

INVITATION FOR BIDS IFB 1315 TCP

AND

SPECIFICATIONS

FOR

NORTHLAKE SHIPYARD SANDBLAST GRIT INTERIM REMOVAL ACTION SEATTLE, WASHINGTON

DIRECTOR: Ted Sturdevant

CONTRACTS OFFICER: Randy Newman

PROJECT MANAGER:

Libby Goldstein

MONTH/YEAR: November 2012

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- 1. Survey Report, Hydrographic and Geophysical Surveys at Northlake Shipyard, Seattle, Washington. Submitted to Ecology and Environment, Inc by Tetra Tech EC, Inc. December 2008.
- 2. Northlake Shipyard Sandblast Grit Study Project Report. Prepared for Washington State Department of Ecology Prepared by Ecology & Environment Inc. June 2009.
- 3. Water Quality Monitoring Plan. Prepared for Washington State Department of Ecology. Prepared by Hart Crowser, Inc. November 2012.

ADDENDA

Refer to Department of Ecology's FTP site for Appendices and Addenda at: ftp://www.ecy.wa.gov/Northlake%20Shipyard%20bid%20documents/

INVITATION FOR BIDS



INVITATION FOR BIDS IFB 1315 TCP

The State of Washington, Department of Ecology, will accept bids until 3:00 p.m. PST on December 20, 2012 for "Northlake Shipyard Sandblast Grit Interim Removal Action."

The site is located on the north shore of Lake Union in downtown Seattle, Washington. The estimated cost of this work for bonding purposes is approximately \$800,000.

NOTE: A pre-bid meeting (including site walk) will be held at 11 a.m. December 4, 2012. Please contact Randy Newman at (360) 407-7219 if you plan on attending. It is highly recommended that all potential bidders attend this meeting.

Direct questions and comments to Randy Newman at (360) 407-7219 or randy.newman@ecy.wa.gov.

Access bid documents at ftp://www.ecy.wa.gov/Northlake%20Shipyard%20bid%20documents/

Accepted Bid Delivery Methods:

Regular mail

Randy Newman Toxics Cleanup Program Department of Ecology PO Box 47600 Olympia, WA 98504-7600 UPS, Express Mail, or hand delivery to Ecology Headquarters receptionist

Randy Newman Toxics Cleanup Program Department of Ecology 300 Desmond Drive Lacey, WA 98503

ECOLOGY does not assume responsibility for any problems with e-mail or the method of delivery chosen.

GENERAL

The construction accomplished within the requirements outlined in this contract will be the responsibility of one Contractor licensed with the State of Washington to perform the work as stated in the specifications and shown on the contract drawings.

This responsibility extends to work accomplished by independent organizations through agreement with the Contractor. The Contractor will provide personnel familiar with all of the procedures (including payment procedures), instructions, and technical requirements of this contract.

All work shall be done in accordance with the best modern construction practices and under the supervision of capable superintendents, supervisors, and workers fully experienced in their field of work.

SCOPE

The project is located on the north shore of Lake Union, Seattle, Washington. The project involves dredging approximately 2.5 acres of sediment to a depth of 2 feet that has been impacted by sandblast grit at the Northlake Shipyard and State Owned Aquatic Land. The general location of the grit is immediately beneath and adjacent to the two existing dry docks as identified on the plans. Sandblast grit contains elevated concentrations of metals.

Debris, including two large vessels, will also be removed. The dredge prism volume is estimated at 8,000 cubic yards, with an allowable overdredge amount equal to 2,000 cy, or a uniform 6-inch depth. The most recent bathymetric survey at the site indicates that a steep lake bottom near the bank gradually flattens to an elevation of approximately - 20 feet mean lower low water (MLLW) - U.S. Army Corps of Engineers (USACE) - Locks datum. The dredged sediment will be dewatered on a barge and transported to an off-site, upland disposal facility. Following dredging, 6 inches of clean sand will be placed over the dredged area.

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CERTIFICATION OF TECHNICAL SPECIFICATIONS

Technical Specifications in this document were prepared by the design professisted below for Divisions 35. Division 00 and 01 are not technical specification not require certification.	
The stamp of the professional engineer is presented below.	
Christopher R. Poulsen, PE	

END OF SECTION

PART 1 - PRE-BID REQUIREMENTS

- A. Carefully examine all project documents.
- B. Visit the work site and determine quantities.
- C. Become fully informed of all existing conditions and limitations.
- D. Be registered by the Department of Labor & Industries (L&I) Division of Building and Construction Safety Inspection and conform to the *Contractor's License Act*. Place the license number in the space provided on the *Bid Proposal Form*.
- E. Include in the proposal a sum sufficient to cover all items required by Project Documents including applicable federal, state, and local taxes (except State Retail Sales Tax), insurance, license, State Prevailing Wage or Davis Bacon Rates, L&I filing fees, and all other fees that may be necessary to complete the work.
- F. Before award of a public works contract, the bidder must meet the following responsibility criteria to be considered a responsible bidder and qualified to be awarded a public works project. The bidder must:
 - 1. At time of bid submittal, have a certificate of registration in compliance with chapter 18.27 RCW;
 - 2. Have a current state unified business identifier number (UBI):
 - 3. If applicable, have industrial insurance coverage for the bidder's employees working in Washington as required in *Title 51 RCW*; an employment security department number as required in *Title 50 RCW*; and a state excise tax registration number as required in *Title 82 RCW*; and
 - 4. Not be disqualified from bidding on any public works contract under *RCW* 39.06.010 or 39.12.065(3).

PART 2 - PREPARATION AND SUBMITTAL OF BIDS

2.01 REQUIRED BID DOCUMENTS

- A. Bid Proposal Form. The bid form must be signed and any addendum/addenda signed or bid will be considered non-responsive.
- B. Statement of Bidder's Qualifications

- C. Subcontractor List For Project Bids Greater Than \$100,000. (See SECTION 00 80 1.18 of the SUPPLEMENTAL CONDITIONS)
- D. Bid Bond. (See SECTION 00 80 1.15 of the SUPPLEMENTAL CONDITIONS)

2.02 BID FORMAT

- A. Bids and bid modifications will be submitted in sealed envelopes or packages (1) addressed to the office specified in the solicitation; and (2) showing the time specified for receipt, the solicitation number, and the name and address of the bidder.
- B. Telegraphic, facsimile, telephone, or oral bids will not be considered.

NOTE: Allow one (1) extra day for timely mail delivery to the Olympia area.

