.5-5</td>
<td>---</td>
<td>---</td>
<td>37</td>
<td>32</td>
<td>22</td>
<td>10</td>
<td>1.5</td>
<td>CL-ML</td>
</tr>
</tbody>
</table>

Sample Prepared using the WET method

Dry Strength: VERY HIGH  
Dilatancy: SLOW  
Toughness: LOW
Client: Anchor QEA, LLC
Project: Leach Creek
Location: Project No: GTX-316295
Boring ID: ---
Sample ID: LCHA03-2.5-3.5
Depth: ---
Sample Type: bag
Test Date: 11/04/22
Test Id: 692082
Tested By: cam
Checked By: bfs
Test Comment: ---
Visual Description: Moist, dark grayish brown silt with sand
Sample Comment: ---

Atterberg Limits - ASTM D4318

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Sample ID</th>
<th>Boring</th>
<th>Depth</th>
<th>Natural Moisture Content,%</th>
<th>Liquid Limit</th>
<th>Plastic Limit</th>
<th>Plasticity Index</th>
<th>Liquidity Index</th>
<th>Soil Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LCHA03-2.5-3.5</td>
<td>---</td>
<td>---</td>
<td>58</td>
<td>66</td>
<td>49</td>
<td>17</td>
<td>0.6</td>
<td>CH or OL</td>
</tr>
</tbody>
</table>

Sample Prepared using the WET method

Dry Strength: HIGH
Dilatancy: SLOW
Toughness: LOW
Appendix C
Previous Boring and Probe Logs (Others)
SOIL DESCRIPTION

Surface Elevation: Approx. 216 Feet

Depth, Ft. | Samples | Ground Water Depth, Ft.
--- | --- | ---
0 | 1 | 0
14 | 5 | 50/2°
16.5 | 6 | 0

Dense to very dense, brown, silty, gravelly SAND and sandy GRAVEL with some cobbles; moist to wet (DAM FILL)

Medium dense, slightly silty, gravelly SAND; wet

BOTTOM OF BORING
COMPLETED 9-26-90

LEGEND

2" O.D. split spoon sample
3" O.D. thin-wall sample
- Sample not recovered

Atterberg limits:

- Liquid limit
- Natural water content
- Plastic limit

The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.

Standard Penetration Resistance (140 lb. weight, 30° drop)
△ Blows per foot

Leach Creek Flood Control Project
Tacoma, Washington

LOG OF BORING DB-2
March 1991
W-5434-01

SHANNON & WILSON, INC.
Geotechnical Consultants
FIG. B-2
SOIL DESCRIPTION

Surface Elevation: Approx. 216 Feet

<table>
<thead>
<tr>
<th>Depth, Ft.</th>
<th>Samples</th>
<th>Ground Water</th>
<th>Depth, Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>□</td>
<td>□</td>
<td>50/6&quot;</td>
</tr>
<tr>
<td>10</td>
<td>□</td>
<td>□</td>
<td>50/5&quot;</td>
</tr>
<tr>
<td>10</td>
<td>□</td>
<td>□</td>
<td>79</td>
</tr>
</tbody>
</table>

BOTTOM OF BORING
COMPLETED 9-26-90

NOTE
A falling head permeability test was performed in this boring.

LEGEND

\(\circ\) % Water Content

2" O.D. split spoon sample

3" O.D. thin-wall sample

Sample not recovered

Impervious seal

Water level

Piezometer tip

Sample pushed

Atterberg limits:

Liquid limit

Natural water content

Plastic limit

Leach Creek Flood Control Project
Tacoma, Washington

LOG OF BORING DB-3
March 1991
W-5434-01

SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. B-3
SOIL DESCRIPTION

Surface Elevation: Approx. 216 Feet

<table>
<thead>
<tr>
<th>Depth, Ft.</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>37.7</td>
<td>32</td>
</tr>
<tr>
<td>46.7</td>
<td>32</td>
</tr>
<tr>
<td>49.9</td>
<td>34</td>
</tr>
</tbody>
</table>

Dense to very dense, brown, slightly silty to silty, gravelly SAND with cobbles; moist to wet (DAM FILL)

Very dense, gray, silty, gravelly SAND and sandy GRAVEL with cobbles; moist to wet

Very dense, gray, silty SAND and sandy SILT with cobbles; wet

Very dense, gray to gray-brown, slightly silty to silty, gravelly SAND and sandy GRAVEL with cobbles; wet

Very dense, gray, sandy SILT and silty SAND; trace gravel with some cobbles; wet

Very dense, gray-brown, slightly silty to silty, sandy GRAVEL; wet

BOTTOM OF BORING COMPLETED 9-25-90

LEGEND

- 2" O.D. split spoon sample
- 3" O.D. thin-wall sample
- Sample not recovered
- Atterberg limits:
  - Liquid limit
  - Natural water content
  - Plastic limit
  - Impervious seal
  - Water level
  - Piezometer tip
  - Sample pushed

The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.

Leach Creek Flood Control Project
Tacoma, Washington

LOG OF BORING DB-4
March 1991
W-5434-01
SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. B-4
### Soil Description

**Surface Elevation:** Approx. 216 Feet

<table>
<thead>
<tr>
<th>Depth, Ft.</th>
<th>Samples</th>
<th>Ground Water Depth, Ft.</th>
<th>Standard Penetration Resistance (140 lb. weight, 30&quot; drop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>50/5&quot;</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>5</td>
<td>50/6&quot;</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>6</td>
<td>50/6&quot;</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>8</td>
<td>75/5&quot;</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>10</td>
<td>50/4&quot;</td>
</tr>
<tr>
<td>12.3</td>
<td>7</td>
<td>12</td>
<td>50/6&quot;</td>
</tr>
<tr>
<td>14.3</td>
<td>8</td>
<td>14</td>
<td>50/6&quot;</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>15</td>
<td>75/5&quot;</td>
</tr>
<tr>
<td>20.3</td>
<td>11</td>
<td>20</td>
<td>50/4&quot;</td>
</tr>
</tbody>
</table>

**Bottom of Boring**

**Completed 9-24-90**

**Note**

Heave occurred from 14 feet to the bottom of the boring.

### Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>✖️</td>
<td>2&quot; O.D. split spoon sample</td>
</tr>
<tr>
<td>✗</td>
<td>3&quot; O.D. thin-wall sample</td>
</tr>
<tr>
<td>✱</td>
<td>Sample not recovered</td>
</tr>
</tbody>
</table>

- **Impervious seal**
- **Water level**
- **Piezometer tip**
- **Sample pushed**

**Atterberg limits:**

- Liquid limit
- Natural water content
- Plastic limit

The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.

---

**Leach Creek Flood Control Project**

**Tacoma, Washington**

**Log of Boring DB-5**

**March 1991**

**W-5434-01**

**Shannon & Wilson, Inc.**

**Geotechnical Consultants**

**Fig. B-5**
### SOIL DESCRIPTION

**Surface Elevation:** Approx. 216 Feet

<table>
<thead>
<tr>
<th>Depth, Ft</th>
<th>Ground Water Depth, Ft</th>
<th>Standard Penetration Resistance (140 lb. weight, 30&quot; drop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>50/4.5&quot;</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>74</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>75/11&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>79</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>50/5&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>78/11.5&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>50/1&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>86/10&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>50/5&quot;</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>50/4&quot;</td>
</tr>
</tbody>
</table>

### NOTE

At approximately 32 feet, water flowed out the top of the augers (artesian). On 10-4-90 and 10-25-90 the piezometer was flowing. Artesian water appeared to be leaking up into the piezometer tip interval. The piezometer was later abandoned in accordance with 173-160 WAC.

### BOTTOM OF BORING COMPLETED 9-27-90

47.9 13

### LEGEND

- 2" O.D. split spoon sample
- 3" O.D. thin-wall sample
- Sample not recovered

**Atterberg limits:**

- Liquid limit
- Natural water content
- Plastic limit

The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.

### LOG OF BORING DB-6

March 1991

W-5434-01

**SHANNON & WILSON, INC.**
Geotechnical Consultants

**FIG. B-6**
<table>
<thead>
<tr>
<th>Soil Description</th>
<th>Depth, Ft</th>
<th>Samples</th>
<th>Ground Water Depth, Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very loose, brown, sandy SILT with scattered gravel and very abundant roots; slightly moist</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Medium to dense, gray, slightly silty, gravelly SAND; moist</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**BOTTOM OF BORING**
**COMPLETED 10-18-90**

**LEGEND**
- Porter split spoon sample
- Thin-wall tube sample
- Sample not recovered
- Impervious seal
- Water level
- Piezometer tip
- Sample pushed

**The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.**
**SOIL DESCRIPTION**

Surface Elevation: Unknown

<table>
<thead>
<tr>
<th>Depth, ft</th>
<th>Samples</th>
<th>Ground Water</th>
<th>Depth, ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Very loose, brown, sandy SILT with scattered gravel and very abundant roots; slightly moist (topsoil); roots up to 3/4" dia.

Medium to dense, gray, slightly silty, gravelly SAND; moist

**BOTTOM OF BORING**

COMPLETED 10-18-90

---

**LEgend**

- Porter split spoon sample
- Thin-wall tube sample
- Sample not recovered

Atterberg limits:

- Liquid limit
- Natural water content
- Plastic limit

The stratification lines represent the approx. boundaries between soil types, and the transition may be gradual.

---

**LOG OF HAND BORING HB-2**

March 1991 W-5434-01

Leach Creek Flood Control Project
Tacoma, Washington

SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. B-8
### LOG OF TEST PIT DTP-1

**SOIL DESCRIPTION**

<table>
<thead>
<tr>
<th>Ground Water</th>
<th>% Water Content</th>
<th>Samples</th>
<th>Depth, Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Soft to very soft, dark brown, organic SILT; moist to wet with frequent seeps (PEAT)</th>
<th>✔️</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Dense, light gray, silty, sandy GRAVEL; moist with occasional wet sandy zones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Very dense, gray, slightly fine, gravelly, silty SAND; moist (TILL)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sketch of NE Pit Side**

Surface Elevation:

- Horizontal Distance in Feet
- Seepage

---

**FIG. B-9**
LOG OF TEST PIT DTP-2

SOIL DESCRIPTION

1. Soft to very soft, dark brown, organic SILT; moist to wet (PEAT)

2. Stiff to very stiff, gray to light brown, silty CLAY; moist

3. Dense, gray, slightly silty, gravelly SAND; well-graded; moist to wet

GROUND WATER % WATER CONTENT SAMPLES

1  2  3  4  5  6  7  8  9  10  11  12
0  2  4  6  8  10  12

Sketch of NW Pit Side

Surface Elevation:

Horizontal Distance in Feet

NOTES

1. Unit 2 was not observed on opposite side of pit; however, the top 6 inches of unit 3 was siltier.

2. After encountering the wet sand, the hole caved almost as fast as it was excavated.

FIG. B-10
LEGEND

Probe 4 - 88 Feet West of DB-6
Probe 5 - 101 Feet West of DB-6
Probe 6 - 122 Feet West of DB-6

Leach Creek Flood Control Project
Tacoma, Washington

LOG OF PENETRATION PROBES
March 1991
W-5434-01
SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. B-12
LEGEND

- Probe 7 - 136 Feet West of DB-6
- Probe 8 - 6 Feet West of DB-5
- Probe 9 - 12 Feet West of DB-5
LEGEND

- Probe 10 - 101 Feet East of DB-4
- Probe 11 - 109 Feet East of DB-4
- Probe 12 - 49 Feet East of DB-4
LEGEND

- Probe 13 - 45 Feet East of DB-4,
  12 Feet North of North
  Edge of Roadway, in
  Failure Slide Area

- Probe 14 - 24 Feet West of DB-2
Leach Creek
Flood Control Project
Tacoma, Washington

GRAN SIZE DISTRIBUTION

March 1991

SHANNON & WILSON, INC.
Geotechnical Consultants

FIG. B-16

<table>
<thead>
<tr>
<th>SAMPLE NO.</th>
<th>DEPTH-FT.</th>
<th>U.S.C.</th>
<th>CLASSIFICATION</th>
<th>NAT. W.C., %</th>
<th>LL</th>
<th>PL</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB-2</td>
<td>10.0-11.5</td>
<td>SM</td>
<td>Gray-brown, silty, gravelly SAND.</td>
<td>7.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-4</td>
<td>10.5-11.2</td>
<td>SP-SM</td>
<td>Gray, slightly silty, gravelly SAND.</td>
<td>7.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAMPLE</td>
<td>DEPTH FT</td>
<td>U.S.C.</td>
<td>W.C.%</td>
<td>LL</td>
<td>PI</td>
<td>PL</td>
<td>Classification</td>
</tr>
<tr>
<td>--------</td>
<td>----------</td>
<td>--------</td>
<td>-------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----------------</td>
</tr>
<tr>
<td>S-1</td>
<td>0.0-1.0</td>
<td>SM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gray-brown, silty, gravelly sand.</td>
</tr>
<tr>
<td>S-6</td>
<td>1.0-2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Gray, silty, gravelly sand.</td>
</tr>
<tr>
<td>DB-5</td>
<td></td>
<td></td>
<td>11.3</td>
<td>4.3</td>
<td>0.3</td>
<td>0.1</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Sieve Analysis**

- **Size of opening in inches**
- **Number of mesh per inch, U.S. standard**

**Hydrometer Analysis**

- **Grain size in microns**

- **Percent fines by weight**
- **Percent coarser by weight**
APPENDIX C

WETLAND / WATER QUALITY PERMITS
Mr. Cal Taylor  
Environmental Services Department  
City of Tacoma  
326 East D Street  
Tacoma, Washington 98421  

Reference: NWS-2011-859-WRD  
Tacoma, City of (Leach Creek Holding Basin)  

Dear Mr. Taylor:

Enclosed is a Department of the Army permit which authorizes performance of the work described in your referenced application. You are cautioned that any change in the location or plans of the work will require submittal of revised plans to this office for approval prior to accomplishment. Deviation from the approved plans may result in imposition of criminal or civil penalties.

Your attention is drawn to General Condition 1 of the permit which specifies the expiration date for completion of the work. Upon completing the authorized work, please fill out and return the enclosed Certificate of Compliance with Department of the Army Permit form.

We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey form. This form and information about our program is available on our website at: www.nws.usace.army.mil select “Regulatory Branch, Permit Information” and then “Contact Us.” If you have any questions please contact Mr. Daniel Krenz at daniel.a.krenz@usace.army.mil or at (206) 316-3153.

Sincerely,

Michelle Walker  
Chief, Regulatory Branch  

Enclosures
DEPARTMENT OF THE ARMY PERMIT

Permittee: Tacoma, City of

Environmental Services Department
City of Tacoma
326 East D Street
Tacoma, Washington 98421

Permit No: NWS-2011-859-WRD

Issuing Office: Seattle District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers (Corps) having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The applicant has proposed to construct a stormwater channel within the Leach Creek Holding Basin. The proposed work includes:

1. Construct a 1,000 foot long channel (2-4 feet deep with 5:1 side slopes) through forested wetlands to connect the existing forebay with the outfall and spillway structures. The channel will be planted with emergent plants per a planting plan.

2. Construct an access ramp to the proposed channel to facilitate maintenance.

3. Remove gravel from the existing spillway, replace an existing 48-inch diameter overflow riser structure, and install a bar screen trash rack.

This project will result in the conversion of 1.02 acres of forested Category I wetland, restored to emergent wetlands after temporary impacts and the permanent impact of 0.03 acres of forested, Category I wetland.

The work described above (in accordance with the plans and drawings dated July 2019 attached hereto which are incorporated in and made a part of this permit). The purpose of the project is stormwater management.

Project Location: In Leach Creek at Tacoma, Pierce County, Washington.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on August 5, 2023. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in accordance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification to this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

7. After a detailed and careful review of all the conditions contained in this permit, the permittee acknowledges that, although said conditions were required by the Corps, nonetheless the permittee agreed to those conditions voluntarily to facilitate issuance of the permit; the permittee will comply fully with all the terms of all the permit conditions.

Special Conditions:

a. You must provide a copy of the permit transmittal letter, the permit form, and drawings to all contractors performing any of the authorized work.

b. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

c. All construction debris shall be properly disposed of on uplands in such a manner that it cannot enter into the waterway or cause water quality degradation.

e. You must implement and abide by the Endangered Species Act (ESA) requirements and/or agreements set forth in the Leach Creek Holding Basin Maintenance Project Biological Evaluation, dated March 2016, in its entirety. The U.S. Army Corps of Engineers (Corps) made a determination of No Effect for all species and critical habitat based on this document. Failure to comply with the commitments made in this document constitutes non-compliance with the ESA and your Corps permit.

f. You shall implement and abide by the Leach Creek Stormwater Wetland Mitigation Plan date July 8, 2019, and obtain In Lieu Fee (ILF) credits in accordance with Section 7.1 of the Mitigation Plan.

g. You shall obtain from the Pierce County In-Lieu-Fee sponsor, documentation of the completed In Lieu Fee (ILF) transaction in the form of a Statement of Sale. You shall submit to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch a copy of the ILF Statement of Sale prior to performing work in waters of the U.S. authorized by this permit. All submittals must prominently display the reference number NWS-2011-859-WRD.

h. You shall implement and abide by the mitigation plan, Leach Creek Stormwater Wetland Mitigation Plan date July 8, 2019, and preserve 16 acres of Category I, forested wetland and associated buffers in accordance with Section 7.2 of the mitigation plan. You shall also implement and abide by the requirements outlined in Section 8 of the mitigation plan for the restoration of emergent wetlands and all requirements to monitor and achieve performance standards. The successful establishment of emergent wetlands within the “conversion” area is a requirement of the mitigation proposal as accepted by the Corps.

i. The fully executed Declaration of Restrictive Covenants for the mitigation site(s) shall be recorded with the
Registrars of Deeds or other appropriate official charged with maintaining records on real property. A copy of the fully executed Declaration of Restrictive Covenants and proof of recording shall be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch prior to project construction.

j. Your responsibility to complete the required compensatory mitigation as set forth in Special Conditions "e" through "h", including your responsibility to obtain the required In-Lieu-Fee mitigation credits as set forth in Special Condition "f" will not be considered fulfilled until you have demonstrated mitigation success, submitted the required documentation, and have received written verification from the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:
   - Section 404 of the Clean Water Act (33 U.S.C. 1344).
   - Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C 1413).