2.03 BID OPENING

- A. Sealed bids for this project will be received by the Toxics Cleanup Program Contract Officer or his representative at the Toxics Cleanup Headquarters Office located at 300 Desmond Drive in Lacey, Washington 98503 until the time and date indicated on the Bid Proposal Form and will be publicly opened and read.
- B. Late bids, for whatever cause, are disqualified.

2.04 PERIOD OF ACCEPTANCE

All bid proposals may be held 30 calendar days from the date of bid opening. At the end of this period, the three (3) lowest bids may be retained for 15 additional days, or as may be further extended by the State with the approval of the bidding companies.

2.05 STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder will provide a Statement of Bidder's Qualifications, which includes a statement of Bidder's Work experience and general ability to perform the Work contemplated. Ecology will have the right to make such investigations as it deems necessary to determine the ability of the Bidder to furnish the Work as described in the Contract Documents, and the Bidder will furnish to Ecology all such information and data for this purpose. Each Bidder will be skilled and regularly engaged in the general class or type of Work called for in the Contract Documents. Proposed Subcontractors

will be competent, experienced, and thoroughly familiar with aspects of the Work that they will perform. Ecology reserves the right to reject any bid if the evidence submitted by, or the investigation of, such Bidder fails to satisfy Ecology that such Bidder and its proposed Subcontractors are properly qualified to carry out the obligations of the Contract and to furnish the Work described in the Contract Documents at the required standard(s) of quality.

PART 3 - BID EVALUATION

3.01 BASIS OF AWARD

Award will be made to the lowest responsive and responsible bidder based upon any or all of the bid priced items listed on the Bid Proposal Form. The State reserves the right to award the contract to the lowest (single) bidder based upon any or all of the bid items listed as necessary to restrict contract payment to the funds available. Moreover, the State reserves the right to further negotiate the bid amounts with the low bidder as necessary to restrict the contract payment to the funds available.

In determining a "Responsive and Responsible Bidder," the following qualifications will be considered by the Department of Ecology:

- a. The ability, capacity, and skill of the bidder to perform the service required with the specified time.
- b. The character, integrity, reputation, judgment experience, and efficiency of the bidder.
- c. The quality of performance of previous contracts or services.
- d. The previous and existing compliance by the bidder with laws and ordinances relating to previous contracts and to the bidders employment practices.
- e. The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the services.
- f. The quality, availability, and adaptability of the supplies, or contractual services, to the particular use required.
- g. Such other information as may be secured by the Department of Ecology having bearing on the decision to recommend the award.

3.02 REJECTION OF BID

Ecology reserves the right to reject any and/or all bids. It also reserves the right to waive any informality in connection with said bids. If the bid includes a supplemental schedule of predetermined unit prices for labor and material, or other items for the purpose of establishing a cost basis on unforeseen contract changes, Ecology reserves the right to reject, without impairing the balance of the bid, any or all such

predetermined unit prices in such supplement which Ecology may consider excessive or unreasonable.

3.03 PERFORMANCE AND PAYMENT BOND REQUIRED.

(See SECTION 00 72 02.04 of the GENERAL CONDITIONS)

3.04 INTERPRETATIONS AND PRELIMINARY PROJECT SCHEDULE

Questions regarding the contract specifications should be addressed to Randy Newman (e-mail: randy.newman@ecy.wa.gov) in writing. Oral explanations or instructions given before the award of a contract will not be binding. Questions that result in changes to the scope, specifications or contract obligations will be answered by addendum. Questions received less than forty-eight (48) hours before the bid opening time and date cannot be answered. Questions received after the end of the question and answer period may or may not be answered. All addenda issued during the time of bidding will be incorporated into the contract. The State will not be responsible for any oral interpretations.

Preliminary Project Schedule

Issue Invitation For Bids	11/21/12
Question and answer period	11/21/12-12/5/12
Pre-bid meeting on site	12/4/12
Issue addendum to specifications (if applicable)	12/1112
Bids due	12/20/12
Favorable bid letter	12/27/12
Contract signed – Notice to Proceed	1/7/13
Contractor mobilized	1/14/13
Substantial completion	2/8/13
Final completion	2/15/13

Ecology reserves the right to revise the above schedule.

3.05 MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE)
PARTICIPATION

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

A. In support of the State's economic and environmental goals, although not an award factor (unless otherwise specified herein), Bidders are encouraged to consider the following in responding to this solicitation:

- Support for a diverse supplier pool, including small, Minority and Women-Owned Business Enterprises (MWBE), Voluntary numerical WBE goals 10% MBE 10% have been established for this solicitation. Achievement of these goals is encouraged whether directly or through subcontractors. Bidders may contact the Office of Minority and Women's Business Enterprise to obtain information on certified firms or to become certified.
- 2. Use of environmentally preferable goods and services to include post consumer waste and recycled content
- 3. Products made or grown in Washington
- B. In accordance with the legislative findings and policies set forth in RCW 39.19, the State of Washington encourages participation in all of its Contracts by Minority and Woman Owned Business Enterprise (MWBE) firms certified by the Office of Minority and Women's Business Enterprises (OMWBE). While the state does not give preferential treatment, it does seek equitable representation from the minority and women's business community. In addition, the state welcomes participation by self-identified minority and woman owned firms and strongly encourages such firms to become certified by OMWBE.
- C. Participation may be either on a direct basis in response to this Solicitation or as a Subcontractor to a Contractor. However, unless required by federal statutes, regulations, grants, or Contract terms referenced in the original Solicitation, no preference will be included in the evaluation of Bids, no minimum level of MWBE participation shall be required as condition for receiving an award, and Bids will not be evaluated, rejected or considered non-responsive on that basis.
- D. Any affirmative action requirements set forth in federal regulations or statutes included or referenced in the original Solicitation will apply. Bidders are encouraged to contact Office of Minority and Woman Owned Business Enterprise (OMWBE) to obtain information on becoming a certified firm as set forth in Washington Administrative Code (WAC) Chapters 326-02 and 326-20; or to obtain information on other certified firms for potential sub-contracting arrangements. Nothing in this section is intended to prevent or discourage Bidders from inviting others from participation from non-MWBE firms as well as MWBE firms. Prior to performance, Awarded Bidder who is a MWBE or intends to use MWBE Subcontractors is encouraged to identify the participating firm(s) to OSP.