2. Limits of this authorization.
   a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.
   b. This permit does not grant any property rights or exclusive privileges.
   c. This permit does not authorize any injury to the property or rights of others.
   d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
   a. Damages to the permitted project or uses thereof as a result of other permitted activities or from natural causes.
   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
   d. Design or construction deficiencies associated with the permitted work.
   e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the
circumstances warrant. Circumstances that could require include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of the permit.

b. The information provided by you in support of your application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 Code of Federal Regulations (CFR), Part 325.7 or enforcement procedures such as those contained in 33 CFR, Parts 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR, Part 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

City of Tacoma

Division Manager

8/4/2020

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

WALKER.MICHELLE.1231587698

Digitally signed by
WALKER.MICHELLE.1231587698
Date: 2020.08.05 11:38:03 -07'00'

8/5/20

(DATE)

Alexander “Xander” L. Bullock
Colonel, Corps of Engineers
District Engineer
When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

__________________________  ________________________
(TRANSFEREE)               (DATE)
LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS

DATE: JULY 2019

PROJECT LOCATION, VICINITY MAP, AND DRAWING INDEX

1. PROJECT LOCATION, VICINITY MAP, AND DRAWING INDEX
2. LEGEND
3. ABBREVIATIONS
4. OUTLET STRUCTURE DEMOLITION PLAN
5. TEMPORARY EROSION AND SEDIMENT CONTROL, GRADING AND LAYOUT
6. INFLOW CHANNEL, REROUTING AND ACCESS RAMP
7. OUTLET STRUCTURE - GRATING ELEVATION AND DETAILS
8. GRADING SECTIONS
9. SITE DETAILS
10. OUTLET STRUCTURE SECTIONS AND DETAILS - 1
11. OUTLET STRUCTURE SECTIONS AND DETAILS - 2
12. OUTLET STRUCTURE GENERAL STRUCTURAL NOTES, ABBREVIATION AND LEGEND
13. OUTLET STRUCTURE PLANS
14. OUTLET STRUCTURE SECTIONS AND DETAILS - 1
15. POWER BLOCK DIAGRAM
16. SIGNAL BLOCK DIAGRAM

SCALE: 1" = 100'
SCALE: 1" = 5000'
LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS

FILE NO. ENV-00030

JULY 2019

NOT FOR CONSTRUCTION

1. See Specification (GU50) for demolition and salvage requirements.

2. Remove concrete and accumulated debris.

3. Remove accumulated sediment from forebay.

4. Hinged portion of grating to remain.

5. Remove existing excess material and debris to original elevation.

6. Existing handrail to remain.

7. Existing grating is tack-welded and will require cutting out.

Source: 1983 record drawings for Leach Creek Holding Basin: dam and structures

Section

Scale: NTS

Key Notes:

1. Remove existing support

2. Remove existing equipment enclosures (2) and stilling wells (2)

3. Remove existing conduit

4. Remove existing 72" structure

5. Remove existing concrete

6. Pipe to flush with wall

7. Remove existing pipe

8. Remove existing concrete pipe to flush with wall

9. Remove existing 72" structure

10. Remove existing pipe

11. Remove existing conduit

12. Remove existing equipment enclosures (2) and stilling wells (2)
GENERAL NOTES:
1. SOURCE OF SURVEY DATA IS PER CITY OF TACOMA CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS.
2. REPAIR GRAVEL, SURFACING REMOVED OR DISTURBED DURING CONSTRUCTION TO MATCH EXISTING CONDITIONS.
3. ALL TEMPORARY CORRIDORS TO BE INSTALLED TO PROTECT EXISTING DRAINAGE CHANNELS DURING CONSTRUCTION. PROVISIONS OF THE PROJECTS FISH AND WILDLIFE PERMIT, MANAGEMENT MANUAL AND SHALL COMPLY WITH THE PROVISIONS OF THE PROJECTS FISH AND WILDLIFE PERMIT. CONTROL NUMBER: 127099-1.
4. LOCATE STABILIZED CONSTRUCTION ENTRANCE AT THE LOCATION(S) SPECIFIED BY THE CITY.
5. PROTECT EXISTING DRAINAGE CHANNELS DURING CONSTRUCTION.

KEY NOTES:
1. APPLY 3" OF COMPOSTED MULCH TO ALL DISTURBED AREAS AS TEMORARY COVER. ERODIBLE SOILS SHALL BE COVERED WITHIN THE TIME PERIOD SPECIFIED IN WSDOT SECTION 641.5.1.
2. PRIOR TO ALLOWING FLOW IN THE CHANNEL, APPLICATION OF ALL PERMANENT SEEDING, PLANTING, AND EROSION CONTROL BLANKETS MUST BE COMPLETE.
3. DELINEATE CLEARING LIMITS WITH HIGH VISIBILITY PLASTIC FENCE.
4. INSTALL STORM DRAIN INLET PROTECTION. NOT USED.
5. MAINTAIN MINIMUM BASEFLOW OF 4 CFS AT ALL TIMES IN BASIN. PROVIDE BACK-UP SYSTEM FOR DIVERTING FLOW DURING HIGH FLOW EVENTS.
6. REMOVE EXCESS MATERIAL AND DEBRIS TO ORIGINAL DESIGN ELEVATION OF 205. SEE SPECIFICATION SECTION 9.10.
7. CONSTRUCT TEMPORARY COFFER DAM OR INSTALL SAND BAGS IN ORDER TO BYPASS FLOW DURING CONSTRUCTION.
8. MAINTAIN 24-HOUR ACCESS TO EXISTING PUMP STATION AND OUTLET STRUCTURE AT ALL TIMES.
9. EXISTING WELLS AND BOLLARDS. PROTECT IN PLACE.
10. DAYLIGHT CHANNEL TO MATCH EXISTING GRADINGS.
GENERAL NOTES:
1. SOURCE OF SURVEY DATA IS PER CITY OF TACOMA.
   CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS.
2. CONTRACTOR TO LOCATE AND PROTECT EXISTING UTILITIES.
3. SEE SHEET C-001 FOR TEMPORARY EROSION AND SEDIMENT CONTROL.
4. FOR CHANNEL CENTERLINE SURVEY CONTROL, SEE SHEET C-001.

KEY NOTES:
1. INSTALL ECOLOGY BLOCKS FOR 80' DOWNSTREAM OF INLET STRUCTURE.
2. INSTALL RIPRAP OUTLET PROTECTION, 14-FEET DOWNSTREAM AND EXTENDING UP THE CHANNEL SIDES A MINIMUM OF 1-FOOT ABOVE THE PIPE CROWN ELEVATION.
3. BYPASS EXISTING FLOWS PER CONSTRUCTION PHASING.

GENERAL NOTES:
1. SOURCE OF SURVEY DATA IS PER CITY OF TACOMA.
   CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS.
2. CONTRACTOR TO LOCATE AND PROTECT EXISTING UTILITIES.
3. SEE SHEET C-001 FOR TEMPORARY EROSION AND SEDIMENT CONTROL.
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   CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS.
2. CONTRACTOR TO LOCATE AND PROTECT EXISTING UTILITIES.
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KEY NOTES:
1. INSTALL ECOLOGY BLOCKS FOR 80' DOWNSTREAM OF INLET STRUCTURE.
2. INSTALL RIPRAP OUTLET PROTECTION, 14-FEET DOWNSTREAM AND EXTENDING UP THE CHANNEL SIDES A MINIMUM OF 1-FOOT ABOVE THE PIPE CROWN ELEVATION.
3. BYPASS EXISTING FLOWS PER CONSTRUCTION PHASING.
KEY NOTES:
1. ECOLOGY BLOCKS. SEE C-002 FOR EXTENTS OF INSTALLATION.
2. BACKFILL SURFACE TO TOP OF ECOLOGY BLOCKS.

SECTION 1
SCALE: 1" = 10' (H) 1" = 5' (V)
EL. 207' CLEARING LIMITS

SECTION 2
SCALE: 1" = 10' (H) 1" = 5' (V)
EL. 207' CLEARING LIMITS

SECTION 3
SCALE: 1" = 10' (H) 1" = 5' (V)
EXISTING PUMP STATION FOREBAY (EL. 205') CLEARING LIMITS
VARIES
EL. 215'

SECTION 4
SCALE: 1" = 10' (H) 1" = 5' (V)
EL. 212'

SECTION 5
SCALE: 1" = 10' (H) 1" = 5' (V)

SECTION 6
SCALE: 1" = 10' (H) 1" = 5' (V)

SECTION 7
SCALE: 1" = 10' (H) 1" = 5' (V)

CLEARING LIMITS
EL. 212'
VARIES
GENERAL NOTES:
1. SOURCE OF SURVEY DATA IS PER CITY OF TACOMA.
   CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS.

Table 5: Exposed wetland planting schedule – Phase of Stormwater Channel

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Species Name</th>
<th>Section</th>
<th>Date</th>
<th>Setting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Plugs will be placed in place of live.

Table 6. Wetland Berm and – Phase of Stormwater Channel

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Species Name</th>
<th>Section</th>
<th>Date</th>
<th>Setting Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Species may be established with other native wetland species if availability is limited.

**Know what's below. Call before you dig.**

**Before you dig.**

JULY 2019
NOT FOR CONSTRUCTION
NOTES:
1. MORE THAN THE MINIMUM OF ONE FASTENER PER SQUARE YARD MAY BE REQUIRED DUE TO CONDITIONS SUCH AS BLANKET COMPOSITION, SOIL TYPE, SURFACE UNIFORMITY, AND SLOPE STEEPNESS.
2. SEE STANDARD SPECIFICATION 8-01.3(7).

NOTES:
1. CONTRACTOR SHALL INSTALL AND MAINTAIN A STABILIZED CONSTRUCTION ENTRANCE WHERE VEHICLES ENTER THE PROJECT SITE.
2. THE ROCK PAD SHALL BE AT LEAST 12" THICK AND 100' LONG. MATERIAL SHALL BE 4" TO 8" QUARRY SPALLS AND MAY BE TOP-DRESSED WITH 1" TO 3" ROCK. WIDTH SHALL BE THE FULL WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA.
3. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
4. CONTRACTOR TO MAINTAIN ROAD DURING CONSTRUCTION TO MINIMIZE TRACK-OUT OF DIRT AND MATERIAL.

SITE DETAILS C-006

1. CONTRACTOR SHALL INSTALL AND MAINTAIN A STABILIZED CONSTRUCTION ENTRANCE WHERE VEHICLES ENTER THE PROJECT SITE.
2. THE ROCK PAD SHALL BE AT LEAST 12" THICK AND 100' LONG. MATERIAL SHALL BE 4" TO 8" QUARRY SPALLS AND MAY BE TOP-DRESSED WITH 1" TO 3" ROCK. WIDTH SHALL BE THE FULL WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA.
3. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY TO MAINTAIN PROPER FUNCTION OF THE PAD.
4. CONTRACTOR TO MAINTAIN ROAD DURING CONSTRUCTION TO MINIMIZE TRACK-OUT OF DIRT AND MATERIAL.
GENERAL STRUCTURAL NOTES

STEEL

MATERIAL

DOWELS AND CORNER BARS

REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60.

DESIGN STRENGTH

BUILDING CODE, LATEST EDITION.

LATEST EDITION. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318

PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI 315,

OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH MANUAL OF STANDARD

SERIES CONFORMING TO ANSI/AWS D1.1 TABLE 3.1 AND ELECTRODE

WELDING

ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS

APPLICABLE BUILDING NOTES AND CODES

ARE MORE RESTRICTIVE.

IN CONCRETE

BOLTS INSTALLED

CONCRETE WHICH IS PART

OF THE STRUCTURE.

ANCHOR BOLTS

ANCHOR BOLTS SHALL BE STAINLESS CONFORMING TO ASTM A16.51, SET ALL BOLTS BY TEMPLATE.

DIA EXPANSION BOLTS

EXPANSION BOLTS SHALL BE STAINLESS "304L BO-L pk TYPE 3" BY HILTI

CORP. OR APPROVED EQUAL. ISO9001 CERTIFICATION AND SPECIAL INSPECTION

IS REQUIRED.

DIA ADHESIVE ANCHORING SYSTEM

STAINLESS STEEL RODS SHALL BE AISI 316, REINFORCING BARS AND RODS

ANCHORED INTO EXISTING CONCRETE SHALL BE ENGAGED 2" WITH M420 "NIT WEAR-150-30", OR SHARK "SNAKEUR" EPOXY INJECTION GEL OR APPROVED

EQUAL, ISO9001 CERTIFICATION AND SPECIAL INSPECTION IS REQUIRED.

STEEL

TYP

ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM

DESIGNATIONS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

TEES, CHANNELED ANGLES, PLATES AND BARS

ASTM A36, UNLESS OTHERWISE NOTED

PIES

ASTM A500, GRADE B, Fy=50ksi

WELDING

ALL WELDING SHALL CONFORM TO AWS D 1.1 WELDING CODE. MINIMUM SIZE

WELDS 5/32", CONTINUOUS FILLET. WELDING ELECTRODES SHALL BE TiOK

SERIES CONFORMING TO AWS D 1.1 TABLE 3.1 AND ELECTRODE

SPECIFICATION AWS D1.1. WELDING SHALL BE CONDUCTED BY HABO CERTIFIED WELDER.

GALVANIZING

STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED IN CONFORMANCE

WITH SPECIFICATIONS.

SPECIAL INSPECTION

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER ISC SECTION 1704.

CONCRETE

CONCRETE WHICH IS PART

OF THE STRUCTURE.

BOLTS INSTALLED

IN CONCRETE

ANCHOR BOLTS.
KEY NOTES:
1. INTERCEPT EXISTING SUPPLY CONDUCTORS AND SPLICE TO NEW CIRCUIT P1 CONDUCTORS.
2. DISCONNECT AND DEMOLISH CONDUCTORS AND CONDUIT BETWEEN EXISTING EQUIPMENT.
3. REMOVE CONDUCTORS FROM 480V JUNCTION BOX AND DISCONNECT SWITCH. ROUTE NEW CIRCUIT P2 FROM POWER DISTRIBUTION BLOCK TO EXISTING DISCONNECT WITHOUT SPLICES.
4. REMOVE EXISTING EQUIPMENT AND SALVAGE.
5. DEMOLISH EXISTING CONTROL CABINET ENCLOSURE.
6. OWNER SUPPLIED PANEL FOR INSTALLATION BY CONTRACTOR. SEE SHEET C-003 FOR LOCATIONS.
7. NOT USED.
8. INSTALL NEW CONDUIT AND CONDUCTORS AS SHOWN. TERMINATION OF CONDUCTORS IN OWNER FURNISHED CONTROL PANEL WILL BE BY OWNER.

INDICATES DEMOLITION

NEW OWNER SUPPLIED CONTROL PANEL

NEW GATE OPERATOR ENCLOSURE

NEW GATE OPERATOR

NEW GATE OPERATOR ENCLOSURE

FLOW TRANSMITTER ENCLOSURE (E)

FLOW TRANSMITTER

POWER SUPPLY CABINET (E)

PLC CABINET (E)

CPT (E)

LEGEND:

INDICATES DEMOLITION
**KEY NOTES:**

1. **DEMOLISH 1" CONDUIT FROM EXISTING SIGNAL JUNCTION BOX TO PLC CABINET IN EXISTING CONTROL CABINET ENCLOSURE. PRESERVE THE COMMUNICATION CABLE, REROUTE CABLES.**
2. **NEW OWNER SUPPLIED PANEL. FOR INSTALLATION BY CONTRACTOR. OWNER TO TERMINATE ALL CABLE WITHIN NEW CONTROL PANEL.**
3. **SAVAGE EXISTING PRESSURE TRANSDUCERS.**
4. **EXISTING EQUIPMENT FOR SAVAGE.**
5. **INSTALL 2 NEW STILLING WELLS AND PRESSURE TRANSDUCERS SHOWN ON DRAWING C-033. STILLING WELLS SHALL BE PER DETAIL AE-002. SENSOR SHALL BE AS SPECIFIED IN SECTION 16000.**
6. **COORDINATE MOUNTING EITHER DIRECTLY ABOVE OR BELOW GRATING, AS DIRECTED BY OWNER.**
7. **OWNER FURNISHED PANEL IS 48"W x 72"H x 24"D. PROVIDE CONCRETE MOUNTING PAD THAT RAISES PANEL 2 INCHES ABOVE GRADE AND HAS 1 INCH CLEARANCE AROUND OUTSIDE OF PANEL.**

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**LEGEND:**

- Indicates demolition
- Conduit to control panel enclosure
- Removable grating as applicable
- Provide 4' extra cable, coiled and supported on S.S. cable support
- Drill single row of 1" holes every 12" in sidewall of stilling pipe
- 316SS bracket for stilling pipe
- Cut 12" x 9" long slots at bottom of pipe
- Pressure transducer, stainless steel weight by transducer supplier
- New gate operator box with terminal strip & desicant for vent tube. Size for equipment provided.
- Float switch installation detail

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**JULY 2019**

**NOT FOR CONSTRUCTION**

**NW-2011-855 WRD**

**July 2019**

**LEACH CREEK STORMWATER HOLDING BASIN MODIFICATIONS**

**E-002**

**SIGNAL BLOCK DIAGRAM**

**DEPARTMENT OF PUBLIC WORKS**

**CITY OF TACOMA**

**Brown and Caldwell**
September 24, 2018

City of Tacoma  
Environmental Services Department  
ATTN: Mr. John Burk  
326 East D Street  
Tacoma, WA 98421

RE: Water Quality Certification Order No. 16036 for Corps Public Notice No. NWS-2011-859-WRD, for the Leach Creek Holding Basin Maintenance Project, Tacoma, Pierce County, Washington

Dear Mr. Burk:

On July 10, 2017, the City of Tacoma submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification (401 Certification) under the federal Clean Water Act for the Leach Creek Holding Basin Maintenance Project, in the City of Tacoma, Pierce County, Washington.

The proposed project includes expansion of the existing pump station forebay with the creation of a stormwater channel to connect the forebay to the outlet and spillway structures, construction of an access ramp, relocation of the stormwater discharge flowpath away from the toe of the dam, gravel removal from the existing spillway, replacement of the outlet structure, restoration of the impact areas, and ongoing maintenance activities.