3.06 ADDITIVE OR DEDUCTIVE BID ITEMS

The low bidder for purposes of award will be the conforming responsible bidder offering the low aggregate amount for the first or base bid item, plus or minus those additive or deductive bid items providing the most features of the work within the funds determined by Ecology to be available. After determination of the low bidder as stated, award in the

best interests of Ecology may be made to that bidder on its base bid and any combination of its additive or deductive bid items for which funds are determined to be available at the time of the award, provided that award on such combination of bid items does not exceed the amount offered by any other conforming responsible bidder for the same combination of bid items.

PART 4 - AWARD OF CONTRACT

The successful bidder will be required to execute said contract, furnish insurance certificate, payment and performance bond satisfactory to Ecology within seven (7) days after receiving properly prepared contract documents from Ecology.

The agency will retain five percent (5%) of the contract amount for a period of thirty (30) days after date of final acceptance, or until receipt of all necessary releases from the Department of Revenue and the Department of Labor & Industries and settlement of any liens filed, whichever is later.

END OF INSTRUCTIONS TO BIDDERS

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS Section 00 31 24 - Environmental Assessment Information

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. Ecology does not expect materials excavated during the Work to be designated as Dangerous Waste under state regulations (Chapter 173-303 WAC). However, contingency work could include management, handling, and disposal of Dangerous Wastes. Dredged materials shall be characterized for disposal as early as possible to determine if material is Dangerous Waste. If Ecology or Ecology's Representative identifies excavated material as Dangerous Waste, the Contractor shall handle, manage, and dispose of Dangerous Waste in accordance with requirements of Chapter 173-303 WAC. If excavated material is identified as a dangerous waste, Ecology may choose to suspend work. The contractor will properly dispose of the excavated material.

1.02 SITE CONDITIONS

Northlake Shipyard is a working shipyard located at 1441 N. Northlake Way in the Seattle, Washington. The area being dredged comprises most of the SE ½ of section 18 of Township 25N Range 4E, and is located near 47.64640 N latitude 122.34163 W longitude. The Tax Parcel Numbers for this area are 4088804620, 40888046224, 088804643, and 182504HYDR. Part of the area to be dredged is owned by Northlake Shipyard and Part by the Department of Natural Resources (DNR). No upland areas are involved.

The site is contaminated primarily as a result of uncontrolled sandblasting by the previous owners, United Marine International and Marine Power and Equipment. In 1994 the current owner, Northlake Shipyard, Inc. entered into a Prospective Purchaser Consent Decree (PPCD) prior to purchasing the Site through bankruptcy proceedings from United Marine International. Under the terms of the PPCD Northlake Shipyard created a trust fund solely for the purpose of cleaning up the sandblast grit. Ecology intends to spend this money to dredge the grit later this year, as soon as fish passage concerns allow.

Metals detected in sediment samples near the Site included antimony up to 420 parts per million (ppm), arsenic up to 2,920 ppm, cadmium up to 9 ppm, copper up to 4,180 ppm, lead up to 2,550 ppm, mercury up to 3 ppm, nickel up to 131 ppm, silver up to 8 ppm and zinc up to 9,440 ppm. Total PAH concentrations in surface sediments ranged from 9 parts per million (ppm) to 3,749 ppm.

Northlake Shipyards has two operating steel drydocks, as follows:

DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS Section 00 31 24 - Environmental Assessment Information

Operation	Tonnage	Length	Width	Cycles/yr
Drydock #2	1200 Tons	200 Feet	44 Feet	25-35 per year
Drydock #9	1900 Tons	288 Feet	44 Feet	25-35 per year

END OF SECTION

PART 1 - STATEMENT OF BIDDER'S QUALIFICATIONS

1.01 STATEMENT OF BIDDER'S QUALIFICATIONS Name of Bidder: Address: Number of years the Bidder has been engaged in the business under the present firm name indicated: Gross dollar amount of work completed: Gross dollar amount of work under Contract not completed: Type of work generally performed by Bidder: List of five major projects of a similar nature that have been completed by the Bidder within the last ten years and the gross dollar amount of each project: List of five major pieces of equipment that are anticipated to be used on this project by the Bidder and note which items are owned by the Bidder and which are to be leased or rented from others: Bank References: How many general superintendents or other responsible employees in a supervisory position do you have at this time and how long have they been with the Bidder?

Have you changed bonding companies within the last three years?
If so, why? (Optional):
For what reason?
List case title and cause number of each such lawsuit, as well as the court in which each was or is being filed:
Disposition of case, if resolved:
Washington State Department of Labor and Industries Workmen's Compensation
Account No.:
Washington State Department of Licenses Contractor's Registration No.:

PART 2 - BID FORM

BIDDER'S	NAME:									
PROJECT	TITLE:	NORTHL	AKE	SHIPYAR	D SAN	DBLAST	GRIT	INTERIM	REMOV	/AL
ACTION	•						,			

The undersigned bidder declares that they have read the specifications, understand the conditions, have examined the site, and have determined for themselves all situations affecting the work herein bid upon. Bidder proposes and agrees, if this proposal is accepted, to provide at bidder's own expense, all labor, machinery, tools, materials, etc., including all work incidental to, or described or implied as incidental to such items, according to the Contract Documents of the Department of Ecology, and that the bidder will complete the work within the time stated, and that the bidder will accept in full payment therefore the lump sum price(s) set forth below:

TABLE 1
SCHEDULE OF LUMP SUM/KNOWN QUANTITY PRICES

BID ITEM NO.	BID ITEM DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL
1	Mobilization and	LS	1	N/A	
	Demobilization				
2	Project Administration	LS	1	N/A	
3	Field Engineering	LS	1	N/A	
4	Temporary Facilities and Control	LS	1	Ņ/A	
5	Health and Safety	LS	1	N/A	
6	Debris Removal and Disposal	LS	1	N/A	
7	Dredging	LS	1	N/A	
8	Off Site Disposal	ton	15,000		
9	Thin Layer Placement	LS	1	N/A	
10	Project Close-Out	LS	1	N/A	

For additional description of bid items, refer to Division 01, Section 01 20 00- Price and Payment Procedures.

TOTAL	

Washington State Sales Tax. Do <u>not</u> include Washington State Sales Tax in your bid total. Washington State Sales Tax will be added at the time a contract is awarded.

Evaluation of Bids. The evaluation of bids and determination of the low responsive bid will be based on the Not to Exceed Bid Total in the above table in combination with the Unit Prices provided in the table below.