On behalf of the state of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Lori Kingsbury at (360) 407-6926. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

[Signature]

Perry J Lund, Section Manager  
Shorelands and Environmental Assistance Program  
Southwest Regional Office

Enclosure

By Certified Mail 9489 0090 0027 6019 1529 10
City of Tacoma
Order No. 16036
September 24, 2018

cc: Dan Krenz, Corps of Engineers
    Calvin Taylor, City of Tacoma
    Shauna Hansen, City of Tacoma
    Char Naylor, Puyallup Tribe of Indians
    Russ Ladley, Puyallup Tribe of Indians
    Melissa Malott, Citizens for a Healthy Bay
    Mathew Curtis, WDFW

e-cc: Linda Storm, EPA
     ECY RE FEDPERMITS
     Loree' Randall, Ecology
     Lori Kingsbury, Ecology
     Zach Meyer, Ecology
     Chris Montague-Breakwell, Ecology
     Angela Vincent, Ecology
     Dana Mock, Ecology

Version 1.0
IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION TO  
The City of Tacoma  
ATTN: Mr. John Burk  
in accordance with 33 U.S.C. 1341  
(FWPCA § 401), RCW 90.48.120, RCW 90.48.260 and Chapter 173-201A WAC  

ORDER No. 16036  
Corps Reference No. NWS-2011-859-WRD  
Leach Creek Holding Basin Maintenance Project, within Leach Creek and Wetlands, Tacoma, Pierce County, Washington  

TO: City of Tacoma
Environmental Services Department
ATTN: Mr. John Burk
326 East D Street
Tacoma, WA 98421

On July 10, 2017, the Department of Ecology (Ecology) received a Joint Aquatic Resource Permit Application (JARPA) from the City of Tacoma, Environmental Services Department, requesting a Section 401 Water Quality Certification (WQC). The U.S. Army Corps of Engineers (Corps) issued a joint public notice for the project on September 26, 2017. On June 14, 2018, the City of Tacoma submitted a Withdraw and Reapply for 401 WQC. Ecology issued a second public notice for the project on June 21, 2018.

The existing 42 acre Leach Creek Holding Basin serves as a regional stormwater detention facility to regulate discharges to Leach Creek. The facility receives stormwater through five major outfalls and has approximately 80 acre-feet of active storage capacity. The holding basin dam and gated outlet structure were constructed in 1961.

The purpose of the proposed project is to improve the operational capacity of the Leach Creek Holding Basin and reduce downstream effects from flooding and channel erosion. The project will also address dam safety issues identified by the Department of Ecology’s Dam Safety Office during a recent inspection.

The project is proposing the following activities:

- Expand pump station forebay with the creation of a 1,000 foot-long stormwater channel to connect the forebay with the outfall and spillway structures;
- Relocate the stormwater discharge flowpath away from the toe of the dam;
- Construct an access ramp to the proposed channel to facilitate maintenance;
- Remove gravel from the existing spillway;
- Replace the 48 inch concrete overflow riser structure;
- Add a trash rack to the outlet control structure;
- Restore temporarily disturbed areas with wetland plantings; and,
- Perform ongoing maintenance activities.
The proposed project will permanently impact 0.03 acres of forested Category I wetlands and will convert 1.02 acres of forested Category I wetlands to emergent wetlands. Mitigation to compensate for the wetland impacts will be in the form of preservation of 16 acres of Category I forested wetlands within the basin and the purchase 0.27 credits from the Pierce County In-Lieu Fee Program. Temporarily disturbed wetland areas will be restored and monitored for a period of five (5) years.

The existing Leach Creek dam, holding basin, and pump station are located west of South Orchard Street near South 34th Street in the City of Tacoma, Pierce County, Washington, 98424; NE Quarter of Section 14; Township 20 North; Range 2 East; WRIA 12, Chambers-Clover Watershed.

AUTHORITIES:
In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA §301, 302, 303, 306, and 307);

2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW, and with other applicable state laws; and,

3. Conformance with the provision of using all known, available, and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:
Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will not violate applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. §1341, RCW 90.48.120, RCW 90.48.260, Chapter 173-200 WAC, and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC), or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters, or sediments occurring as a result of project construction or operations.

A. General Conditions:

1. For purposes of this Order, the term “Applicant” shall mean the City of Tacoma and its agents, assignees, and contractors.
2. All submittals required by this Order shall be sent to Ecology’s Southwest Regional Office, Attn: Federal Permit Manager, SEA Program, PO Box 47775, Olympia, WA 98504-7775, or via e-mail to fednotiﬁcation@cew.wa.gov with a copy to lori.kingsbury@cew.wa.gov. All submittals shall reference Order No. 16036 and Corps No. NWS-2011-859-WRD and include the Applicant name, project name, project contact, and contact phone number.

3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on July 10, 2017 unless otherwise authorized by Ecology.

4. The Applicant shall obtain Ecology review and approval before undertaking any changes to the proposed project that may affect water quality, other than those project changes required by this Order.

5. Within 30 days of receipt of an updated information, Ecology will determine if the revised project requires a new Water Quality Certification and public notice or if a modification to this Order is required.

6. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue a Section 404 permit.

7. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.

8. The Applicant shall provide access to the project site and mitigation site(s) upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.

9. Nothing in this Order waives Ecology’s authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identiﬁed (e.g., violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality.

10. In the event of changes or amendments to the state water quality, ground water quality, or sediment standards; the state Water Pollution Control Act (RCW 90.48); or the federal Clean Water Act, Ecology may issue an amendment to this Order to incorporate any such changes or amendments that are applicable to this project.

11. The Applicant shall ensure that all appropriate project engineers, contractors, and other workers at the project site with authority to direct work, have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in the Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents, and approvals. These statements shall be submitted to Ecology (per Condition A.2.) before construction begins.
12. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state or related aquatic resources, except as specifically provided for in the conditions of this Order.

13. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

B. Water Quality Conditions:

1. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in WAC 173-201A-600 (1) (a) (iv).
   a. Turbidity must not exceed 5 NTU over background when the background is 50 NTU or less; or a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
   b. pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.2 units.

2. During and immediately after project construction, the Applicant or their contractor shall monitor for turbidity discharges at the point of compliance as specified in WAC 173-201A-200(1)e(i). A turbidimeter is recommended, however, visual gauging with photo documentation of turbidity is acceptable.

3. The Applicant shall submit a Water Quality Monitoring and Protection Plan (WQMPP) to the Federal Permit Manager per condition A.2. of this Order for review and approval at least 60 days prior to work activities below the Ordinary High Water Mark (OHWM) of Leach Creek. Work is not authorized to begin until approval is received. At a minimum the WQMPP shall include the following information:
   a. The name(s) and contact information of the person responsible for on-site monitoring and reporting;
   b. The Best Management Practices (BMPs) and procedures to be used to protect water quality during specific work activities within the of Leach Creek;
   c. A water quality monitoring plan for turbidity which includes sample locations and frequency;
   d. The monitoring locations shall include, but are not limited to: a background, half the distance to the point of compliance, and at the point of compliance, unless otherwise approved by Ecology;
   e. A map with the numbers or named sampling locations; and,
   f. A contingency plan in the event of an exceedance.

4. Results of the water quality monitoring shall be documented in a report and submitted weekly to the Federal Permit Manager per condition A.2. (Refer to Attachment B for an example.) The Report must include the following monitoring information: Date, time,
monitoring location, turbidity observations, name of the personnel doing the monitoring, and the weather conditions at the time of the monitoring.

5. Ecology must approve, in writing any changes or additions to the WQMP.

6. If water quality exceedances are observed outside the point of compliance, work shall cease immediately and the Applicant or the contractor shall assess the cause of the water quality problem and take immediate action to stop, contain, correct the problem, and prevent further water quality turbidity exceedances. If an exceedance occurs, the Applicant shall follow the procedures below:

a. Notification of exceedances: Notification of exceedances shall be made to Ecology within 24 hours of occurrence. Notification shall be made with reference to Order No. 16036 Attn: Federal Permit Manager by telephone at (360) 407-6926 or by e-mail at Lori.kingsbury@ecy.wa.gov. The Applicant shall, at a minimum, provide Ecology with the following information:

   i. A description of the nature, extent, and cause of the exceedance.
   ii. The period of non-compliance, including exact dates, duration, and times and/or anticipated time when the project will return to compliance.
   iii. The steps taken, or to be taken to reduce, eliminate, and prevent a recurrence of the non-compliance.

   iv. In addition, within five (5) days after the notification of the exceedance, the Applicant shall submit a written report to Ecology (per conditions A.2.) that describes the nature of the exceedance(s), corrective action taken and/or planned, steps taken to prevent a recurrence, photographs, and any other pertinent information.

b. Mitigation and/or additional monitoring may be required as a result of the exceedance(s).

C. Timing:

1. This Order shall remain in effect for a period of five (5) years from the date of issuance unless otherwise modified by Ecology.

2. Work on the outfall at the dam outlet must occur between July 15 and September 30.

D. Notification Requirements:

1. The Applicant shall provide a copy of the final Corps Permit to Ecology's Southwest Regional Office Federal Permit Manager per condition A.2 of this Order, within two (2) weeks of receipt of the permit.

2. The Applicant shall provide written notification (FAX, e-mail, or mail) to Ecology's Southwest Regional Office Federal Permit Manager in accordance with condition A.2 above for the following activities:

   a. Immediately when the project is out of compliance with any conditions of this Order;
   b. At least ten (10) days prior to the onset of any work on site;
   c. Within fourteen (14) days after completion of project construction.
3. If project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit a written construction status report per Condition A.2. The Applicant shall submit status reports every 12 months thereafter until project construction is complete.

E. Construction, Equipment Staging and Maintenance:

1. The project shall obtain and comply with the conditions of the current Construction Stormwater General Permit (National Pollutant Discharge Elimination System – NPDES) issued for this project.

2. All work within the basin shall occur with the gated outlet closed to isolate the basin from Leach Creek.

3. Work shall occur in the dry to the extent practicable.

4. All work in and near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment, and erosion control best management practices (BMPs; e.g., filter fences, etc.) suitable to prevent exceedances of state water quality standards shall be in place prior to starting construction and inspected and maintained throughout project implementation.

5. No petroleum products, fresh concrete, lime or concrete, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state, including wetlands.

6. All construction debris shall be properly disposed of in a manner to prevent it from entering wetlands and/or wetland buffers.

7. All work within the project limits shall be clearly marked/staked prior to construction. Clearing limits, travel corridors, and stockpile sites shall be clearly marked. Sensitive areas and buffers that are to be protected from disturbance shall be marked so as to be clearly visible to equipment operators. All project staff shall be trained to recognize construction fencing or flagging that identifies sensitive area boundaries. Equipment shall enter and operate within the marked clearing limits corridors and stockpile areas.

8. Machinery and equipment used during construction shall be serviced, fueled, and maintained in a confined area on uplands a minimum of 50 feet, and where practical, 100 feet from waters of the state including wetlands. Fueling areas will be provided with adequate spill containment.

9. Appropriate BMPs shall be implemented to minimize track-out during construction.

10. Staging areas will be located a minimum of 50 feet and, where practical, 200 feet from waters of the state (including wetlands), unless authorized by Ecology.

11. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working area shall be contained for proper disposal, and shall not be discharged into state waters or storm drains.

12. The Applicant shall ensure that fill (soil) placed for the proposed project does not contain toxic materials in toxic amounts.
Culvert Work & Temporary Diversion Structures

13. All culvert work shall be conducted in the dry or in isolation from stream flow.

14. Temporary cofferdams to divert water around the work area shall be in place prior to initiation of work within the wetted perimeter and shall remain in place until in-water work is completed and disturbed areas are stabilized.

15. The temporary diversion shall be of sufficient size, constructed of non-erosive materials, and installed to divert the entire flow through the bypass or around the isolated work area for the duration of the work.

16. The diversion system shall be designed and operated so as not to cause erosion in the channel or on the banks of the waterbody in which the work is being conducted.

17. Culverts shall be installed to avoid inlet scouring and prevent downstream bank erosion.

18. Prior to returning water flow to the work area, all bank protection measures shall be in place.

19. Re-introduction of water into the isolated work area shall be done gradually, and at a rate not higher than the normal flow, in order to minimize the mobilization of sediments and fines.

20. Upon completion of the work activities, all material used for the temporary cofferdam and diversion shall be removed from the site.

F. Wetland Compensatory Mitigation Conditions:

1. The Applicant shall mitigate wetland impacts as described in the Leach Creek Stormwater Facility Wetland Mitigation Plan, (hereafter referred to as the “Mitigation Plan”) prepared by Grette Associates LLC, dated March 13, 2017, or as modified by this Order or as revised and approved by Ecology.

2. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology (per condition A.2 of this Order) for review and approval before work begins.

3. Unless otherwise approved by Ecology in writing, the Applicant shall begin the compensatory mitigation within 12 months of impacting wetlands or Ecology may require additional compensation to account for additional temporal loss of wetland functions.

4. If the project mitigation (including credit purchase) cannot be completed within 13 months of the date of this Order, the Applicant shall inform Ecology, in writing, of the status of:
   a. The Leach Creek Holding Basin Maintenance Project,
   b. When ILF credits will be purchased and onsite mitigation completed.

   With the:
   c. Reason for the delay.
d. Expected date of completion.

The Applicant shall submit an updated written notification every 12 months thereafter until the Leach Creek Holding Basin Maintenance Project is complete, the required ILF credits purchased, and the on-site mitigation completed.

5. If the Applicant has not met all conditions, including performance standards for the mitigation site at the end of the monitoring period, Ecology may require additional monitoring, additional mitigation, or both.

6. Until the Applicant has received written notice from Ecology that the Mitigation Plan has been fully implemented, the Applicant’s obligation under Condition F.1 to mitigate for wetland impacts is not met.

**In-Lieu-Fee (ILF) Conditions**

7. Prior to impacting wetlands, the Applicant shall obtain a Statement of Sale from the Sponsor as documentation of purchase of 0.27 credits for this impact project. The Applicant shall submit a copy of the Statement of Sale to Ecology (per Condition A.2 of this Order) prior to impacting wetlands at the project site. Documentation from the Sponsor shall include:
   a. Ecology’s Order number;
   b. Order issuance date;
   c. Description of mitigation credits purchased; and,
   d. Signatures from the Sponsor and the Applicant.

8. The Applicant shall notify and submit in writing to Ecology (see A.2) any proposed changes to the amount of wetland impacts, revisions to the mitigation plan, and/or submittal of new information for review and approval before work begins.

9. The Applicant shall complete the purchase of credits before the impacts to wetlands occur, or Ecology may require additional compensation to account for temporal loss of wetland functions.

**Restoration of the Wetland Conversion Area**

10. The approximately 1.02 acres of temporarily disturbed forested wetland area shall be restored and converted to emergent wetland.

11. The Applicant shall have a wetland professional at the wetland conversion area site to supervise the restoration and planting.

12. The Applicant shall ensure that all excess excavated site material is disposed of in an appropriate location outside of wetlands and their buffers at the site and above the 100-year floodplain.

13. The Applicant shall ensure that no material is stockpiled within existing wetlands and their buffers at any time, unless provided for in the Ecology-approved Mitigation Plan.
14. The Applicant shall ensure that no construction debris is deposited within existing wetland and their buffers at the wetland mitigation site(s) at any time, unless provided for in the Ecology approved Mitigation Plan.

15. The Applicant shall not use polyacrylamide at the mitigation site(s).

16. The Applicant shall not use hay or straw on exposed or disturbed soil at the mitigation site(s).

17. Aquatic herbicides can be used or applied only by certified applicators or persons under the direct supervision of a certified applicator, and only for those uses covered by the certified applicator’s license category. Applicants are required to be permitted under Ecology’s Noxious Weed Control Permit. Applicators shall comply with all conditions of the Noxious Weed Control Permit.

18. If weed-barrier fabric is used on the site, the Applicant shall use only permeable, fully biodegradable, non-toxic weed-barrier fabric for entire-site and/or individual plant weed control. Non-biodegradable plastic weed-barrier fabric shall be used only at the base of individual plants and shall be removed before it starts to break down, before it interferes with plant growth, or before the end of the monitoring period, whichever comes first.

19. If seeding is used as a best management practice for temporary erosion control, it must be a seed mix consisting of native, annual, non-invasive plant species.

20. The Applicant shall not use solid or mesh plant protector tubes at the mitigation site(s) unless otherwise approved by Ecology.

21. Upon completion of site-grading and prior to planting, the Applicant shall submit to Ecology written confirmation, from a surveyor or project engineer, that the finished grades are consistent with the approved Mitigation Plan or subsequent Ecology-approved plan changes. The confirmation should indicate how final elevations were confirmed. The written confirmation can be in the form of an email or signed letter.

22. After completing the restoration and planting of the wetland conversion area, the Applicant shall submit to Ecology (per condition A.2 of this Order) an as-built report, including plan sheets, documenting site conditions at Year Zero. The as-built report must:
   a. Be submitted within 90 days of completing construction and planting. Include one hard copy and one electronic file.
   b. Include the information listed in Attachment B (Information Required for As-built Reports).
   c. Include documentation of the recorded legal mechanism required in Condition F. 19 below.

Monitoring and Maintenance

23. The Applicant shall water and maintain all conversion area site plantings so as to meet the Mitigation Plan’s performance standards. If an irrigation system is installed, it shall
be removed by the end of year three unless permission is received in writing from Ecology to allow the system to remain for a longer period.

24. The Applicant shall monitor the wetland conversion area for a minimum of 5 years. The Applicant shall use the monitoring methods described on page(s) 11 through 14 of the Mitigation Plan.

25. The Applicant shall submit to Ecology (per condition A.2 of this Order) monitoring reports documenting the wetland conversion area site conditions for years 1, 2, 3, and 5. The monitoring reports must:
   a. Be submitted by December 31 of each monitoring year. Include one hard copy and one electronic file.
   b. Include the information listed in Attachment C (Information Required for Monitoring Reports).

Preservation Area

26. The Applicant shall send a draft restrictive covenant to Ecology for review and approval. Within 90 days after Ecology approval, the approved restrictive covenant must be recorded with the County Recording Office, Registrar of Deeds, or other official responsible for maintaining records for, or interest in, real property and a copy of the recorded notice sent to Ecology per Condition A.2 of this Order. The restrictive covenant shall be recorded with a figure that corresponds with the legal description showing the area that is being protected, a copy of this Order, and the site map from the final wetland mitigation plan or as-built report showing the location of wetlands and their buffers.

G. Emergency/Contingency Measures:

1. The Applicant shall develop and implement a Spill Prevention and Containment Plan for all aspects of this project.

2. The Applicant shall have adequate and appropriate spill response materials on hand to respond to emergency release of petroleum products or any other material into waters of the state.

3. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc. shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into waters of the state.

4. Work activities or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters, including wetlands, or onto land with a potential for entry into state waters, is prohibited. If such work, conditions, or discharges occur, the Applicant shall notify the Ecology Federal Permit Manager per condition A.2 of this Order and immediately take the following actions:
   a. Cease operations at the location of the non-compliance.
   b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
c. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials.

d. Immediately notify Ecology’s Regional Spill Response Office and the Washington State Department of Fish & Wildlife with the nature and details of the problem, any actions taken to correct the problem, and any proposed changes in operation to prevent further problems.

e. Immediately notify the National Response Center at 1-800-424-8802, for actual spills to water only.

5. Notify Ecology’s Regional Spill Response Office immediately if chemical containers (e.g. drums) are discovered on-site or any conditions present indicating disposal or burial of chemicals on-site that may impact surface water or ground water.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. “Date of receipt” is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

<table>
<thead>
<tr>
<th>Street Addresses</th>
<th>Mailing Addresses</th>
</tr>
</thead>
</table>
| **Department of Ecology**  
Attn: Appeals Processing Desk  
300 Desmond Drive SE  
Lacey, WA 98503 | **Department of Ecology**  
Attn: Appeals Processing Desk  
PO Box 47608  
Olympia, WA 98504-7608 |
| **Pollution Control Hearings Board**  
1111 Israel Rd SW,  
STE 301  
Tumwater, WA 98501 | **Pollution Control Hearings Board**  
PO Box 40903  
Olympia, WA 98504-0903 |
CONTACT INFORMATION

Please direct all questions about this Order to:

Lori Kingsbury
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775
loch461@ecy.wa.gov

MORE INFORMATION

- Pollution Control Hearings Board Website
  www.eho.wa.gov/Boards_PCHB.aspx
- Chapter 43.21B RCW - Environmental and Land Use Hearings Office – Pollution Control Hearings Board
  http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B
- Chapter 371-08 WAC – Practice And Procedure
- Chapter 34.05 RCW – Administrative Procedure Act
  http://apps.leg.wa.gov/RCW/default.aspx?cite=34.05
- Chapter 90.48 RCW – Water Pollution Control
  http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48
- Chapter 173.204 Washington Administrative Code (WAC) Sediment Management Standards
- Chapter 173-200 WAC Water Quality Standards for Ground Waters of the State of Washington
- Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington

SIGNATURE

Perry J Lund, Section Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office
Department of Ecology

Date
Attachment A
Statement of Understanding
Water Quality Certification Conditions

Leach Creek Holding Basin Maintenance Project
City of Tacoma
Water Quality Certification Order No. 16036
And
Corps Reference No. NWS-2011-859-WRD

I, __________________________, state that I will be involved as an agent or contractor for The City of Tacoma with the Leach Creek Holding Basin Maintenance Project located west of Orchard Street near South 34th Street, Tacoma, Pierce County, Washington. I further state that I have read and understand the relevant conditions of the Washington Department of Ecology Water Quality Certification Order No. 16036 and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

_____________________________    ________________________
Signature                      Date

_____________________________
Title

_____________________________
Company

_____________________________
Phone
Attachment B
Information Required for As-built Reports
Leach Creek Holding Basin Maintenance Project
Water Quality Certification Order No. 16036
And
Corps Reference No. NWS-2011-859-WRD

Ecology requires the following information for as-built reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

**Background Information**
1) Project name.
2) Ecology Order number and the Corps reference number.
3) Name and contact information of the person preparing the as-built report. Also, if different from the person preparing the report, include the names of:
   a) The applicant
   b) The landowner
   c) Wetland professional on site during construction of the mitigation site(s).
4) Date the report was produced.

**Mitigation Project Information**
5) Brief description of the *final* mitigation project with any changes from the approved plan made during construction. Include:
   a) *Actual* acreage of Cowardin classes and mitigation type(s) (re-establishment, rehabilitation, creation, enhancement, preservation, upland, buffers).
   b) Important dates, including:
      i. Start of project construction.
      ii. When work on the mitigation site began and ended.
      iii. When different activities such as grading, removal of invasive plants, installing plants, and installing habitat features began and ended.
6) Description of any problems encountered and solutions implemented (with reasons for changes) during construction of the mitigation site(s).
7) List of any follow-up actions needed, with a schedule.
8) Vicinity map showing the geographic location of the site(s) with landmarks.
9) Mitigation site map(s), 8-1/2” x 11” or larger, showing the following:
   a) Boundary of the site(s).
   b) Topography (with a description of how elevations were determined).
   c) Installed planting scheme (quantities, densities, sizes, and approximate locations of plants, as well as the source(s) of plant material).
   d) Location of habitat features.
   e) Location of permanent photo stations and any other photos taken.
   Include the month and year when each map was produced or revised. The site map(s) should reflect on-the-ground conditions after the site work is completed.
10) Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction from which each photo was taken. Photo pans are recommended.
11) A copy of any deed notifications, conservation easements, or other approved site protection mechanism.
Attachment C

Information Required for Monitoring Reports
Leach Creek Holding Basin Maintenance Project
Ecology Order No. 16036

And

Corps Reference No. NWS-2011-859-WRD

Ecology requires the following information for monitoring reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

Background Information
1) Project name.
2) Ecology Order number and the Corps reference number.
3) Name and contact information of the person preparing the monitoring report. Also, if different from the person preparing the report, include the names of:
   a) The applicant
   b) The landowner
   c) The party responsible for the monitoring activities.
4) Dates the monitoring data were collected.
5) Date the report was produced.

Mitigation Project Information
6) Brief description of the mitigation project, including acreage of Cowardin classes and mitigation type(s) (re-establishment, rehabilitation, creation, enhancement, preservation, upland, buffers).
7) Description of the monitoring approach and methods. For each performance standard being measured provide the following information:
   a) Description of the sampling technique (e.g., monitoring point for soil or hydrology, line or point intercept method, ocular estimates in individually placed plots). If you are using a standardized technique, provide a reference for that method.
   b) Size and shape of plots or transects.
   c) Number of sampling locations and how you determined the number of sampling locations to use.
   d) Percent of the mitigation area being sampled.
   e) Locations of sampling (provide a map showing the locations), how you determined where to place the sampling locations (e.g., simple random sample), and whether they are permanent or temporary.
   f) Schedule for sampling (how often and when).
   g) Description of how the data was evaluated and analyzed.
8) Summary table(s) comparing performance standards with monitoring results and whether each standard has been met.
9) Discussion of how the monitoring data were used to determine whether the site(s) is meeting performance standards.
10) Goals and objectives and a discussion of whether the project is progressing toward achieving them.
11) Summary, including dates, of management actions implemented at the site(s), for example, maintenance and corrective actions.
12) Summary of any difficulties or significant events that occurred on the site that may affect the success of the project.
13) Specific recommendations for additional maintenance or corrective actions with a timetable.
14) Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction the camera is facing. Photo pans are recommended.
15) Vicinity map showing the geographic location of the site(s) with landmarks.
16) Mitigation site map(s), 8-1/2” x 11” or larger, showing the following:
   a) Boundary of the site(s).
   b) Location of permanent photo stations and any other photos taken.
   c) Data sampling locations, such as points, plots, or transects.
   d) Approximate locations of any replanted vegetation.
   e) Changes to site conditions since the last report, such as areas of regrading, a shift in the location of Cowardin classes or habitat features, or a change in water regime.
Include the month and year when each map was produced or revised. The site map(s) should reflect on-the-ground conditions during the most recent monitoring year.
CERTIFICATE OF COMPLIANCE
WITH DEPARTMENT OF THE ARMY PERMIT

Permit Number: NWS-2011-859-WRD
Name of Permittee: Tacoma Public Works
Date of Issuance: August 5, 2020

Upon completion of the activity authorized by this permit, please check the applicable boxes below, date and sign this certification, and return it to the following address:

Department of the Army
U.S. Army Corps of Engineers
Seattle District, Regulatory Branch
Post Office Box 3755
Seattle, Washington 98124-3755

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of your authorization, your permit may be subject to suspension, modification, or revocation.

<table>
<thead>
<tr>
<th align="center">The work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of this permit.</th>
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<tr>
<td align="center">Date work complete: __________________________</td>
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<tr>
<td align="center">□ Photographs and as-built drawings of the authorized work (OPTIONAL, unless required as a Special Condition of the permit).</td>
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</table>

<table>
<thead>
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<th align="center">If applicable, the mitigation required (e.g., construction and plantings) in the above-referenced permit has been completed in accordance with the terms and conditions of this permit (not including future monitoring).</th>
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<td align="center">□</td>
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<tr>
<td align="center">□ Photographs and as-built drawings of the mitigation (OPTIONAL, unless required as a Special Condition of the permit).</td>
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</tbody>
</table>

<table>
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<tr>
<td align="center">Printed Name: __________________________________________</td>
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Printed Name: __________________________________________
Signature: __________________________________________
Date: __________
APPENDIX D

DRAFT WATER QUALITY MONITORING PLAN
Water Quality Monitoring Plan

Prepared for Brown and Caldwell
March 2023
Leach Creek Stormwater Holding Basin Modifications Project

Water Quality Monitoring Plan

Prepared for
Brown and Caldwell

Prepared by
Anchor QEA, LLC
1119 Pacific Avenue
Tacoma, Washington 98402
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**FIGURES**

Figure 1 Site Vicinity Map
Figure 2 General Site Map
Figure 3 Bypass and Monitoring Plan

**APPENDIX**

Appendix A Water Quality Monitoring Form
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>BMP</td>
<td>best management practice</td>
</tr>
<tr>
<td>City</td>
<td>City of Tacoma</td>
</tr>
<tr>
<td>Ecology</td>
<td>Washington State Department of Ecology</td>
</tr>
<tr>
<td>NTU</td>
<td>nephelometric turbidity unit</td>
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<tr>
<td>Project</td>
<td>Leach Creek Holding Basin Maintenance Project</td>
</tr>
<tr>
<td>QA/QC</td>
<td>quality assurance/quality control</td>
</tr>
<tr>
<td>WAC</td>
<td>Washington Administrative Code</td>
</tr>
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<td>WQC</td>
<td>Water Quality Certification</td>
</tr>
<tr>
<td>WQMP</td>
<td>Water Quality Monitoring Plan</td>
</tr>
</tbody>
</table>
1 Introduction

The City of Tacoma (City) is proposing the Leach Creek Holding Stormwater Holding Basin Modifications Project (Project) to reduce the flow discharged to Leach Creek at early stages during storm events to provide more storage volume in the holding basin and improve hydraulic connections to the pump station forebay (Figure 2). The purpose of the Project is to expand the pump station’s earthen forebay by constructing a channel to hydraulically connect the forebay and the holding basin’s 42-inch diameter outlet structure and lower the levels at which the pumps are called on by 2 feet.

The Project includes removal and replacement of an existing 60-inch diameter concrete overflow riser structure, installation of a 42-inch diameter inline, installation of a bar screen, and removal and replacement of existing grating. An access ramp will be constructed along the eastern Project boundary to provide a means for channel maintenance. Grading will occur within the new channel, which will require bypassing existing flows and dewatering of the excavation area. The bypass will involve rerouting of the stormwater inflow from pipes located in the southeast portion of the stormwater holding basin. Dewatering will be accomplished via dewatering wells. The outlet structure at the dam will be plugged during this work, so both the bypass and dewatering flows will be discharged into the Leach Creek channel just downstream of the outlet structure (Figure 3).

This document presents the Water Quality Monitoring Plan (WQMP) for the Project, in compliance with Washington State Department of Ecology (Ecology) 401 Water Quality Certification (WQC) No. 16036 for U.S. Army Corps of Engineers Public Notice No. NWS-2011-859-WRD (Ecology 2018; USACE 2020) and to support compliance with the requirements of Washington State’s Water Quality Standards for Surface Water (Washington Administrative Code [WAC] 173-201A). The water quality monitoring program described herein is designed to provide regular water quality monitoring throughout the duration of construction, including visual methods as well as in situ water quality testing. This document includes the following information:

- Water quality monitoring program contents (Section 2)
- Contingency measures and best management practices (Section 3)
- Reporting (Section 4)
2 Water Quality Monitoring Program

This section describes the proposed water quality monitoring program, including field methods for conducting water quality monitoring during discharge of both bypass pumping water and water generated from construction dewatering. The WQMP will be implemented in compliance with the water quality standards in WAC 173-201A, as described in the following sections.

A health and safety plan will be adhered to during monitoring activities. If unsafe conditions are encountered that would put the field team, the contractor, and/or the public at risk, water quality monitoring activities will be temporarily discontinued until the unsafe conditions subside or are adequately mitigated. Any deviations to the WQMP due to health and safety concerns will be documented during reporting procedures (see Section 4).

Any changes to this program will be submitted for review and approval by Ecology prior to implementation.

2.1 Water Quality Standards

The Leach Creek Stormwater Holding Basin is located in the South Tacoma Groundwater Protection District and serves as a stormwater detention facility for approximately 2,500 acres of residential and commercial development within the cities of Tacoma and Fircrest, Washington. In accordance with the Ecology 401 WQC No. 16036, turbidity shall not exceed 5 nephelometric turbidity units (NTU) more than background turbidity at the point of compliance when the background turbidity is 50 NTU or less. When the background turbidity is more than 50 NTU, turbidity shall not exceed 10% more than background at the point of compliance. pH must be within the range of 6.0 to 8.5, with an allowed human-caused variation within the noted range of less than 0.2 unit. Based on existing, publicly available water quality data, background turbidity is expected to be less than 50 NTU.

2.2 Monitoring Locations and Depths

2.2.1 Background Monitoring Locations

The site is located at the headwaters to Leach Creek, a tributary that flows south of Tacoma into Chambers Creek and eventually into Chambers Bay (Figure 1). Two background stations will be included to monitor baseline inflow conditions at the existing channel (Figures 2 and 3). To the north-northwest of the site, Background Station A will be located approximately 120 feet north of the existing outlet structure along the access roadway south of the existing channel and approximately 50 feet west of the proposed channel. To the east of the site, Background Station B

---

will be located approximately 50 feet east-southeast of the existing inlet structure. Measurements collected at these stations will be used as background data for comparison to discharge data to determine whether an exceedance has occurred.

### 2.2.2 Downstream Monitoring Locations

Three downstream monitoring locations will be monitored: the point of discharge, the pre-compliance station, and the compliance station. These locations are described as follows:

1. **Point of discharge.** The discharge point is anticipated to be located immediately downstream of the outlet structure on the southwest side of the site. Measurements at the discharge point will serve as an indicator of water quality for the individual bypass discharge and dewatering discharge prior to any induced downstream turbidity increases associated with discharge methods. Elevated measurements may indicate the potential for a subsequent exceedance at the compliance station, regardless of discharge methods, and this would allow modification of either the bypass operation or dewatering operation to be focused “up-system” of the point of discharge.

2. **Pre-compliance station.** The pre-compliance station will be located at half of the distance to the compliance station, as required in the WQC.

3. **Compliance station.** In accordance with WAC 173-201A-200(1)e(ii), the compliance station will be located 100 feet downstream of the outlet structure when flows are less than 10 cubic feet per second, unless safety concerns require additional offset from the work. If flows are elevated more than 10 cubic feet per second at any time, the compliance location will be moved to 150 feet downstream of the outlet structure per WAC 173-201A-200(1)e(ii). Measurements at the compliance station will be used to determine if water quality conditions meet water quality standards for the Project.

### 2.2.3 Monitoring Depth

Water depth will be determined using a lead line or tape measure at the pre-compliance and compliance stations and will be recorded on the Water Quality Monitoring Form (Appendix A). Water depth will not be recorded at the point of discharge, as samples will be collected directly from both the bypass and dewatering points of discharge. At the background station, pre-compliance station, and compliance station, water quality parameters (turbidity and pH) will be measured at the midpoint of the water column. Sample measurements from each downstream monitoring station will be compared to measurements at corresponding depths at the background stations.

### 2.3 Field Monitoring Frequency and Schedule

During and immediately after project construction, Anchor QEA will monitor discharges for turbidity at the point of compliance as specified in WAC 173-201A-200(1)(e)(i). Construction activities are
anticipated to take up to 90 calendar days to complete and will be performed during the summer months. Any changes to the monitoring plan, based on contractor schedule, field conditions, or progress, will be submitted to Ecology for review and approval.

2.3.1 Monitoring Frequency
Two frequencies of in situ water quality monitoring are anticipated: intensive and routine monitoring.

**Intensive monitoring** will include collection of turbidity and pH measurements every 4 hours, with at least two measurements per day for the first 3 days. Intensive monitoring will begin at the onset of discharge of either bypass or dewatering flows. If no exceedances in turbidity (considering background station measurements) are noted during the first 3 days of construction activities, or if the contractor is successfully able to modify operations and/or implement additional best management practices (BMPs) to mitigate the elevated turbidity conditions, then water quality monitoring activities will switch to routine monitoring.

A change in activities (e.g., change in equipment) will restart the intensive monitoring cycle.

**Routine monitoring** will occur every other day that the potentially turbidity-generating activity occurs through completion of the Project. Routine monitoring activities will include one daily water quality measurement, at minimum.

2.3.2 Daily Monitoring Routine
For intensive monitoring, the first round of monitoring will be conducted within 1 hour after the start of bypass or dewatering discharge, with an additional round conducted every 4 hours. For routine monitoring, sampling is expected to occur mid-day.

For each round of water quality monitoring, background stations will be measured prior to measurement at the point of discharge and at compliance stations. Additional samples at background stations may be collected if field conditions change (e.g., extreme weather shifts) or if lateral inputs are suspected to be causing increased turbidity. Monitoring data collected in the field will be recorded on the Water Quality Monitoring Form (Appendix A).

2.3.3 Monitoring Comparisons
Measurements from each of the background stations will be recorded individually. However, each background station represents a different source of water that will be combined into the bypass system. Therefore, the results of both background stations will be averaged for comparison to downstream monitoring locations.
2.3.4 Visual Monitoring

Visual monitoring (e.g., identification of visible turbidity plume) will be performed by the water quality monitor during intensive and routine monitoring at each monitoring station and while moving between stations throughout the workday. The City and contractor will also periodically visually monitor for turbidity at the monitoring stations throughout discharge.

During visual monitoring, if a visual monitor identifies potential turbidity elevated above the criterion at the compliance stations as a result of construction or discharge activities, then contingency measures will be implemented to reduce turbidity to the extent practicable, as described in Section 3.

Any turbidity events resulting from construction activities that lead to a confirmed turbidity exceedance will be recorded in the Water Quality Monitoring Form (Appendix A). Visual monitoring must also be accompanied by photographic documentation of turbidity or lack thereof.

2.4 Field Monitoring Methods and Equipment

This section includes information regarding monitoring location determination, water quality monitoring methods, and quality assurance/quality control (QA/QC).

2.4.1 Monitoring Location Determinations and Documentation

The locations of the respective monitoring locations will be measured prior to the start of the water quality monitoring program and will be demarcated clearly by stakes, flags, or similar identification markers. The distance downstream and the monitoring station name will be recorded on the Water Quality Monitoring Form (Appendix A). In each round of monitoring, the background station will be monitored first, followed by the discharge point, the pre-compliance station, and then the compliance station.