Schedule of Unit Prices: The following unit prices are proposed to apply only in the event of additions to or deletions from the work required and ordered in the above schedule. All prices will include complete installation without Washington State Sales Tax. The bidder will propose a price for each item; failure to propose a price for each item may render the bid non-responsive. Ecology reserves the right to accept or reject the unit prices proposed.

Item No.	Item of Work	MOU	Unit Price
U1	Overdredge	Cubic yard	
U2	Off-site disposal	Ton	
U3	Thin Layer Placement	Cubic yard	

Contract Time. Ecology expects to Award this Contract on January 3, 2013. The Contract, in its entirety, will be Substantially Complete on or before February 8, 2013. Final Completion will be issued within Seven (7) days thereafter.

Bid Security. A certified check, cashiers check, or other obligation of a bank, or a bid security bond, for at least 5% of the total bid without sales tax, accompanies this bid.

Liquidated Damages. The Liquidated Damages for failure to achieve Substantial Completion as required will be \$250 per day, and for failure to achieve Final Completion within One Hundred and Twenty (120) days thereafter will be 10% of the Liquidated Damages daily rate for failure to achieve Substantial Completion. The damages stipulated above are to be deducted as Liquidated Damages from any monies due or to become due. It is agreed that liquidated damages as specified herein will be levied for each and every calendar day by which the completion of the work is delayed beyond the time fixed for completion or extension thereof.

Principal Subcontractors. In accordance with the Instructions to Bidders, Section 00 21 00-2.05, and as additionally requested here, the bidder will list below the name of each subcontractor to whom the bidder proposes to subcontract portions of Landscaping, Irrigation, Plumbing, Electrical, and others as the Contractor determines or name itself for the work. Indicate NA when no subcontracting for work is involved.

Work to Be Performed	Name of Firm

Addenda. Bidder acknowledges review of all Addenda by signing.

Noncollusion. The undersigned declares under penalty of perjury that the bid submitted is a genuine and not a sham or collusive bid, or made in the interest or on behalf of any person or firm not therein named. The undersigned further says that the said bidder has not directly or indirectly induced or solicited any bidder on the above work or supplies to put in a sham bid, or any other person or corporation to refrain from bidding; and that said bidder has not in any manner sought by collusion to secure to the bidder an advantage over any other bidder or bidders.

,
Date
Title
Address
No. Date of Issue Expiration Date
Business Identifier (UBI) No.:

END OF SECTION

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10.09 Antitrust Assignment

PART 1 - GENERAL CONDITIONS

1.01 DEFINITIONS

- A. <u>Application for Payment:</u> 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 Ecology or A/E may require.
- B. <u>Architect, Engineer, or A/E:</u> A person or entity lawfully entitled to practice architecture or engineering, representing Ecology within the limits of its delegated authority.
- C. <u>Change Order</u>: A written instrument signed by Ecology or Ecology's Representative 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. <u>Claim</u>: Contractor's exclusive remedy for resolving disputes with Ecology regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in SECTION 00 72 08 CLAIMS AND DISPUTE RESOLUTION.
- E. <u>Contract Documents</u>: The Advertisement for Bids, Instructions to Bidders, completed Form of Proposal, GENERAL CONDITIONS, Modifications to the GENERAL CONDITIONS, SUPPLEMENTAL CONDITIONS, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- F. <u>Contract Sum</u>: The total amount payable by Ecology to Contractor for performance of the Work in accordance with the Contract Documents.
- G. <u>Contract Time</u>: The number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- H. <u>Contractor</u>: The person or entity who has agreed with Ecology to perform the Work in accordance with the Contract Documents.
- I. <u>Drawings</u>: 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.

- J. <u>Final Acceptance</u>: The written acceptance issued to Contractor by Ecology after Contractor has completed the requirements of the Contract Documents.
- K. <u>Final Completion</u>: The Work is fully and finally completed in accordance with the Contract Documents.
- L. <u>Force Majeure</u>: Those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in 00 72 03.05A.
- M. <u>Notice</u>: A written notice that 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.
- N. <u>Notice to Proceed</u>: A notice from Ecology to Contractor that defines the date on which the Contract Time begins to run.
- O. <u>Ecology or Ecology's Representative</u>: 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.
- P. <u>Person</u>: A corporation, partnership, business association of any kind, trust, company, or individual.
- Q. <u>Prior Occupancy</u>: Ecology or property owner use of all or parts of the Project before Substantial Completion.
- R. <u>Progress Schedule</u>: A schedule of the Work, in a form satisfactory to Ecology or Ecology's Representative, as further set forth in SECTION 00 72 03.02.
- S. <u>Project</u>: 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 Ecology or by separate contractors.
- T. <u>Project Manual:</u> The volume usually assembled for the Work, which may include documents such as the bidding requirements, sample forms, and other Contract Documents.
- U. <u>Project Record</u>: The separate set of Drawings and Specifications as further set forth in SECTION 00 72 04.02A

- V. <u>Schedule of Values</u>: A written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Ecology.
- W. <u>Specifications</u>: 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.
- X. <u>Subcontract:</u> A contract entered between the Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for, or in connection with, the Work.
- Y. <u>Subcontractor</u>: Any person other than the Contractor who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- Z. <u>Substantial Completion</u>: That stage in the progress of the Work where Ecology has full and unrestricted use and benefit of the facilities for the purposes intended, as more fully set forth in *SECTION 00 72 06.07*.
- AA. <u>Work</u>: 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 will 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. SUPPLEMENTAL CONDITIONS and ADDENDUM
- Modifications to the GENERAL CONDITIONS
- 4. GENERAL CONDITIONS
- 5. <u>Specifications</u>: Provisions in *DIVISION 01* will take precedence over provision of any subsequent divisions.
- 6. <u>Drawings</u>: In case of conflict within the Drawings, large-scale drawings will take precedence over small-scale drawings.

- 7. Signed and Completed Bid Form
- 8. Instruction to Bidders
- 9. Advertisement for Bids

1.03 EXECUTION AND INTENT

Contractor makes the following representations to Ecology or Ecology's Representative:

- A. 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.
- B. 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, labor, materials, equipment, goods, supplies, 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.
- C. 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.
- D. Contractor is able to furnish the plants, 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/BONDS

2.01 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of the Work, Contractor will obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Ecology that such insurance has been procured. Review of the Contractor's insurance by Ecology will not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this section will be licensed to do business under *Chapter 48 RCW* or comply with the *Surplus Lines Law* of the State of Washington. Contractor will include in its bid the cost of all insurance and bonds required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents will be rated "A + VII" or better by A.M. Best and ratings will be indicated on the insurance certificates.