2.4.2 Turbidity Measurements

Monitoring will be performed using a calibrated multi-probe meter (e.g., Hydrolab, YSI probe, or similar meter) and/or a Hach turbidity meter. The depth at each station will be measured, and turbidity measurements will be collected at the midpoint of the water column of each of the monitoring stations, as detailed in Section 2.2.3.

2.4.3 Quality Assurance/Quality Control

All field staff will be experienced with water quality monitoring. Staff will be trained in standardized field monitoring and data collection procedures, requirements, data management protocol, and QA/QC.
The quality assurance objective for this project is to ensure that the data collected are of known and acceptable quality so that the goals of the water quality monitoring program can be achieved. Appropriate field quality control procedures will be followed. These procedures include performing routine field instrument calibration and following standard instrument operation procedures.

Any field equipment that is faulty or not functioning properly will not be used for monitoring or sample collection. Each day and prior to use, a calibration check will be performed on the water quality meter, using certified calibration standards. If water quality meter results are not consistent with standards, the manufacturer’s guidelines will be used to recalibrate the instrument. Standard instrument operating procedures will be used for all field instruments.
3 Contingency Measures and Best Management Practices

This section describes response actions to an elevated measurement at the pre-compliance and compliance stations for maintenance dredging. BMPs are also outlined in this section.

3.1 Discharge Contingency Measures

During discharge activities, if an initial turbidity reading is measured above the criterion at the compliance station, the following sequence of responses will be initiated:

1. Field measurements will be retaken approximately 15 minutes after the initial measurements at the compliance station and compared against rechecked background measurements.

2. If the exceedance at the compliance station is confirmed, Anchor QEA, LLC, will immediately notify the City and the contractor, and discharge shall cease immediately. The contractor shall assess the cause of the water quality problem and take immediate action to stop, contain, correct the problem, and prevent further water quality turbidity exceedances. Work will resume only with modified operations and/or implementation of additional BMPs to mitigate the elevated turbidity condition. If the elevated turbidity condition is determined to be the result of one but not both discharges (either the bypass discharge or the dewatering discharge), the discharge not responsible for the elevated turbidity condition may resume. The discharge responsible for the elevated turbidity condition may resume once the contractor has corrected the problem. In the event that discharge activities result in a confirmed elevated turbidity condition at the compliance station, the extent of the turbidity plume must be determined to define the full extent of the exceedance area.

3. Following any work stoppage, Anchor QEA will retake field measurements at the compliance station and compare them against background measurements hourly after the contractor has implemented the additional BMPs and/or operational modifications until it has been determined that the new BMPs are sufficient to reduce turbidity to compliant levels.

4. A confirmed exceedance at the confirmation station will result in resumption of intensive monitoring, as described in Section 2.3.1, for 3 days.

5. Ecology will be notified within 24 hours of any confirmed turbidity exceedance at the compliance station. Notification shall be made with reference to Order No. 16036 Attn: Federal Permit Manager by telephone at (360) 407-6926 or by e-mail at Lori.kingsbury@ecy.wa.gov. At a minimum, the following information will be provided to Ecology:
   a. A description of the nature, extent, and cause of the exceedance
   b. The period of non-compliance, including exact dates, duration, and times and/or anticipated time when the project will return to compliance
   c. The steps taken or to be taken to reduce, eliminate, and prevent a recurrence of the non-compliance
d. In addition, within 5 days after the notification of the exceedance, a written report shall be submitted to Ecology (per condition A.2.) that describes the nature of the exceedance(s), corrective action taken and/or planned, steps taken to prevent a recurrence, photographs, and any other pertinent information.

3.2 Best Management Practices

BMPs have been incorporated into the Project design to avoid or minimize environmental effects and the exposure of sensitive species to potential effects from construction activities. The following BMPs will be implemented to avoid or minimize environmental impacts during the Project:

- Work on the new channel may occur at any time provided stormwater is not flowing into the work site. Work on the outfall at the dam outlet will occur between July 15 and September 30.
- Turbidity and pH will be monitored to ensure that construction activities are in compliance with Washington State Surface Water Quality Standards, per WAC 173-201A.
- Appropriate BMPs will be employed to minimize sediment loss and turbidity generation during construction activities.
- Work will stop if a confirmed turbidity exceedance at the point of compliance occurs and will not resume until turbidity has returned to background.
- The contractor will inspect equipment, including fuel hoses, oil or fuel transfer valves, and fittings, on a regular basis for drips or leaks to prevent spills into the surface water.
- The contractor will ensure that no material is stockpiled within existing wetlands and their buffers at any time, unless provided for in the Ecology-approved Mitigation Plan (Grette Associates 2019). The contractor will ensure that no construction debris is deposited within existing wetland and their buffers at the wetland mitigation site(s) at any time, unless provided for in the Ecology-approved Mitigation Plan (Grette Associates 2019).
- The contractor will prepare a Spill Prevention, Control, and Countermeasure Plan to be used for the duration of the Project to safeguard against an unintentional release of fuel, lubricants, or hydraulic fluid from construction equipment.
- If weed-barrier fabric is used on the site, the contractor shall use only permeable, fully biodegradable, non-toxic weed-barrier fabric for the entire site and/or individual plant weed control. Non-biodegradable plastic weed-barrier fabric shall be used only at the base of individual plants and shall be removed before it starts to break down, before it interferes with plant growth, or before the end of the monitoring period, whichever comes first.
4 Reporting

Anchor QEA will provide the City with written notification to provide to Ecology’s Southwest Regional Office Federal Permit Manager at the following milestones and/or activities:

1. At least 10 days prior to the onset of any work on site
2. Immediately, if at any time the Project is out of compliance with any permitted conditions of the Section 401 Certification
3. Within 14 days after completion of project construction

At the end of each monitoring day, a brief summary of water quality monitoring activities, field data sheets, and results of the monitoring will be prepared by Anchor QEA. Water quality monitoring results will be submitted to Ecology weekly by the City.

In the event that a water quality turbidity exceedance is confirmed or a visual turbidity plume associated with discharge activities is observed at the point of compliance, the City will report the exceedance to the Ecology representative listed in the water quality certification, within 24 hours of the exceedance.

In the event of a discharge of oil, fuel, or chemicals into surface waters of the state as defined in WAC 173-201A-020, or onto land with a potential for entry into surface waters of the state, containment and cleanup efforts will begin immediately per the Spill Prevention, Control, and Countermeasure Plan. The contractor will immediately report the event to the City, who will contact the Ecology representative listed in the water quality certification and Ecology’s Southwest Regional Office at (360) 407-6300. If the spill occurs outside of normal business hours, it will be reported to the Washington Emergency Management Division 24-hour office at 1-800-OILS-911.
5 References


Figures
SOURCE: Aerial provided by Bing.
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: MLLW
HORIZONTAL DATUM: Washington State Plane North Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: NGVD29

LEGEND:

- 210 — Finish Grade Contours
- 214 — Existing Contours

Figure 2
General Site Map
Leach Creek Holding Basin
NOTE:
When discharge flows are less than 10 cfs, the distance from the Discharge Point to the Compliance Station shall be 100 feet. When discharge flows exceed 10 cfs, the distance shall be 150 feet. In all cases, the Pre-Compliance Station shall be 1/2 the distance from the Discharge Point to the Compliance Station.
Date: 

Time Start: 

Monitoring Personnel: 

Monitoring Period (circle one): Intensive Routine Weather Observations: 

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<tr>
<th>Station ID</th>
<th>Time</th>
<th>Water Depth (ft)</th>
<th>Coordinates</th>
<th>Turbidity (NTU)</th>
<th>pH</th>
<th>Exceed</th>
<th>Water Sample</th>
<th>Sample Name</th>
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Notes:

Water Quality Standard: Turbidity shall be < 5.0 NTU above BG when BG < 50 NTU, and less than 10% over BG when BG is > 50 NTU.

BGA = Background Station A; BGB = Background Station B; DP = Discharge Point; PS = Pre-Compliance Station (50 feet downstream of DP if flow < 10 cfs; 75 feet if flow > 10 cfs); CS = Compliance Station (100 feet downstream of DP if flow < 10 cfs; 150 feet if flow > 10 cfs).
APPENDIX E

INADVERTENT DISCOVERY PLAN
Inadvertent Discovery Plan
Leach Creek Stormwater Holding Basin Modifications Project

March 2023

Introduction
The City of Tacoma (City) plans to construct the Leach Creek Stormwater Holding Basin Modifications Project (the Project). The existing 42-acre Leach Creek Holding Basin serves as a regional stormwater detention facility to regulate discharges to Leach Creek. The facility receives stormwater through five major outfalls and has approximately 80 acre-feet of active storage capacity.

The Project requires a permit from the U.S. Army Corps of Engineers (USACE) and must comply with Section 106 of the National Historic Preservation Act, its implementing regulations at 36 Code of Federal Regulations (CFR) 800, and USACE’s Section 106 regulations at 33 CFR 325. USACE has determined that no historic properties will be affected by the Project. However, ground disturbance will occur, and there is some remaining potential that archaeological materials may be encountered. This plan describes procedures that must be followed if archaeological resources or human remains are encountered during construction, in compliance with applicable local, state, and federal laws.

Project Description
The Project is located west of South Orchard Street near South 34th Street in the City of Tacoma, Pierce County, Washington (Section 14 of Township 20 North, Range 2 East). The Project consists of expansion of an existing pump station forebay with the creation of a stormwater channel to connect the forebay to the outlet and spillway structures, construction of an access ramp, relocation of the stormwater discharge flowpath away from the toe of the dam, gravel removal from the existing spillway, replacement of the outlet structure, restoration of the impact areas, and ongoing maintenance activities.

Discovery of Archaeological Resources
On-site staff must implement the following steps in the event of a discovery of archaeological resources.

1. Recognize Archaeological Resources. An archaeological resource could be prehistoric or historic. Examples include:
   - An accumulation of shell, burned rocks, or other food-related materials
   - Bones or small pieces of bone
   - An area of charcoal or very dark stained soil with artifacts
   - Stone tools or waste flakes (i.e., an arrowhead, or stone chips)
   - Basketry, cordage, or rope
• Clusters of tin cans or bottles, buried railroad tracks, decking, or logging or agricultural equipment or tools

When in doubt, assume the material is an archaeological resource. Examples of archaeological resources are shown in Figure 1.

2. Stop Work. If any City employee, contractor, or subcontractor believes that they have uncovered an archaeological resource at any point in the project, all work adjacent to the find must stop in an area adequate to protect the find (expected to be a 30-foot radius unless conditions indicate otherwise). The location of the find shall not be left unsecured at any time.

3. Notify Project Management. Contact the City Project Manager. If the Project Manager is not available, the monitor shall contact the alternate City contact. The Project Manager, alternate, or designee will make all other contacts. Do not call 911 or speak with the media.

The Project Manager, alternate, or designee will implement the following steps when notified of a discovery.

1. Contact the Project Archaeologist. The Project Manager will retain a qualified archaeologist to evaluate whether the find is an archaeological site or resource as defined by state or federal law. If the Project Archaeologist recommends that the find is not an archaeological site or resource, the recommendation will be provided to USACE and the City. Construction may continue when authorized by USACE.

2. Notify Consulting Parties. If the Project Archaeologist determines that the find is an archaeological site or resource, the Project Archaeologist will notify USACE and the City. USACE shall notify consulting parties (State Historic Preservation Officer [SHPO], Tribes, and any other identified interested parties) of the find within 48 hours, per 36 CFR 800.13.

3. Evaluate Significance. The Project Archaeologist will conduct any additional research necessary to evaluate significance under state or federal law. Based on this research, the Project Archaeologist will recommend to USACE and the City whether the find is significant.

4. Determine Significance and Continue Consultation. USACE will determine whether the find is significant and will provide the determination to consulting parties. Consulting parties have 48 hours to respond, per 36 CFR 800.13.

    If USACE determines that the find is not significant and consulting parties do not object within 48 hours, construction may continue when authorized by USACE. If any consulting party objects, USACE shall continue consultation in good faith to resolve the lack of agreement. If
agreement cannot be reached, USACE shall seek comment from the Advisory Council on Historic Preservation, as described in 36 CFR 800.4(c)(2).

5. **Avoid or Mitigate Adverse Effects.** If USACE determines that the find is significant, USACE will work with the City to determine whether adverse effects can be avoided. If adverse effects can be avoided, USACE will provide documentation of avoidance and a determination of No Adverse Effect. If consulting parties do not object within 48 hours, construction may continue when authorized by USACE. If any consulting party objects, USACE will continue consultation until a reasonable and good faith effort has been made to resolve the lack of agreement.

If a determination is made that adverse effects cannot be avoided, USACE will work with the City and consulting parties to develop mitigation measures. These could include an Archaeological Treatment Plan describing data recovery efforts or other mitigation measures.

**Discovery of Human Remains**

Human remains require special treatment under Revised Code of Washington (RCW) 68.50.645. Any potential remains that are encountered during project work should be assumed to be human until determined otherwise by the Project Archaeologist or law enforcement personnel. Procedures for the discovery of possible human remains are described below.

On-site staff must implement the following steps in the event of a discovery of potential human remains.

1. **Stop Work.** If any City employee, contractor, or subcontractor believes that they have uncovered possible human remains at any point in the project, all work adjacent to the discovery must stop. Work stoppage must be adequate to protect the discovery, which is expected to be a minimum of 30 feet in all directions, unless the Project Archaeologist or law enforcement personnel indicate otherwise.

2. **Do Not Handle Human Remains.** Possible human remains shall not be handled, removed, reburied, or covered.

3. **Flag and Secure the Area.** The area of discovery will be flagged and secured. The location of the discovery will not be left unsecured at any time. Construction equipment and personnel will not enter the area. Spoils piles or vehicles from the area that have the potential to contain human remains, such as dump trucks, will remain on site. No persons other than the proper law enforcement personnel, the Pierce County Medical Examiner, and professional archaeologists will be authorized to access the discovery location after the area is secured.
4. **Notify Project Management.** Contact the City Project Manager. If they are not available, contact alternate City contact. The Project Manager, alternate, or designee will make all other contacts.

5. **Avoid Any Other Communication.** Do not call 911, the media, or members of the public about the find.

The City Project Manager, alternate, or designee will implement the following steps when notified of a discovery of potential human remains.

1. **Preliminary Observation.** The Project Manager will notify USACE (via phone and email) of the discovery and will coordinate with the Project Archaeologist to assess whether the discovery may be human remains (without disturbing the discovery further). If the discovery can be definitively identified as nonhuman, procedures for archaeological resources will be followed.

2. **Notify Law Enforcement.** If the discovery could possibly be human remains, the Project Manager or the Project Archaeologist shall call the Tacoma Police Department nonemergency number and report that potential human remains have been discovered. The Tacoma Police Department will control the discovery site until it is either determined to be non-forensic (not a crime scene) or the investigation is complete.

3. **Participate in Consultation.** Under RCW 27.53.030, RCW 68.50, and RCW 68.60, SHPO will have jurisdiction over non-forensic human remains. USACE and the City will participate in consultation. If there are also archaeological materials at the human remains discovery location, there may be a parallel archaeological resources process led by USACE. Construction can resume when authorized by USACE and SHPO.
Contact Information

City of Tacoma
Primary Contact: Steve Hoffman
Title: Project Manager
Office Phone: (253) 502-2144
Cell Phone: (253) 592-7835
Email: shoffma2@cityoftacoma.org

Alternate Contact:
Title: Project
Office Phone:
Cell Phone:
Email:

U.S. Army Corps of Engineers
Primary Contact: Stephanie Neil
Title: Archaeologist
Office Phone: (206) 764-6941
Email: cultural.resources@usace.army.mil, and stephanie.l.neil@usace.army.mil

State Historic Preservation Office
Primary Contact: Stephanie Jolivette
Title: Local Government Archaeologist
Office Phone: (360) 586-3088 Email: stephanie.jolivette@dahp.wa.gov

Project Archaeologist
Primary Contact: Barbara Bundy
Title: Archaeologist
Office Phone: (907) 677-6671
Cell Phone: (907) 230-0940
bbundy@anchorqea.com

Puyallup Tribe of the Puyallup Reservation
Primary Contact: Richard Young
Title: Cultural Resources
Office Phone: (425) 239-0182
Email: ryoung@tulaliptribes-nsn.gov

Muckleshoot Indian Tribe
Primary Contact: Laura Murphy
Title: Cultural Resources
Office Phone: (253) 876-3272
Email: laura.murphy@muckleshoot.nsn.us

Snoqualmie Indian Tribe
Primary Contact: Steven Mullen-Moses
Title: Cultural Resources
Office Phone: (425) 888-6551
Email: steve@snoqualmietribe.us

Suquamish Indian Tribe
Primary Contact: Dennis Lewarch
Title: Tribal Historic Preservation Officer
Office Phone: (360) 394-8529
Email: dlewarch@suquamish.nsn.us

Nisqually Indian Tribe
Primary Contact: Brad Beach
Title: Tribal Historic Preservation Officer
Office Phone: (360) 456-5221 ext. 2180
Email: Beach.Brad@nisqually-nsn.gov

Tacoma Police Department
Non-Emergency Number: (253) 287-4455
Figure 1
Examples of Archaeological Resources

Chipped stone artifacts or chipping debris

Ground stone artifacts

Layers of burned/blacked soil, clusters of rocks
Animal bone or shell deposits

Cordage or basketry

Foundations, railroad tracks, old utilities, clusters of bricks, building materials, ceramics, bottles, or other debris
PART VII

CITY OF TACOMA

EQUITY IN CONTRACTING PROGRAM
**CITY OF TACOMA EQUITY IN CONTRACTING (EIC) AND LEAP PROGRAMS**

**Bidders Special Instructions**

As part of the City of Tacoma's ongoing work to address past disparities and to increase the City’s contracting with and utilization of historically underutilized businesses, the Equity in Contracting (EIC) Program places requirements on City contracts for utilization of businesses certified by the Washington State Office of Minority and Women’s Business Enterprise (OMWBE) and approved by the Equity in Contracting Program (“Certified Businesses”). The EIC Program also provides guidance and technical assistance to Certified Businesses who are interested in providing supplies, services and public works to the City of Tacoma.

The EIC Program requirements are contained in [Tacoma Municipal Code Chapter 1.07](#).

Contractors bidding on City of Tacoma projects are required to meet the stated EIC requirements. Bids will be evaluated on an individual basis to determine EIC compliance. **A contractor who fails to meet the stated EIC requirements will be considered non-responsive.** Bidders are also subject to the City’s Equal Employment Opportunity policies prohibiting discrimination.