- A. Contractor will maintain the following insurance coverage during the Work and for one year after Final Acceptance. Contractor will also maintain the following insurance coverage during the performance of any corrective Work required by SECTION 00 72 05.17.
 - 1. General liability on the *ISO 1986 New Occurrence Form* or its equivalent, which will include:
 - a. Completed operations/products liability
 - b. Explosion, collapse, and underground
 - c. Employer's liability coverage
 - 2. Automobile liability
- B. Contractor will comply with the Washington State Industrial Insurance Act, and, if applicable, the Federal Longshoremen's and Harbor Workers' Act, and the Jones Act.
- C. All insurance coverages will 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. All insurance coverages will be endorsed to include Ecology as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates will evidence Ecology as an additional insured.

2.02 COVERAGE LIMITS

The coverage limits will be as follows:

- A. Limits of Liability will 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

- A. Prior to the commencement of the Work, Contractor will furnish to Ecology a completed Certificate of Insurance coverage.
- B. All insurance certificates will name Ecology's Project number and Project title.
- C. All insurance certificates will specifically require 45 days prior notice to Ecology of cancellation or any material change, except 30 days for surplus line insurance.

2.04 PAYMENT AND PERFORMANCE BONDS

Payment and performance bonds for 100 percent of the Contract Sum, including all Change Orders and state sales tax, will be furnished for the Work. No payment or performance bond is required if the Contract Sum is \$35,000 or less and Contractor agrees that Ecology may, in lieu of the bond, retain 50 percent of the Contract Sum for the period allowed by *RCW* 39.08.010.

2.05 ADDITIONAL BOND SECURITY

Contractor will promptly furnish additional security required to protect Ecology and persons supplying labor or materials required by the Contract Documents if:

- A. Ecology has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if requested by Ecology.

2.06 CONTRACTOR'S RISK

- A. Contractor will purchase and maintain property insurance for the Contract Sum including all Change Orders for the Work on a replacement cost basis until Final Completion. The insurance will cover the interest of Ecology, Contractor, and any Subcontractors, as their interests may appear.
- B. Contractor property insurance will 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 will cover reasonable compensation for A/Es' services and expenses required as a result of an insured loss.
- C. Ecology and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/Es' subconsultants, separate contractors described in SECTION 00 72 05.20, 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 Ecology as fiduciary. The policies will provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation will 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 will 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. Contractor will, within seven (7) days after issuance of the *Notice to Proceed*, submit a preliminary Progress Schedule. The Progress Schedule will 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. The Progress Schedule will be in the form of a bar chart, or a critical path method analysis, as specified by Ecology or Ecology's Representative. The preliminary Progress Schedule may be general, showing the major portions of the Work, with more specific Progress Schedules in subsequent months as directed by Ecology or Ecology's Representative.
- C. Ecology or Ecology's Representative will return comments on the preliminary Progress Schedule to Contractor within 7 days of receipt. Review by Ecology or Ecology's Representative 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 will revise and resubmit its schedule, as necessary. Ecology may withhold progress payments until a Progress Schedule has been submitted that meets the requirements of this section.
- D. Contractor will utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Ecology or Ecology's Representative, Contractor will submit an updated Progress Schedule at its own expense to Ecology or Ecology's Representative indicating actual progress. If, in the opinion of Ecology or Ecology's Representative, Contractor is not in conformance with the Progress Schedule, the Contractor will take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, or revise the Progress Schedule to reconcile with the actual progress of the Work.
- E. Contractor will promptly notify Ecology or Ecology's Representative in writing of any actual or anticipated event that is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor will 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 ECOLOGY'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

- A. Ecology or Ecology's Representative may, at its sole discretion, order the 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. Upon receipt of a written notice suspending the Work, Contractor will 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 will have agreed, Ecology or Ecology's Representative will 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 SECTION 00 72 09.00 TERMINATION OF THE WORK.
 - C. If a written notice suspending the Work is canceled or the period of the notice or any extension thereof expires, Contractor will resume the Work.
 - D. Contractor will 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 SECTION 00 72 07.00 -CHANGES.

3.04 ECOLOGY'S RIGHT TO STOP THE WORK FOR CAUSE

- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Ecology or Ecology's Representative may order the Contractor in writing to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. Contractor will 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 Ecology or Ecology's Representative based upon such failure.

3.05 DELAY

- A. Any delay in or failure of performance by Ecology or Ecology's Representative or Contractor, other than the payment of money, will 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 that could not have been reasonably anticipated
 - 7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Ecology or Ecology's Representative was available.
- B. Contractor will 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 00 72 7.03*. Contractor will not be entitled to an adjustment in the Contract Sum resulting from an act of *force majeure*.
- C. Contractor will 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 Ecology or Ecology's Representative, provided the Contractor makes a request according to SECTIONS 00 72 7.02 and 00 72 7.03.
- D. Contractor will 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. To the extent any delay or failure of performance was concurrently caused by Ecology or Ecology's Representative and Contractor, Contractor will 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 00 72 7.03, but will not be entitled to an adjustment in Contract Sum.
- F. Contractor will 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

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 will immediately give notice, including all relevant information, to Ecology or Ecology's Representative.

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 will 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:

- Timely performance and completion of the Work is essential to Ecology and time limits stated in the Contract Documents are of the essence. Ecology 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. 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 Ecology because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages Ecology would in such event sustain. This amount will be construed as the actual amount of damages sustained by Ecology, and may be retained by Ecology and deducted from periodic payments to the Contractor.

3. Assessment of liquidated damages will not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

B. Actual Damages:

1. 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. Ecology may offset these costs against any payment due Contractor.

PART 4 - SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor will 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. The Contract Documents are complementary. What is required by one part of the Contract Documents will 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, will be of like effect as if shown or mentioned in both.
- C. Contractor will carefully study and compare the Contract Documents with each other and with information furnished by Ecology or Ecology's Representative. If during the performance of the Work Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents,

it will promptly and before proceeding with the Work affected thereby report such conflict, error, inconsistency, or omission to A/E in writing.

- D. Contractor will do no Work without applicable Drawings, Specifications, or written modifications, or shop drawings where required, unless instructed to do so in writing by Ecology or Ecology's Representative. If Contractor performs any construction activity, and it knows or should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor will be responsible for the performance and will bear the cost for its correction.
- E. Contractor will provide any work or materials the provision of which is clearly implied in the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents will be referred to the A/E.