The stated EIC requirements may be met by the contractor or by identified subcontractors. All EIC Requirements may be met by using MBEs, WBEs, DBEs or SBEs from the OMWBE certified list ([OMWBE website](#)). It is the bidder’s responsibility to ensure that their firm or identified subcontractors are certified by OMWBE and approved by the City of Tacoma EIC Program **at the time of bid submittal.** Business certification may be verified by contacting the EIC Office*.

*For the OMWBE list, be sure to look for businesses in Pierce, King, Lewis, Mason, Grays Harbor, Thurston, or any counties adjacent to the county in which the work is performed per 1.07.050(2)(b-c). Contact the EIC Office* if you have any questions.

The Equity in Contracting (EIC) forms included in these bid documents must be fully completed (including attachments) and included with bid submittals. Failure to include the required forms will result in the submittal being rejected as nonresponsive.

**Post-Award Important Information**

For all contracts that have requirements related to the EIC and LEAP policies, the City of Tacoma is utilizing two cloud-based software systems:

- **B2Gnow** - Contractors and subcontractors must report payment information in the B2Gnow System on a monthly basis. The EIC Staff will monitor/audit that retainage is paid by the prime contractor to the subcontractor(s) within 10 [working] days after the subcontractors’ work is satisfactorily completed. This will be monitored/audited using the B2Gnow System.
- **LCP Tracker** - This system must be used for submitting certified payroll(s) for both EIC and LEAP compliance.
Both systems are monitored/audited by EIC and LEAP staff to ensure contract compliance, proactively identify potential issues and track contract progress.

**EIC & LEAP STAFF Contact Information**

- For questions regarding Certifications, EIC Compliance and B2GNow support, contact EIC Staff:
  - Malika Godo at (253) 591-5630, or via email at mgodo@cityoftacoma.org
  - Gary Lizama at (253) 591-5826, or via email at glizama@cityoftacoma.org

- For questions in regards to LEAP compliance and LCP Tracker support, contact LEAP Staff:
  - Deborah Trevorrow at (253) 591-5590, or via email at dtrevorrow@cityoftacoma.org
CHAPTER 1.07
EQUITY IN CONTRACTING

Sections:
1.07.010 Policy and purpose.
1.07.020 Definitions.
1.07.030 Discrimination prohibited.
1.07.040 Program administration.
1.07.050 Approval as a Certified Business.
1.07.060 Program requirements.
1.07.070 Evaluation of submittals.
1.07.080 Contract compliance.
1.07.090 Program monitoring.
1.07.100 Enforcement.
1.07.110 Remedies.
1.07.120 Unlawful acts.
1.07.130 Severability.
1.07.140 Review of program.

1.07.010 Policy and purpose.

It is the policy of the City of Tacoma that citizens be afforded an opportunity for full participation in our free enterprise system and that historically underutilized business enterprises shall have an equitable opportunity to participate in the performance of City contracts. The City finds that in its contracting for supplies, services and public works, there has been historical underutilization of small and minority-owned businesses located in certain geographically and economically disfavored locations and that this underutilization has had a deleterious impact on the economic well-being of the City. The purpose of this chapter is to remedy the effects of such underutilization through use of narrowly tailored contracting requirements to increase opportunities for historically underutilized businesses to participate in City contracts. It is the goal of this chapter to facilitate a substantial procurement, education, and mentorship program designed to promote equitable participation by historically underutilized businesses in the provision of supplies, services, and public works to the City. It is not the purpose of this chapter to provide any person or entity with any right, privilege, or claim, not shared by the public, generally, and this chapter shall not be construed to do so. This chapter is adopted in accordance with Chapter 35.22 RCW and RCW 49.60.400.

(Ord. 28625 Ex. A; passed Nov. 5, 2019: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.020 Definitions.

Terms used in this chapter shall have the following meanings unless defined elsewhere in the Tacoma Municipal Code (“TMC”), or unless the context in which they are used clearly indicates a different meaning.

1.07.020.B
A. “Bid” means an offer submitted by a Respondent to furnish Supplies, Services, and/or Public Works in conformity with the Specifications and any other written terms and conditions included in a City request for such offer.

B. “Bidder” means an entity or individual who submits a Bid, Proposal or Quote. See also “Respondent.”

1.07.020.C
“Certified Business” means an entity that has been certified as a Disadvantaged Business Enterprise (“DBE”), Small Business Enterprise (“SBE”), Minority Business Enterprise (“MBE”), Women Business Enterprise (“WBE”), or Minority and Women’s Business Enterprise (“MWBE”) by the Washington State Office of Minority and Women’s Business Enterprise and meets the criteria set forth in Section 1.07.050 (2) of this chapter and has been approved as meeting that criteria by the Community and Economic Development Department Program Manager.

“City” means all Departments, Divisions and agencies of the City of Tacoma.

“Contract” means any type of legally binding agreement regardless of form or title that governs the terms and conditions for procurement of Public Works and Improvements and/or Non-Public Works and Improvements Supplies and Services. Contracts include the terms and conditions found in Specifications, Bidder or Respondent Submittals, and purchase orders issued by the City. A “Contract” as used in this chapter shall include an agreement between the City and a non-profit entity to perform construction-related services for Public Works. A “Contract” does not include: (1) awards made by the City with
federal/state grant or City general funds monies to a non-profit entity where the City offers assistance, guidance, or supervision on a project or program, and the recipient of the grant awards uses the grant moneys to provide services to the community; (2) sales transactions where the City sells its personal or real property; (3) a loan transaction where the City is acting as a debtor or a creditor; (4) lease, franchise; (5) agreements to use City real property (such as Licenses, Permits and Easements) and, (6) banking and other financial or investment services.

“Contractor” means any Person that presents a Submittal to the City, enters into a Contract with the City, and/or performs all or any part of a Contract awarded by the City, for the provision of Public Works, or Non-Public Works and Improvements, Supplies or Services.

1.07.020.G

“Goals” means the annual level of participation by Certified Businesses in City Contracts as established in this chapter, the Program Regulations, or as necessary to comply with applicable federal and state nondiscrimination laws and regulations. Goals for individual Contracts may be adjusted as provided for in this chapter and shall not be construed as a minimum for any particular Contract or for any particular geographical area.

1.07.020.N

“Non-Public Works and Improvements” means all competitively solicited procurement of Supplies and/or Services by the City not solicited as Public Works.

1.07.020.P

“Person” means individuals, companies, corporations, partnerships, associations, cooperatives, any other legally recognized business entity, legal representative, trustee, or receivers.

“Program Manager” means the individual appointed, from time to time, by the City’s Community and Economic Development Director to administer the Program Regulations.

“Program Regulations” means the written regulations and procedures adopte d pursuant to this chapter for procurement of Supplies, Services and Public Works.

“Proposal” means a written offer to furnish Supplies or Services in response to a Request for Proposals. This term may be further defined in the Purchasing Policy Manual and/or in competitive solicitations issued by the City.

“Public Works (or “Public Works and Improvements)” means all work, construction, alteration, repair, or improvement other than ordinary maintenance, executed at the cost of the City, or that is by law a lien or charge on any property therein. This term includes all Supplies, materials, tools, and equipment to be furnished in accordance with the Contract for such work, construction, alteration, repair, or improvement.

1.07.020.Q

“Quote” means a competitively solicited written offer to furnish Supplies or Services by a method of procurement that is less formalized than a Bid or a Proposal. This term may be further defined in the Purchasing Policy Manual.

1.07.020.R

“Respondent” means any entity or Person, other than a City employee, that provides a Submittal in response to a request for Bids, Request for Proposals, Request for Qualifications, request for quotes or other request for information, as such terms are defined in Section 1.06.251 TMC. This term includes any such entity or Person whether designated as a supplier, seller, vendor, proposer, Bidder, Contractor, consultant, merchant, or service provider that; (1) assumes a contractual responsibility to the City for provision of Supplies, Services, and/or Public Works; (2) is recognized by its industry as a provider of such Supplies, Services, and/or Public works; (3) has facilities similar to those commonly used by Persons engaged in the same or similar business; and/or (4) distributes, delivers, sells, or services a product or performs a Commercially Useful Function.

1.07.020.S

“Services” means non-Public Works and Improvements services and includes professional services, personal services, and purchased services, as such terms are defined in Section 1.06.251 TMC and/or the City’s Purchasing Policy Manual.

“Submittal” means Bids, Proposals, Quotes, qualifications or other information submitted in response to requests for Bids, Requests for Proposals, Requests for Qualifications, requests for Quotations, or other City requests for information, as such terms are defined in Section 1.06.251 TMC.

“Supplies” means materials, Supplies, and other products that are procured by the City through a competitive process for either Public Works procurement or Non-Public Works and Improvements procurement unless an approved waiver has been granted by the appropriate authority.
1.07.020.T
“Tacoma Public Utilities Service Area” means any ZIP code in which Tacoma Public Utilities maintains infrastructure or provides retail services.

1.07.020.W
“Waiver” means a discretionary decision by the City that the one or more requirements of this chapter will not be applied to a Contract or Contracts.


1.07.030 Discrimination prohibited.
A. No person that is engaged in the construction of public works for the City, engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services to the City, shall discriminate against any other person on the basis of race, religion, color, national origin or ancestry, sex, gender identity, sexual orientation, age, marital status, familial status, or the presence of any sensory, mental or physical disability, or “pregnancy outcomes” under TMC 1.29.040, in employment. Such discrimination includes the unfair treatment or denial of normal privileges to a person as manifested in employment upgrades, demotions, transfers, layoffs, termination, rates of pay, recruitment of employees, or advertisement for employment.

B. The violation of the terms of RCW 49.60 or Chapter 1.29 TMC by any person that is engaged in the construction of public works for the City, is engaged in the furnishing of laborers or craftspeople for public works of the City, or is engaged for compensation in the provision of non-public works and improvements supplies and/or services shall result in the rebuttable presumption that the terms of this chapter have also been violated. Such violation may result in termination of any City contract the violator may have with the City and/or the violator’s ineligibility for further City Contracts.

(Ord. 28859 Ex. A; passed Nov. 22, 2022: Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.040 Program administration.
A. The Community and Economic Development Director, or their designated Program Manager, shall be responsible for administering this chapter and obtaining compliance with respect to contracts entered into by the City and/or its contractors. It shall be the duty of the Director to pursue the objectives of this chapter by conference, conciliation, persuasion, investigation, or enforcement action, as may be necessary under the circumstances. The Director is authorized to implement an administrative and compliance program to meet these responsibilities and objectives.

B. The Director is hereby authorized to adopt and to amend administrative regulations known as the Program Regulations, to properly implement and administer the provisions of this chapter. The Program Regulations shall be in conformance with City of Tacoma policies and state and federal laws and be designed to encourage achievement of the Goals set forth herein.

(Ord. 28766 Ex. A; passed June. 8, 2021: Ord. 28141 Ex. A; passed Dec. 15, 2009)

1.07.050 Approval as a Certified Business.
A. The Program Manager shall approve an entity as a Certified Business if all of the following criteria are satisfied:
   1. The entity is certified as a DBE, SBE, MBE, WBE, or MWBE through the state of Washington’s Office of Minority & Women Business Enterprises; and
   2. The entity can demonstrate that it also meets at least one of the following additional requirements:
      a. The personal residence of the owner is located within the City of Tacoma or Tacoma Public Utilities Service Area, or
      b. The entity’s business offices are located in any county of the Tacoma Public Utilities Service Area or any county adjacent to Pierce County, or
      c. When the work is performed outside of Pierce County, the entity’s business offices may be located in an adjacent county in which the work is performed, or
      d. Such additional information as the Program Manager or designee may require.

   3. When another governmental entity has an equivalent business classification process, the City may enter into an interlocal cooperative agreement for mutual recognition of certifications.
B. Appeals.

The applicant may appeal any approval determination by the Program Manager under this chapter to the Director. The appeal must be made in writing and must set forth the specific reasons for the appeal. The Director shall make a decision on the appeal request within a reasonable time, which decision shall be final unless further appeal is made to the Hearing Examiner. In that event, the Hearing Examiner Rules of Procedure for Hearings, Chapter 1.23 TMC, shall be applicable to that appeal proceeding.


1.07.060 Program requirements.

A. The program shall meet the following requirements:

1. Establishment of Annual Goals.

The Program Regulations adopted pursuant to this chapter shall state reasonably achievable cumulative annual goals for utilization of Certified Businesses in the provision of supplies, services, and public works procured by the City. Cumulative annual goals for the participation of Certified Businesses in City contracts shall be based on the number of qualified Certified Businesses operating within the Tacoma Public Utilities Service Area. The dollar value of all contracts awarded by the City to Certified Businesses in the procurement of supplies, services, and public works shall be counted toward the accomplishment of the applicable goal.


The Program Manager shall consult with City departments/divisions to establish department/division specific goals for competitively solicited contracts in accordance with this chapter and the Program Regulations.

B. Exceptions:

City departments/divisions or the Program Manager may request an exception to one or more of the requirements of this chapter as they apply to a particular Contract or Contracts. Exceptions may be granted in any one or more of the following circumstances:

1. Emergency:

The supplies, services and/or public works must be provided with such immediacy that neither the City nor the contractor can comply with the requirements herein. Such emergency will be deemed documented whenever a waiver of competitive solicitation for emergency situations is authorized under Tacoma Municipal Code Chapter 1.06.257 or as may be hereinafter amended.

2. Not Practicable:

The Contract involves special facilities or market conditions or specially tailored or performance criteria-based products, such that compliance with the requirements of this chapter would cause financial loss to the City or an interruption of vital services to the public. Such circumstances must be documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over $500,000 (excluding sales tax), approved by the Board of Contracts and Awards (“C&A Board”).

3. Sole source:

The supplies, services, and/or public works are available from only one feasible source, and subcontracting possibilities do not reasonably exist as documented by the department/division awarding the Contract and approved by the senior financial manager or, for Contracts where the estimated cost is over $500,000 (excluding sales tax), approved by the C&A Board.

4. Government purchasing:

The Contract or Contracts are the result of a federal, state or inter-local government purchasing agreement and the use of such agreement in lieu of a bid solicitation conducted by the City is approved by the senior financial manager.

5. Lack of certified contractors:

An insufficient number of qualified contractors exist to create any utilization opportunities as documented by the Program Manager.

C. Waiver:
If, after receipt of Submittals but prior to Contract award, it is determined that due to unforeseen circumstances, waiver of goals is in the best interests of the City, the Director or Superintendent of the department/division awarding the Contract may request in writing that the City Manager or designee, on behalf of General Government, or the Director of Utilities or designee, on behalf of the Department of Public Utilities, approve such waiver.

Waivers may be granted only after determination by the City Manager or Director of Utilities that compliance with the requirements of this chapter would impose unwarranted economic burden on, or risk to, the City of Tacoma as compared with the degree to which the purposes and policies of this chapter would be furthered by requiring compliance.


1.07.070 Evaluation of submittals.

A. All submittals for a supplies, services, or public works and improvements contracts shall be evaluated for attainment of the Certified Business requirements established for that contract in accordance with this chapter and the Program Regulations.

B. The determination of Certified Business usage and the calculation of Certified Business requirements per this section shall include the following considerations:

1. General.

The dollar value of the contract awarded by the City to a Certified Business in the procurement of supplies, services, or public works shall be counted toward achievement of the respective goal.

2. Supplies.

A public works and improvements contractor may receive credit toward attainment of the Certified Business requirement(s) for expenditures for supplies obtained from a Certified Business; provided such Certified Business assumes the actual and contractual responsibility for delivering the supplies with its resources. The contractor may also receive credit toward attainment of the Certified Business goal for the amount of the commission paid to a Certified Business resulting from a supplies contract with the City; provided the Certified Business performs a commercially useful function in the process.


Any bid by a Certified Business or a bidder that utilizes a Certified Business shall receive credit toward requirement attainment based on the percentage of Certified Business usage demonstrated in the bid. A contractor that utilizes a Certified Business as a subcontractor to provide services or public works shall receive a credit toward the contractor’s attainment of the respective requirement based on the value of the subcontract with that firm.


Certified Business acting as brokers, fronts, or similar pass-through arrangements (as such terms are defined in the Program Regulations) shall not count toward the requirement attainment unless the activity reflects normal industry practices and the broker performs a commercially useful function.

C. Evaluation of competitively solicited submittals for public works and improvements and for services when a requirement has been established for the contract to be awarded shall be as follows:

1. When contract award is based on price.

The lowest priced bid submitted by a responsive and responsible bidder will be reviewed to determine if it meets the requirement. Certified Businesses may self-count utilization on such bids if they will perform the work for the scope the requirement is based upon.

a. If the low bidder meets the requirements, the bid shall be presumed the lowest and best responsible bid for contract award.

b. Any bidder that does not meet the stated Certified Business requirements shall be considered a non-responsible bidder unless a waiver of one or more of the requirements of this chapter is granted, in the City’s sole discretion, pursuant to the criteria and processes in Tacoma Municipal Code 1.07.060.C.

2. When contract award is based on qualifications or other performance criteria in addition to price, solicitations shall utilize a scoring system that promotes participation by certified contractors. The Program Regulations may establish further requirements and procedures for final selection and contract award, including:

a. Evaluation of solicitations for Architectural and Engineering (A&E) services;

b. Evaluation and selection of submittals in response to requests for proposals; and
c. Selection of contractors from pre-qualified roster(s).


1.07.080 Contract compliance.

A. The contractor awarded a contract based on Certified Business participation shall, during the term of the contract, comply with the requirements established in said contract. To ensure compliance with this requirement following contract award, the following provisions apply:

1. Any substitutions for or failure to utilize Certified Business projected to be used must be approved in advance by the Program Manager. Substitution of one Certified Business with another shall be allowed where there has been a refusal to execute necessary agreements by the original Certified Business, a default on agreements previously made or other reasonable excuse; provided that the substitution does not increase the dollar amount of the bid.

2. Where it is shown that no other Certified Business is available as a substitute and that failure to secure participation by the Certified Business identified in the solicitation is not the fault of the respondent, substitution with a non-Certified Business shall be allowed; provided, that, the substitution does not increase the dollar amount of the bid.

3. If the Program Manager determines that the contractor has not reasonably and actively pursued the use of replacement Certified Business, such contractor shall be deemed to be in non-compliance.

B. Record Keeping.

All contracts shall require contractors to maintain relevant records and information necessary to document compliance with this chapter and the contractor's utilization of Certified Businesses, and shall include the right of the City to inspect such records.