4.02 PROJECT RECORD

- A. Contractor will 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. This separate set of Drawings and Specifications will be the "Project Record."
- B. The Project Record will be maintained on the project site throughout the construction and will be clearly labeled "PROJECT RECORD." The Project Record will be updated at least weekly noting all changes and will be available to Ecology or Ecology's Representative at all times.
- C. Contractor will submit the completed and finalized Project Record to A/E prior to Final Acceptance.

4.03 SHOP DRAWINGS

A. "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 will 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 will submit all samples at its own expense. Ecology or Ecology's Representative may duplicate, use, and disclose shop drawings provided in accordance with the Contract Documents.

- В. Contractor will coordinate all shop drawings and review them for accuracy, completeness, and compliance with the Contract Documents and will indicate its approval thereon as evidence of such coordination and review. Where required by law, shop drawings will be stamped by an appropriate professional licensed by the State of Washington. Shop drawings submitted to A/E without evidence of Contractor's approval will be returned for resubmission. Contractor will 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 Ecology or Ecology's Representative or separate contractors. Contractor's submittal schedule will allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the shop drawings. Contractor will 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. Ecology or Ecology's Representative and A/E will respond to shop drawing submittals with reasonable promptness. Any Work by Contractor will be in accordance with reviewed shop drawings. Submittals made by Contractor that are not required by the Contract Documents may be returned without action.
- C. Approval or other appropriate action with regard to shop drawings by Ecology or Ecology's Representative or A/E will 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 Ecology or Ecology's Representative or A/E will 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 will be responsible for all costs of correction.

- D. If shop drawings show variations from the requirements of the Contract Documents, Contractor will 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 will be recorded on the Project Record.
- E. Unless otherwise provided in *DIVISION 01*, Contractor will submit to A/E for approval 5 copies of all shop drawings. Unless otherwise indicated, 3 sets of all shop drawings will be retained by A/E, and 2 sets will be returned to Contractor.

4.04 ORGANIZATION OF SPECIFICATIONS

Specifications are prepared in sections that conform generally with trade practices. These sections are for Ecology and Contractor convenience and will 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

- A. 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 will own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E will be deemed the author of them and will, along with any rights of Ecology, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, will be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. 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 outside the scope of the Work without the specific written consent of Ecology or Ecology's Representative 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.
- Contractor and all Subcontractors grant a nonexclusive license to C. Ecology or Ecology's Representative, 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 Ecology or Ecology's Representative 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 Ecology and Ecology's Representative pursuant to the indemnity provisions in SECTION 00 72 5.23 from any violations of copyright or other intellectual property rights arising out of Ecology or Ecology's Representative use of the shop drawings hereunder, or to secure for Ecology or Ecology's Representative, at Contractor's own cost, licenses in conformity with this section.
- D. The shop drawings and other submittals prepared by Contractor, Subcontractors, 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 on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Ecology or Ecology's Representative. 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

A. Contractor will supervise and direct the Work, using its best skill and attention, and will perform the Work in a skillful manner. Contractor will 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 will disclose its means and methods of construction when requested by Ecology or Ecology's Representative.

- B. Performance of the Work will be directly supervised by a competent superintendent who is satisfactory to Ecology or Ecology's Representative, and has authority to act for Contractor. The superintendent will not be changed without the prior written consent of Ecology or Ecology's Representative.
- C. Contractor will be responsible to Ecology or Ecology's Representative for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor will enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor will not permit employment of persons not skilled in tasks assigned to them. Contractor's employees will at all time conduct business in a manner that assures fair, equal, and nondiscriminatory treatment of all persons. Ecology or Ecology's Representative may, by written notice, request Contractor to remove from the Work or Project site any employee Ecology reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor will keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed shop drawings, and permits and permit drawings.
- F. Contractor will ensure that its owner(s) and employees, and those of its Subcontractors, comply with the *Executive Conflict of Interest Act, RCW 42.18*, 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 will 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. Unless otherwise provided in the Contract Documents, Contractor will 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 will be delivered to Ecology or Ecology's Representative.
- B. Ecology or Ecology's Representative will apply for and secure State Environmental Policy Act (SEPA) and Joint Aquatic Resources Permit Application/Biological Evaluation (JARPA/BE) permitting.

- C. 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 will be adjusted by Change Order.
- D. Contractor will 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

Contractor is responsible for, and will pay, all royalties and license fees. Contractor will defend, indemnify, and hold Ecology and Ecology's Representative 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 will 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 will promptly notify Ecology or Ecology's Representative of such potential infringement.

5.04 PREVAILING WAGES

- A. Contractor will 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 (L&I). The schedule of prevailing wage rates for the locality or localities of the Work, as determined by the Industrial Statistician of L&I, is by reference made a part of the Contract Documents as though fully set forth herein.
- B. Before commencing the Work, Contractor will file a statement under oath with Ecology or Ecology's Representative and with the Director of L&I 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 will not be less than the prevailing wage rate.
- C. Disputes regarding prevailing wage rates will be referred for arbitration to the Director of L&I. The arbitration decision will be final and

conclusive and binding on all parties involved in the dispute as provided for by *RCW* 39.12.060.

- D. Each Application for Payment submitted by Contractor will state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) will be posted on the job site with the address and telephone number of the Industrial Statistician of L&I where a complaint or inquiry concerning prevailing wages may be made.
- E. In compliance with CHAPTER 296-127 WAC, Contractor will pay to L&I the currently established fee for each statement of intent and/or affidavit of wages paid submitted to L&I for certification.

5.05 HOURS OF LABOR

- A. Contractor will 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 will be permitted or required to work more than 8 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 8 hours of each calendar day will be not less than 1½ times the rate allowed for this same amount of time during 8 hours of service.
- B. 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 10 hours in a calendar day. No such agreement may provide that the employees work 10-hour days for more than 4 calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of *RCW* 49.28 will not apply to the hours, up to 40 hours per week, worked pursuant to any such agreement.

5.06 NONDISCRIMINATION

A. 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. Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, 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. Contractor will, 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, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability.
- Contractor will 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. Contractor will permit access to its books, records, and accounts, and to its premises by Ecology or Ecology's Representative, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
- 5. Contractor will include the provisions of this section in every Subcontract.