1.07.090 Program monitoring.

A. An Advisory Committee shall monitor compliance with all provisions of this chapter and the related Regulations. The Program Manager shall establish procedures to collect data and monitor the effect of the provisions of this chapter to assure, insofar as is practical, that the remedies set forth herein do not disproportionately favor one or more racial, gender, ethnic, or other protected groups, and that the remedies do not remain in effect beyond the point that they are required to eliminate the effects of under utilization in City contracting, unless such provisions are supported by a Disparity Study. The Program Manager shall have the authority to obtain from City departments/divisions, respondents, and contractors such relevant records, documents, and other information as is reasonably necessary to determine compliance.

B. The Program Manager shall submit an annual report to the Community and Economic Development Director, Director of Utilities, and the City Manager detailing performance of the program. The report shall document Certified Business utilization levels, waivers, proposed modifications to the program, and such other matters as may be specified in the Program Regulations.


1.07.100 Enforcement.

The Director, or designee, may investigate the employment practices of contractors to determine whether or not the requirements of this chapter have been violated. Such investigation shall be conducted in accordance with the procedures established in the Program Regulations.


1.07.110 Remedies.

A. Upon receipt of a determination of contractor violation by the Program Manager, the City Manager or Director of Utilities, as appropriate, may take the following actions, singly or together, as appropriate:

1. Forfeit the contractor’s bid bond and/or performance bond;
2. Publish notice of the contractor’s noncompliance;
3. Cancel, terminate, or suspend the contractor’s contract, or portion thereof;
4. Withhold funds due contractor until compliance is achieved; and/or
5. Recommend appropriate action including, but not limited to, disqualification of eligibility for future contract awards by the City (debarment) per Section 1.06.279 TMC;

B. Prior to exercise of any of the foregoing remedies, the City shall provide written notice to the contractor specifying the violation and the City’s intent to exercise such remedy or remedies. The notice shall provide that each specified remedy becomes effective within ten business days of receipt unless the contractor appeals said action to the Hearing Examiner pursuant to Chapter 1.23 TMC.

C. When non-compliance with this chapter or the Program Regulations has occurred, the Program Manager and the department/division responsible for enforcement of the contract may allow continuation of the contract upon the contractor’s development of a plan for compliance acceptable to the Director.


1.07.120 Unlawful acts.
It shall be unlawful for any Person to willfully prevent or attempt to prevent, by intimidation, threats, coercion, or otherwise, any Person from complying with the provisions of this chapter.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.130 Severability.
If any section of this chapter or its application to any Person or circumstance is held invalid by a court of competent jurisdiction, then the remaining sections of this chapter, or the application of the provisions to other Persons or circumstances, shall not be affected.

(Ord. 27867 Ex. A; passed Dec. 15, 2009)

1.07.140 Review of program.
This chapter shall be in effect through and until December 31, 2024, unless the City Council shall determine at an earlier date that the requirements of this chapter are no longer necessary. If this chapter has not been repealed by July 1, 2024, the City Council shall determine by the end of that year whether substantial effects or lack of opportunity of MWBEs and/or SBEs remain true in the relevant market and whether, and for how long, some or all of the requirements of this chapter should remain in effect.

This form is to document **only** the contractors, subcontractors, material suppliers or other types of firms that are intended to be used to meet the stated EIC requirements for the contract awarded from this solicitation. This information will be used to determine contract award. Additional forms may be used if needed.

- You must include this form with your bid submittal in order for your bid to be responsive.
- **Prime contractors are required** to solicit bids from Businesses that are "Certified" by the Office of Minority and Women's Business Enterprises (OMWBE) [www.omwbe.wa.gov](http://www.omwbe.wa.gov) as a MBE, WBE, and SBE to be know as "Certified Business".
- It is the Prime contractor’s responsibility to verify the certification status of the business(s) intended to be utilized prior to the submittal deadline.

**Bidder’s Name:**

---

<table>
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<tr>
<th>Spec. No.</th>
<th>Base Bid * $</th>
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**Complete business names and phone numbers are required to verify your usage of Certified Businesses**

<table>
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<tr>
<th>a. Business Name and Certification Number(s)</th>
<th>b. MBE, WBE, or SBE (Write all that apply)</th>
<th>c. NAICS code(s)</th>
<th>d. Contractor Bid Amount (100%)</th>
<th>e. Material Supplier Bid Amount (20%)</th>
<th>f. Estimated MBE Usage Dollar Amount</th>
<th>g. Estimated WBE Usage Dollar Amount</th>
<th>h. Estimated SBE Usage Dollar Amount</th>
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<th>i. MBE Utilization %</th>
<th>j. WBE Utilization %</th>
<th>k. SBE Utilization %</th>
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By signing and submitting this form the bidder certifies that the OMWBE Certified Business(s) listed will be used on this project including all applicable change orders.

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**Type or Print Name of Responsible Officer / Title**

**Signature of Responsible Officer**

**Date**

CCD/EIC/BID DOCS revised March 4, 2022
INSTRUCTIONS FOR COMPLETING
EIC UTILIZATION FORM

The purpose of these instructions is to assist bidders in properly completing the EIC Utilization Form.

This form when submitted with your bid, provides information to the City of Tacoma to accurately review and evaluate your proposed EIC usage.

1. * Base Bid is the prime contractor’s bid, plus any alternates, additives and deductibles selected by the City of Tacoma. Also, please refer to Items #10-12 below.

2. Column “a” – List all Certified Business(s) that you will be awarding a contract to if you are the successful bidder.

3. Column "b" – Identify if the Certified Business(s) is being utilized as an MBE, WBE, or SBE. (Businesses may count towards multiple requirements).

4. Column "c" – List the appropriate NAICS code(s) for the scope of work, services, or materials/supplies for each Certified Business.

5. Column “d” – The bid amount must be indicated for all listed Certified Businesses that you plan on doing business with. This quote is the price that you and the Certified Businesses have negotiated prior to bid opening.

6. Column “e” – The bid amount must be indicated for all listed Certified Businesses that you plan on doing business with. This quote is the price that you and the material supplier have negotiated prior to bid opening.

7. Column "f" – Estimated MBE Usage Dollar Amount: For all MBE firms used, multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

8. Column “g” – Estimated WBE Usage Dollar Amount: For all WBE firms used, multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

9. Column “h” – Estimated SBE Usage Dollar Amount: For all MBE, WBE, or SBE firms used, Multiply the amount in Column “d” by 1.0 plus the amount in Column “e” by 0.20. Insert the total amount in this column.

10. Block “i” – The percentage of actual MBE utilization calculated on the Base Bid only. (Divide the sum of Estimated MBE Usage Dollar Amount (Column “f”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “f” divided by Base Bid (*) x 100 = MBE usage as a percentage of the Base Bid.)

11. Block “j” – The percentage of actual WBE utilization calculated on the Base Bid only. (Divide the sum of Estimated WBE Usage Dollar Amount (Column “g”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “g” divided by Base Bid (*) x 100 = WBE usage as a percentage of the Base Bid).

CCD/EIC/BID DOCS revised March 4, 2022
12. Block “k” – The percentage of actual SBE utilization calculated on the Base Bid only. (Divide the sum of Estimated SBE Usage Dollar Amount (Column “h”) by your Base Bid (*) then multiply by 100 to get a percentage: $ amounts from column “h” divided by Base Bid (*) x 100 = SBE usage as a percentage of the Base Bid.)

It is the prime contractor’s responsibility to check the status of **Certified Businesses** prior to bid opening. Call the EIC Office at 253-591-5826 or email at EICOoffice@cityoftacom.org for additional information.
PART VIII

LOCAL EMPLOYMENT

AND

APPRENTICESHIP TRAINING PROGRAM (LEAP)

REGULATIONS

FOR

PUBLIC WORKS CONTRACTS
LEAP REQUIREMENT FORM

Local Employment and Apprenticeship Training Program
Requirements

Local Employee Requirement and Apprentice Requirement

This project has LEAP Requirements of 15% Local Employee Utilization and an additional 15% Apprentice Utilization.

- Please add attached LEAP Bid documents to your spec
- Please note in your spec that when the project is added to the Labor & Industries’ Awarding Agency Portal site, the “Tacoma, City of” label should be chosen.
- Please send the Notice to Proceed and Notice of Completion to leap@cityoftacoma.org
- Invite LEAP to the project PreBid, PreCon, and Progress Meetings.
- If the contract is the result of a Cooperative Agreement or an Interlocal – Piggyback Public Agency Agreement, contact LEAP directly before drafting the contract.

For questions or concerns related to LEAP and LCP Tracker, email LEAP Staff at leap@cityoftacoma.org.
LEAP
LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM
ABBREVIATED PROGRAM REQUIREMENTS

LEAP is a mandatory City of Tacoma program adopted to provide employment opportunities for City of Tacoma residents and residents of Economically Distressed Areas of the Tacoma Public Utilities Service Area. It requires Prime Contractors performing qualifying public works projects or service contracts to ensure that 15 percent of the total labor hours worked on the project are performed by LEAP-Qualified apprentices approved by the Washington State Apprenticeship Council (SAC), youth, veterans, residents of Tacoma, residents of surrounding Economically Distressed Areas, and/or TPU Service Areas (as outlined below). Compliance may be met through any combination LEAP-Qualified employees.

Prime Contractors may obtain further information by contacting the City of Tacoma’s LEAP Coordinator, Deborah Trevorrow, at (253) 591-5590, or e-mail leap@cityoftacoma.org. The LEAP Coordinator can assist contractors in the recruitment of qualified entry-level workers to work on City of Tacoma Public Works projects. The LEAP Office is in the Tacoma Municipal Building, 747 Market Street, Rm 900.

LEAP PROGRAM REQUIREMENTS:
1. LOCAL EMPLOYMENT GOAL: The Prime Contractor is required to ensure that 15 percent of the total Labor Hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed ZIP Codes for the following projects:
   a) Civil Projects over $250,000
   b) Building Projects over $750,000

2. APPRENTICE GOAL: The Contractor is required to ensure that 15 percent of the total Labor Hours worked on any project over $1,000,000 are performed by Apprentices who are residents of the Tacoma Public Utilities Service Area. This is in addition to the Local Employment Goal.

3. SUBCONTRACTOR NOTIFICATION: Prime Contractors shall notify all Subcontractors of the LEAP Program requirement. Subcontractor labor hours may be utilized towards achievement of the LUG. Owner/Operator hours may be used for the Local Employment Goal.

4. FAILURE TO MEET LEAP UTILIZATION GOAL: Contractors shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor met its goal. The amount per hour that shall be assessed shall be as follows:

- 100% achievement $0.00 penalty
- 99% to 90% achievement $2.00 penalty
- 89% to 75% achievement $3.50 penalty
- 74% to 50% achievement $5.00 penalty
- 49% to 1% achievement $7.50 penalty
- 0% achievement $10.00 penalty

*Penalty may be waived in the best interests of the City of Tacoma.
LEAP DOCUMENT SUBMITTALS**:

1. **LEAP EMPLOYEE VERIFICATION FORM**: The Contractor must provide the LEAP Office with a form for every person whom the contractor thinks will assist with attaining credit towards meeting the LUG with at least one piece of verifying documentation. The LEAP Office staff will respond regarding whether or not the employee is LEAP-Qualified.

2. **LEAP WEEKLY PAYROLL REPORT**: The Prime and Subcontractors must complete and attach this form to the front of each weekly certified payroll when submitting payrolls in LCP Tracker

3. **WEEKLY CERTIFIED PAYROLL**: The Prime and Subcontractors must submit weekly Certified Payrolls that include, employee name, address, social security number, craft/trade, class, hours worked on this job, rate of pay, and gross wages paid including benefits for this job.

4. **DEPARTMENT OF LABOR & INDUSTRIES (L&I)**: The Prime must enter the project in the L&I project site under the ‘Tacoma, City of’ account and notify the LEAP Office when this has been completed.

**WITHHOLDING PROGRESS PAYMENTS**: The LEAP Coordinator may withhold progress payments for failure to follow the above-outlined procedures
LEAP

Documents and Submittal Schedule

In the attached packet, you will find the LEAP forms that are required to be submitted by the Prime and Sub Contractors.

- **LEAP Abbreviated Program Requirements**: brief overview of LEAP Program requirements
- **LEAP Employee Verification Form**: to be submitted on an ongoing basis for each employee who may be a LEAP-qualified employee
- **Tacoma Public Utilities Service Area Map and List, Economically Distressed ZIP Codes Map and List**: for your reference on LEAP-qualified zoning areas

In addition, the City of Tacoma will also require from the Prime Contractor and all its Subcontractors:

- **Weekly Certified Payrolls**: to be submitted via LCP Tracker weekly, biweekly or monthly as scheduled by the Prime
- **Statement of Intent to Pay Prevailing Wages**: to be submitted prior to commencing work
- **Affidavit of Wages Paid**: to be submitted upon completion of each contractor’s work
- **Document Verification**: provide required information when requested from LEAP Office

Please submit above documents as instructed by the LEAP Coordinator.

If you have any questions or request further information, please feel free to contact the City of Tacoma’s LEAP Program at (253) 591-5590 or email dtrevorrow@cityoftacoma.org
CHAPTER 1.90
LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM

Sections:
1.90.010 Purpose.
1.90.020 Scope.
1.90.030 Definitions.
1.90.040 LEAP goals.
1.90.050 Repealed.
1.90.060 Effect of program on prime contractor/subcontractor relationship.
1.90.070 Apprentice utilization requirements – Bidding and contractual documents.
1.90.080 Enforcement.
1.90.090 Compliance with applicable law.
1.90.100 Review and reporting.
1.90.105 Authority
1.90.110 Interpretation.

1.90.010 Purpose.
The purpose of this Chapter is to establish a means of providing for the development of a trained and capable workforce possessing the skills necessary to fully participate in the construction trades.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.020 Scope.
The provisions of this Chapter shall apply to all Public Works or Improvements funded in whole or in part with City funds or funds which the City expends or administers in accordance with the terms of a grant.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.030 Definitions.
As used in this chapter, the following terms shall have the following meanings:

A. “Apprentice” shall mean a person enrolled in a course of training specific to a particular construction trade or craft, which training shall be approved by the Washington State Apprenticeship and Training Council established pursuant to RCW 49.04.010.

B. “Building Projects” shall mean all Public Works or Improvements having an Estimated Cost greater than $750,000.00, and for which a building permit must be issued pursuant to Chapter 1 of the current edition of the state building code (Uniform Building Code).

C. “City” shall mean all divisions and departments of the City of Tacoma, and all affiliated agencies, provided, however, that the Tacoma Community Redevelopment Authority shall not be included within this definition.

D. “Civil Projects” shall mean all Public Works or Improvements that are not defined as a “Building Project,” provided that those projects having an Estimated Cost of less than $250,000.00 shall not be included in this definition.

E. “Contractor or Service Provider” means a person, corporation, partnership, or joint venture entering into a contract with the City to construct a Public Work or Improvement.

F. “Director” shall mean the Director of Community and Economic Development, or the Director’s Designee.

G. “Economically Distressed ZIP Codes” shall mean ZIP codes in the Tacoma Public Utilities Service Area that meet two out of three (2/3) of the thresholds of:
   1. High concentrations of residents living under 200% of the federal poverty line in terms of persons per acre (69th percentile)
   2. High concentrations of unemployed people in terms of persons per acre (45th percentile)
   3. High concentrations of people 25 years or older without a college degree in terms of persons per acre (75th percentile)

Said thresholds shall be updated within 30 days following any Prevailing Wage updates issued by the Washington State Labor and Industry. All updates are to be published on the first business day in August and in February of each calendar year.
H. “Electrical Utility” and “Water Utility” shall mean, respectively, the Light Division of the Department of Public Utilities of the City of Tacoma, and shall include the electrical and telecommunications services of that Division, and the Water Division of the Department of Public Utilities of the City of Tacoma.

I. “Estimated Cost” shall mean the anticipated cost of a Public Work or Improvement, as determined by the City, based upon the expected costs of materials, supplies, equipment, and labor, but excluding taxes and contingency funds.

J. “Estimated Labor Hours” shall mean the anticipated number of Labor Hours determined by the City to be necessary to construct a Public Work or Improvement and set forth in the specifications for the project, or as may be subsequently revised due to contract or project adjustment, or pursuant to an agreed upon change order.

K. “Existing Employee” shall mean an employee whom the Contractor or Service Provider can demonstrate was actively employed by the Contractor or Service Provider for at least 1000 hours in the calendar year prior to bid opening plus one month following bid opening, and who was performing work in the construction trades.

L. “Labor Hours” shall mean the actual number of hours worked by workers receiving an hourly wage who are employed on the site of a Public Work or Improvement, and who are subject to state or federal prevailing wage requirements. The term “Labor Hours” shall include hours performed by workers employed by the Contractor or Service Provider and all Subcontractors, and shall include additional hours worked as a result of a contract or project adjustment or pursuant to an agreed upon change order. The term “Labor Hours” shall not include hours worked by workers who are not subject to the prevailing wage requirements set forth in either RCW 39.12 or the Davis-Bacon Act - 40 U.S.C. 276 (a).

M. “LEAP Coordinator” shall mean the City of Tacoma staff member who administers LEAP.

N. “LEAP Program” or “Program” shall mean the City of Tacoma’s Local Employment and Apprenticeship Training Program, as described in this chapter.

O. “LEAP Regulations” or “Regulations” shall mean the rules and practices established in this document.

P. “LEAP Utilization Plan” shall mean the document submitted by the Contractor to the LEAP Coordinator which outlines how the associated goals will be met on the project.

Q. “Priority Hire Resident” shall mean any resident within the Economically Distressed ZIP Codes.

R. “Project Engineer” shall mean the City employee who directly supervises the engineering or administration of a particular construction project subject to this chapter.

S. “Public Work or Improvement” shall have the same meaning as provided in Section 39.04.010 RCW, as that Section may now exist or hereafter be amended.

T. “Resident of Tacoma” shall mean any person, not defined as a Resident of the Community Empowerment Zone, who continues to occupy a dwelling within the boundaries of the City of Tacoma, has a present intent to continue residency within the boundaries of the City, and who demonstrates the genuineness of that intent by producing evidence that the person’s presence is more than merely transitory in nature.

U. “Service Area - Electrical” or “Electrical Service Area” shall mean that area served with retail sales by the Electrical Utility of the City of Tacoma at the time a bid is published by the Electrical Utility for a Public Work or Improvement to be performed primarily for the Electrical Utility.

V. “Service Area - Water” or “Water Service Area” shall mean that area served with retail sales by the water utility of the City of Tacoma at the time a bid is published by the water utility for a Public Work or Improvement to be performed primarily for the water utility.

W. “Service Contract” shall mean all City contracts relating to a Public Work or Improvement which utilize labor at a City site and which are not within the exceptions to nor defined as “Building Projects” or “Civil Projects.”