5.07 SAFETY PRECAUTIONS

- A. Contractor will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- B. In carrying out its responsibilities according to the Contract Documents, Contractor will 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 onsite or stored offsite; and prevent damage to other property at the site or adjacent thereto. Contractor will 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; will erect and maintain all necessary safeguards for such safety and protection; and will notify owners of adjacent property and utilities when prosecution of the Work may affect them.
- C. Contractor will 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 will immediately report any such incident to Ecology or Ecology's Representative. Ecology or Ecology's Representative will, at all times, have a right of access to all records of exposure.
- D. Contractor will 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. <u>Information</u>: At a minimum, Contractor will inform persons working on the Project site of:
 - a. The requirements of CHAPTER 296-62 WAC, General Occupational Health Standards and as defined in 01 35 29
 Health Safety and Safety and Emergency Response Procedures.
 - Any operations in their work area where hazardous chemicals are present
 - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and Material Safety Data Sheets (MSDS) required by CHAPTER 296-62 WAC.

- 2. <u>Training</u>: At a minimum, Contractor will provide training for persons working on the project site, which includes:
 - a. 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. The physical and health hazards of the chemicals in the work area.
 - c. 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.
 - d. The details of the hazard communication program developed by Contractor or its Subcontractors, including an explanation of the labeling system and the MSDS and how employees can obtain and use the appropriate hazard information.
- E. Contractor's responsibility for hazardous, toxic, or harmful substances will include the following duties:
 - 1. Contractor will 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 will any such hazardous substance be stored more than 90 days on the Project site.
 - 2. Contractor will promptly notify Ecology or Ecology's Representative of all spills or releases of any hazardous substances that are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor will promptly notify Ecology or Ecology's Representative 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. All Work will be performed with due regard for the safety of the public. Contractor will perform the Work to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic will be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours will be borne by Contractor.
- G. 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 will so act if so authorized or instructed.
- H. Nothing provided in this section will be construed as imposing any duty upon Ecology or Ecology's Representative 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. Contractor will confine all operations, including storage of materials, to Ecology or Ecology's Representative-approved areas.
- B. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Ecology or Ecology's Representative and without expense to Ecology or Ecology's Representative. The temporary buildings and utilities will remain the property of Contractor and will be removed by Contractor at its expense upon completion of the Work.
- C. Contractor will use only established roadways or temporary roadways authorized by Ecology or Ecology's Representative. When materials are transported in prosecuting the Work, vehicles will 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 control of all materials or facility components to be demolished or removed from the Project site by Contractor will immediately vest in Contractor upon severance of the component from

the facility or severance of the material from the Project site. Contractor will be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor will provide Ecology or Ecology's Representative with a copy of all manifests and receipts evidencing proper disposal when required by Ecology or Ecology's Representative or applicable law.

- E. Contractor will 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 Ecology or Ecology's Representative. When Contractor uses any portion of the Project site as a shop, Contractor will be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor will 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 will repair or replace without cost to Ecology or Ecology's Representative any damage or loss that may occur, except damages or loss caused by the acts or omissions of Ecology or Ecology's Representative. Contractor will 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 will repair or replace without cost to Ecology 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

"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 will provide notice of the scheduled commencement of excavation to all owners of underground facilities and utilities through locator services.

5.10 UNFORESEEN PHYSICAL CONDITIONS

A. 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 will give written notice to Ecology or Ecology's Representative promptly before conditions are disturbed and in no event later than seven (7) days after the first observance of the conditions.

B. 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 thereof as provided in SECTION 00 72 07.00 - CHANGES.

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

- A. Contractor will 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 will 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, Ecology or Ecology's Representative may have the necessary work performed and charge the cost to Contractor.
- B. Contractor will only remove trees when specifically authorized to do so, and will protect vegetation that will remain in place.

5.12 LAYOUT OF WORK

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

5.13 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work will 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, will be regarded as establishing a standard quality and will 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 will 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 reasonable implied by, the Contract Documents. Contractor will not endanger any work by cutting, excavating, or otherwise altering the Work and will not cut or alter the work of any other contractor unless approved in advance by Ecology or Ecology's Representative.
- C. 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 Ecology or Ecology's Representative.

5.15 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Unless otherwise provided in the Contract Documents, the utility service consumed will be charged to or paid for by Contractor at prevailing rates. Contractor will carefully conserve any utilities furnished.
- B. Contractor will, at its expense and in a skillful manner satisfactory to Ecology or Ecology's Representative, 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 will remove all temporary connections, distribution lines, meters, and associated equipment and materials.

5.16 TESTS AND INSPECTION

A. Contractor will 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 will be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor will arrange for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Ecology or Ecology's Representative, or with the appropriate public authority, and will bear all related costs of tests, inspections, and approvals. Contractor will give Ecology or Ecology's Representative timely notice of when and where tests and inspections are to be made. Contractor will maintain complete inspection records and make them available to Ecology or Ecology's Representative.

- B. Ecology or Ecology's Representative 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. Ecology or Ecology's Representative will 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 Ecology or Ecology's Representative, such Ecology or Ecology's Representative inspection and tests are for the sole benefit of Ecology 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
 - 5. Impair Ecology's right to reject defective or nonconforming items or to avail itself of any other remedy to which it may be entitled.
- C. Neither observations by an inspector retained by Ecology or Ecology's Representative, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, will 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.

Contractor will promptly furnish, without additional charge, all facilities, D. labor, material, and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Representative. Ecology Ecology's Ecology or Ecology's or Representative 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 re-inspection or retest necessary. Ecology or Ecology's Representative will perform its inspections and tests in a manner that will cause no undue delay in the Work.

5.17 CORRECTION OF NONCONFORMING WORK

- A. If a portion of the Work is covered contrary to the requirements of the Contract Documents, it must, if required in writing by Ecology or Ecology's Representative, be uncovered for Ecology's Representative observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. If any time prior to Final Completion Ecology or Ecology's Representative desires to examine the Work or any portion of it that has been covered, Ecology or Ecology's Representative may request to see such Work, and it will be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor will 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 a request therefore as provided in SECTION 00 72 07.00 CHANGES. If such Work is not in accordance with the Contract Documents, the Contractor will pay the costs of examination and reconstruction.
- C. Contractor will promptly correct Work found by Ecology or Ecology's Representative 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 will bear all costs of correcting such nonconforming Work, including additional testing and inspections.
- D. If, within 1 year after the date of Substantial Completion of the Work, or designated portion thereof, or within 1 year after the date for commencement of any system warranties established under SECTION 00 72 06.08, 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 will correct it promptly after receipt of written notice from Ecology to do so. Ecology will give such notice promptly after discovery of the condition. This period of 1 year will be extended, with respect to portions of Work first performed after Substantial Completion, by the time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced will run for 1 year from the date of repair or replacement. Obligations under this paragraph will survive Final Acceptance.