X. “Subcontractor” means a person, corporation, partnership, or joint venture that has contracted with the Contractor or Service Provider to perform all or part of the work to construct a Public Work or Improvement by a Contractor.

Y. “Tacoma Public Utilities” means the City of Tacoma, Department of Public Utilities.

Z. “Tacoma Public Utilities Service Area” shall mean every ZIP code listed by Tacoma Public Utilities as an area that either receives services or maintains infrastructure to provide services.

AA. Washington State Labor and Industry Prevailing Wage shall mean the hourly wage, usual benefits and overtime, paid in the largest city in each county, to the majority of workers, laborers, and mechanics. Prevailing wages are established, by the Department of Labor & Industries, for each trade and occupation employed in the performance of public work. They are established separately for each county, and are reflective of local wage conditions.
1.90.040 LEAP goals.

A. Utilization Goals.

1. All Contractors constructing Civil Projects or Building Projects, and all Service Providers involved with the construction of a Public Work or Improvement, shall ensure that at least 15 percent of the total Labor Hours actually worked on the Project are performed by persons having their residence within the boundaries of the City of Tacoma or Economically Distressed ZIP Codes, whether or not any such person is an Apprentice.

   a. The thresholds for this section shall be $250,000.00 for Civil Projects and $750,000.00 for Building Projects.

   2. Fifteen percent (15%) of the Total Labor Hours on contracts above one-million dollars ($1,000,000.00) shall have work performed by Apprentices who are residents of the Tacoma Public Utilities Service Area consistent with RCW 39.04.320(1)(a), subject to waiver based on exceptions as specified in RCW 39.04.320(2)(a), (b), and (c).

   3. Labor Hours performed by non-residents of the State of Washington will be deducted from a project’s total Labor Hours for purposes of determining compliance with the requirements of this chapter.

4. All Contractors and Service Providers shall submit a LEAP Utilization Plan as provided for in the regulations adopted under this chapter, and shall meet with the LEAP Coordinator to review said Plan prior to being issued a Notice to Proceed. Failure to submit a LEAP Utilization Plan may be grounds for the City to withhold remittance of a progress payment until such Plan is received from the responsible Contractor or Provider. A meeting with the LEAP Coordinator prior to issuance of a Notice to Proceed shall be excused only when the LEAP Coordinator is unavailable to meet prior to the scheduled date for issuance of the Notice to Proceed and the Contractor and the LEAP Coordinator have otherwise scheduled a meeting for the coordinator to review the Contractor’s or Provider’s plan.

   The Contractor or Service Provider shall be responsible for meeting the LEAP utilization goal requirements of the contract, including all amendments and change orders thereto, and shall be responsible for overall compliance for all hours worked by Subcontractors. To the extent possible, the Contractor or Service Provider shall recruit Apprentices from multiple trades or crafts.

B. Failure to Meet Utilization Goal.

1. Contracts for the construction of Building projects or Civil projects and Service Contracts shall provide that Contractors or Service Providers failing to meet the LEAP utilization goals shall be assessed an amount for each hour that is not achieved. The amount per hour shall be based on the extent the Contractor or Service Provider met its goal. The amount per hour that shall be assessed shall be as follows:

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<thead>
<tr>
<th>Percent of Goal Met</th>
<th>Assessment per unmet hour</th>
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</thead>
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<tr>
<td>100%</td>
<td>$ 0.00</td>
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<tr>
<td>90% - 99%</td>
<td>$ 2.00</td>
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<tr>
<td>75% to 89%</td>
<td>$ 3.50</td>
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<tr>
<td>50% to 74%</td>
<td>$ 5.00</td>
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<td>1% to 49%</td>
<td>$ 7.50</td>
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<tr>
<td>0%</td>
<td>$10.00</td>
</tr>
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</table>

When determining the percent of goal that is met, all rounding shall be down to the nearest whole percent. No penalty shall be waived by the City unless it is determined by the Director to be in the best interests of the City, which determination shall be made after consultation with the LEAP Coordinator.

2. Deposit of Assessments. All assessments imposed pursuant to this section shall be deposited into a separate account and utilized to support the City’s pre-apprenticeship and training program. The policies and regulations adopted by the City Manager and Director of Utilities pursuant to this chapter shall address issues pertaining to a Contractor’s existing workforce. Contributions need not be made for Labor Hours that have been adjusted in accordance with Section 1.90.040(E).

C. LEAP Reports.

Notwithstanding the provisions of TMC 1.90.100, the Director shall, not less than annually, publish a LEAP report setting forth Contractor compliance with this chapter. Said report shall include information on all contracts and all Contractors to which this chapter applies, and shall detail the level and nature of LEAP participation by contract and by Contractor, The
Director’s LEAP report may include such other information as may be helpful to assuring fair and accurate representation of the contracts, Contractors or projects covered in the report. The Director’s LEAP reports may be considered by the Board of Contracts and Awards in its determinations as to bidder responsibility.

D. LEAP Goal Adjustments.

1. LEAP utilization goals may be adjusted prior to bid opening and/or as a result of a contract amendment or change order on a Building Project, Civil Project, or Service Contract.

a. If LEAP utilization goals are adjusted prior to bid opening, they shall be set forth in the bid or Request For Proposal advertisement and specification documents or in an addendum timely provided to prospective bidders, provided that such adjustment shall be based upon a finding by the Project Engineer that the reasonable and necessary requirements of the contract render LEAP utilization unfeasible at the required levels. The Director shall concur with the Project Engineer’s finding, provided that should the Project Engineer and the Director fail to reach agreement on the Project Engineer’s finding, then in that circumstance the matter shall be referred to the City Manager or the Director of Utilities, as appropriate, for ultimate resolution. Notwithstanding any other provision of this chapter to the contrary, the decision of the City Manager or the Director of Utilities with regard to LEAP goal adjustment may not be appealed.

b. If LEAP utilization goals are adjusted due to contract amendment or change order, the amount of adjustment shall be consistent with the utilization goals set forth in this chapter and shall be determined pursuant to regulations adopted pursuant to this chapter for administration of LEAP utilization goal adjustments.

2. The methodology of determining the appropriate adjustments to LEAP utilization goals shall be determined in consultation with the LEAP Advisory Committee, established pursuant to this ordinance for so long as the LEAP Advisory Committee remains in existence.

3. LEAP utilization goals shall not apply to those portions of a project that are funded by sources other than (a) City funds, or (b) funds which the City expends or administers in accordance with the terms of a grant to the City, provided that the Project Engineer shall notify the Director of such non-application prior to bid advertisement. For the purposes of this paragraph, credits extended by another entity for the purpose of providing project funding shall not be considered to be City funds.

E. Utilization - Electrical Projects Outside Electrical Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City’s Electrical Utility, which are wholly situated outside the Electrical Service Area, and for which the estimated cost is less than $1,000,000.00, are exempt from the requirements of this chapter.

F. Utilization - Water Projects Outside Water Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by the City’s water utility, which are wholly situated outside the Water Service Area, and for which the estimated cost is less than $1,000,000.00 are exempt from the requirements of this chapter.

G. Utilization - Projects Outside Tacoma Public Utilities Service Area.

Civil Projects or Building Projects that are constructed primarily for the benefit or use by Tacoma Public Utilities, which are wholly situated outside the retail service area of the Tacoma Public Utilities Service Area, and for which the estimated cost is less than $1,000,000.00 are exempt from the requirements of this chapter. Projects wholly situated outside the Tacoma Public Utilities Service Area, and for which the estimated cost is more than $1,000,000.00, shall be exempt from 15% utilization goal specified in subsection A1. of this section. The 15% utilization goal specified in subsection A2. of this section may be met if project work is performed by Apprentices who are enrolled in a course of training specific to a particular construction trade or craft, provided such training has been approved by the Washington State Apprenticeship and Training Council in accordance with Chapter 49.04, RCW.

H. Emergency.

This chapter shall not apply in the event of an Emergency. For the purposes of this section, an “Emergency” means unforeseen circumstances beyond the control of the City that either: (a) present a real, immediate threat to the proper performance of essential functions; or (b) will likely result in material loss or damage to property, bodily injury, or loss of life if immediate action is not taken.

I. Conflict with State or Federal Requirements.

If any part of this chapter is found to be in conflict with federal or state requirements which are a prescribed condition to the allocation of federal or state funds to the City, then the conflicting part of this chapter is inoperative solely to the extent of the conflict and with respect to the City departments directly affected. This provision does not affect the operation of the
remainder of this chapter. Administrative rules or regulations adopted under this chapter shall meet federal and state requirements which are a necessary condition to the receipt of federal or state funds by the City.

(Ord. 28520 Ex. A; passed Jul. 17, 2018; Ord. 28147 Ex. B; passed May 7, 2013; Ord. 27815 Ex. A; passed Jun. 30, 2009; Ord. 27368 § 2; passed Jun. 21, 2005; Ord. 26992 § 1; passed Oct. 15, 2002; Ord. 26698 § 2; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.050 Repealed by Ord. 27368. Good faith efforts.

(Ord. 27368 § 3; passed Jun. 21, 2005; Ord. 26998 § 3; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.060 Effect of program on prime contractor/service provider - subcontractor relationship.

The LEAP Program shall not be construed so as to modify or interfere with any relationship between any Contractor or Service Provider and Subcontractor. The LEAP Program shall not grant the City any authority to control the manner or method of accomplishing any construction work that is additional to any authority retained by the City in a Public Works contract.

(Ord. 26698 § 4; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.070 Apprentice utilization requirements – Bidding and contractual documents.

All packages of bid documents for every Building Project and every Civil Project shall incorporate provisions satisfactory to the City Attorney so as to allow enforcement of the provisions contained in this Chapter. Such contractual provisions may include liquidated damages, calculated to reimburse the City for the Contractor’s breach of these performance requirements, which shall be published with the City’s call for bids.

(Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.080 Enforcement.

A. The Director shall review the Contractor’s or Service Provider’s and all Subcontractor’s employment practices during the performance of the work for compliance with LEAP Program requirements. On-site visits may be conducted as necessary to verify compliance with the requirements of the LEAP Program. The Contractor, Service Provider, or Subcontractors shall not deny to the City the right to interview its employees, provided that the Director shall make reasonable efforts to coordinate employee interviews with employers.

B. Any knowing failure or refusal to cooperate in compliance monitoring may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

C. The making of any material misrepresentation may disqualify the defaulting Contractor, Service Provider, or Subcontractor from eligibility for other City contracts.

D. Any action by the City, its officers and employees, under the provisions of this Chapter may be reviewed by the Board of Contracts and Awards, upon written application of the party so affected. Application shall be made within twenty (20) days of the date of the action upon which the appeal is based, and provided to the City by certified mail or by personal service. Any action taken by the Board of Contracts and Awards may be appealed to the City Council or Public Utility Board, as appropriate, and thereafter if desired, to the Superior Court of Pierce County, Washington, within fifteen (15) days of the previous decision.

(Ord. 26698 § 5; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.090 Compliance with applicable law.

Nothing in this Chapter shall excuse a Prime Contractor, Service Provider, or Subcontractor from complying with all relevant federal, state, and local laws.

(Ord. 26698 § 6; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.100 Review and reporting.

The City Manager and Director of Utilities shall review the Program on or before January 1, 2000, and every two (2) years thereafter, and shall report to the City Council and Public Utility Board the Manager’s and Director’s findings, conclusions, and recommendations as to the continued need for the Program, and any revisions thereto that should be considered by the Council and Board.
1.90.105 Authority.

The City Manager and the Director of Utilities shall have authority to jointly adopt policies and regulations consistent with this chapter to implement the LEAP program.

(Ord. 26698 § 7; passed Sept. 12, 2000; Ord. 26301 § 1; passed Oct. 6, 1998)

1.90.110 Interpretation.

This Chapter shall not be interpreted or construed so as to conflict with any state or federal law, nor shall this Chapter be enforced such that enforcement results in the violation of any applicable judicial order.

(Ord. 26301 § 1; passed Oct. 6, 1998)
LOCAL EMPLOYMENT AND APPRENTICESHIP TRAINING PROGRAM (LEAP)

LEAP REQUIREMENTS & PROCEDURES:

The LEAP office enforces post-award mandatory requirements. Bidders do not have to submit any information in the bid submittal package to be in compliance with LEAP.

Post-award Submittals:

- **LEAP Employee Verification Form.** This form is to be completed for employees who may be LEAP-Qualified and may be able to help meet the LEAP Goals.
- **LEAP Weekly Payroll Report.** This form is to be completed and submitted with each certified payroll.

The City of Tacoma’s LEAP office enforces two mandatory requirements on City projects based on certain monetary thresholds.

Local Employment Utilization Goal - the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by residents of the City of Tacoma or Economically Distressed Zip Codes, whether or not any such person is an apprentice.

Apprenticeship Utilization Goal – for contracts above one-million dollars, the Prime Contractor performing a qualifying public works project must ensure that 15 percent of the total labor hours worked on the project are performed by Apprentices who are residents of the City of Tacoma or Tacoma Public Utilities Service Area. The accompanying LEAP Regulations, forms, and maps are included in these specifications.

*Exceptions: If the project is located outside of the retail service area of the Tacoma Public Utilities Service Area, then Apprentices may come from the county in which the work is performed.

This project is above $1 million and is thusly subject to the:

1. 15% Local Employment Utilization Goal
2. 15% Apprentice Utilization Goal

LEAP staff can assist contractors in the recruitment, screening and selection of qualified City of Tacoma residents, Economically Distressed Area residents, and Apprentices. Contractors may obtain further information by contacting the City’s LEAP Office at (253) 316-3057 or (253) 591-5590. The LEAP Office is located in the Tacoma Municipal Building, 747 Market Street, Room 900, Tacoma, WA 98402. www.cityoftacoma.org/leap
LEAP EMPLOYEE VERIFICATION FORM

Contractor/Sub: __________________________  Specification Number: __________________________

Project Description: ____________________________________________________________

Employee Name: ___________________________________________  Craft: __________________________

Ethnic Group (optional): □ Asian/Pac Isl. □ Black □ Hispanic □ Native American □ White □ Other

Gender (optional): □ MALE □ FEMALE

Complete Physical Address (No PO Boxes): ____________________________________________

City: ___________ State: _______ Zip: _______ Telephone: ___________ Date of Hire: ___________

Apprenticeship County: ___________  Apprentice Registration I.D. (if applicable): ________________

Age: _____  Copy of DD-214: ______

*******Please fill out entire form for tracking LEAP performance******

LEAP qualified employee categories: (check all that apply and provide evidence for each check)

_____ a. Resident (journey level or certified apprentice) within the geographic boundaries of the City of Tacoma

_____ b. Resident (journey level or certified apprentice) within Economically Distressed ZIP Codes of the Tacoma Public Utilities Service Area

_____ c. WA State Approved Apprentice living in the Tacoma Public Utilities Service Area (Only valid for projects over $1,000,000)

_____ d. WA State Approved Apprentice *(Only valid for contracts where 100% of work is performed outside of Pierce County)

Signature of Employee: ___________________________  Date: __________________________

Contractor Representative: ___________________________  Date: __________________________
LEAP EMPLOYEE VERIFICATION FORM

To be Completed by Contractor or Subcontractor

Please attach a legible copy of one or more of the following document(s) showing the address of residence as proof of local (Tacoma) and/or Economically Distressed Area and/or TPU Service Areas residency. For youth, see first line and for veteran status, see second line.

For Youth - Copy of Birth Certificate or WA State ID or WA Driver’s License (projects advertised after 05-20-13)

For Veterans – Copy of DD-214(Projects advertised after 05-20-13)

Driver’s License with current address

Utility Bill/Phone Bill/Cell Bill/Cable Bill with current address

Copy of current tax form W-4

Rental Agreement/Lease (residential)

Computer Printout From Other Government Agencies

Property Tax Records

Apprentice Registration I.D.

Food Stamp Award Letter

Housing Authority Verification

Insurance Policy (Residence/Auto)

*Any of the above must have a complete physical address verified by the www.govme.org website.

No PO Boxes

Contractor Representative: ________________________________ Date: ________________

Title: ________________________________

Revised 04/2-22/DT
Appendix C: Economically Distressed ZIP Codes Map

Map is for reference only.

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Community & Economic Development Department
GIS Analysis & Data Service
4/26/2017
### Tacoma Public Utilities Infrastructure and Service Area
### (Apprentice Utilization)

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<th>Zip Code</th>
<th>City</th>
<th>Apprentice Utilization</th>
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<td>Easton</td>
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</table>

Updated 11/2020: CA
## Economically Distressed ZIP Codes
### (Journeyman AND Apprentice)

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>200% Pov</th>
<th>Unemployed</th>
<th>25+ College</th>
<th>Area</th>
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<tr>
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<td></td>
<td></td>
<td>Ashford/Rainier</td>
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<tr>
<td>98323</td>
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<td>Carbonado</td>
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<tr>
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<td>Eatonville</td>
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<tr>
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<td>Elbe</td>
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<tr>
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<td>Glenoma</td>
</tr>
<tr>
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<td>Lakebay</td>
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<tr>
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<td>Mineral</td>
</tr>
<tr>
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<td>Stadium/St. Helens</td>
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<td>South End</td>
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<td>Easton</td>
</tr>
</tbody>
</table>

Updated 11/2020: CA
PART IX

STATE PREVAILING WAGE RATES
PREVAILING WAGE RATES

This project requires prevailing wages under 39.12 RCW. Any worker, laborer, or mechanic employed in the performance of any part of the work shall be paid not less than the applicable prevailing rate of wage.

The project site is located in PIERCE County.

The effective date for prevailing wages on this project will be the submittal deadline with these exceptions:

a. If the project is not awarded within six months of the submittal deadline, the award date is the effective date.

b. If the project is not awarded pursuant to a competitive solicitation, the date the contract is executed is the effective date.

c. Janitorial contracts follow WAC 296-127-023.

Except for janitorial contracts, these rates shall apply for the duration of the contract unless otherwise noted in the solicitation.

Look up prevailing rates of pay, benefits, and overtime codes from this link: [https://secure.lni.wa.gov/wagelookup/](https://secure.lni.wa.gov/wagelookup/)

REQUIRED FILINGS

The contractor and all subcontractors covered under 39.12 RCW shall submit to the Department of Labor and Industries (L&I) for work provided under this contract:

1. A Statement of Intent to Pay Prevailing Wages must be filed with and approved by L&I upon award of contract.

2. An Affidavit of Wages Paid must be filed with and approved by L&I upon job completion.

Payments cannot be released by the City until verification of these filings are received by the engineer. Additional information regarding these filings can be obtained by calling the Department of Labor & Industries, Prevailing Wage at 360-902-5335, [https://www.lni.wa.gov](https://www.lni.wa.gov) or by visiting their MY L&I account.