- E. Contractor will remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Ecology or Ecology's Representative.
- F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Ecology or Ecology's Representative may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor will 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. Nothing contained in this section will be construed to establish a period of limitation with respect to other obligations that Contractor might have according to the Contract Documents. Establishment of the time period of 1 year, as described in SECTION 00 72 05.17D, 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. If Ecology or Ecology's Representative prefers to accept Work that is not in accordance with the requirements of the Contract Documents, Ecology or Ecology's Representative may do so instead of requiring its removal and correction, in which case the Contract sum may be reduced as appropriate and equitable.

5.18 CLEANUP

Contractor will 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 will remove from the premises its rubbish, tools,

scaffolding, equipment, and materials. Upon completing the Work, Contractor will leave the Project site in a clean, neat, and orderly condition satisfactory to Ecology or Ecology's Representative. If Contractor fails to clean up as provided herein, and after reasonable notice from Ecology or Ecology's Representative, Ecology or Ecology's Representative may do so and the cost thereof will be charged to Contractor.

5.19 ACCESS TO WORK

Contractor will provide Ecology or Ecology's Representative and A/E access to the Work in progress wherever located. This may include transporting Ecology or Ecology's Representative or A/E by boat around the dredging area.

5.20 OTHER CONTRACTS

Ecology may undertake or award other contracts for additional work at or near the Project site. Contractor will reasonably cooperate with the other contractors and Ecology's employees and will carefully adapt scheduling and perform the Work in accordance with Contract Documents to reasonably accommodate the other work.

5.21 SUBCONTRACTORS AND SUPPLIERS

- A. Before submitting its first Application for Payment, Contractor will furnish in writing to Ecology or Ecology's Representative the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor will use Subcontractors and suppliers that are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor will not utilize any Subcontractor or supplier to whom Ecology or Ecology's Representative has a reasonable objection, and will obtain Ecology's written consent before making any substitutions or additions.
- B. All Subcontracts must be in writing. By appropriate written agreement, Contractor will 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 Ecology or Ecology's Representative in accordance with the Contract Documents. Each Subcontract will preserve and protect the rights of Ecology and Ecology's Representative 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 will require each Subcontractor to enter into similar agreements with Sub-subcontractors. However,

nothing in this paragraph will be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.

- C. Contractor will schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work will 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.
- D. Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Ecology provided that:
 - 1. The assignment is effective only after termination by Ecology for cause pursuant to *SECTION 00 72 09.01* and only for those Subcontracts which Ecology accepts by notifying the Subcontractor in writing; and
 - After the assignment is effective, Ecology will assume all future duties and obligations toward the Subcontractor that Contractor assumed in the Subcontract.
 - 3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

5.22 WARRANTY OF CONSTRUCTION

- A. 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. The warranty shall extend for one year from the completion of the work, unless a different period of warranty is specified in contract documents.
- B. With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor will:
 - 1. Obtain all warranties that would be given in normal commercial practice

- 2. Require all warranties to be executed, in writing, for the benefit of Ecology
- 3. Enforce all warranties for the benefit of Ecology, if directed by Ecology or Ecology's Representative
- 4. Be responsible to enforce any subcontractor's, manufacturers, or supplier's warranty should they extend beyond the period specified in the Contract Documents.
- C. The obligations under this section will survive Final Acceptance.

5.23 INDEMNIFICATION

- A. Contractor will defend, indemnify, and hold Ecology and Ecology's Representative 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. The sole negligence of Contractor or any of its Subcontractors
 - 2. The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor
 - 3. 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. In any action against Ecology or Ecology's Representative 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 will 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 Ecology or Ecology's Representative and A/E only, in accordance with *RCW Title 51*.

PART 6 - PAYMENTS AND COMPLETION

6.01 CONTRACT SUM

Ecology will pay Contractor the Contract Sum for performance of the Work in accordance with the Contract Documents. The Contract Sum will include all taxes imposed by law and properly chargeable to the Project, including sales tax.

6.02 SCHEDULE OF VALUES

Before submitting its first Application for Payment, Contractor will submit to Ecology or Ecology's Representative for approval a breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Ecology or Ecology's Representative ("Schedule of Values"). The approved Schedule of Values will include appropriate amounts for demobilization, record drawings, operation and maintenance manuals, and any other requirements for Project closeout and will be used by Ecology as the basis for progress payments. Payment for Work will be made only for and in accordance with those items included in the Schedule of Values.

6.03 APPLICATION FOR PAYMENT

- A. At monthly intervals, unless determined otherwise by Ecology or Ecology's Representative, Contractor will submit to Ecology or Ecology's Representative an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application will be supported by such substantiating data as Ecology or Ecology's Representative may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.010, 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 00 72 01.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.
- C. At the time it submits an Application for Payment, Contractor will analyze and reconcile, to the satisfaction of Ecology or Ecology's Representative, the actual progress of the Work with the Progress Schedule.
- D. If authorized by Ecology or Ecology's Representative, 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:

6.04 PROGRESS PAYMENTS

- A. Ecology will make progress payments, in such amounts as Ecology or Ecology's Representative determines are properly due, within 30 days after receipt of a properly executed Application for Payment. Ecology or Ecology's Representative will notify Contractor in accordance with RCW 39.76 if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Ecology will retain 5 percent of the amount of each progress payment until 30 days after Final Acceptance and receipt of all documents required by law or the Contract Documents including, at Ecology's request, consent of surety to release of the retainage. In accordance with RCW 60.28, Contractor may request that monies reserved be retained in a fund by Ecology, deposited by Ecology 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. Ecology may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. Title to all Work and materials covered by a progress payment will pass to Ecology at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title will not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Ecology to insist on full compliance by Contractor with the Contract Documents.
- D. Payments due and unpaid in accordance with the Contract Documents will bear interest as specified in *RCW* 39.76.

6.05 PAYMENTS WITHHELD

- A. Ecology 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 Ecology from loss or damage for reasons including but not limited to:
 - 1. Work not in accordance with the Contract Documents

- Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum
- Work by Ecology or Ecology's Representative to correct defective Work or complete the Work in accordance with SECTION 00 72 05.17
- 4. Failure to perform in accordance with the Contract Documents
- 5. Cost or liability that may occur to Ecology as the result of Contractor's fault or negligent acts or omissions.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Ecology or Ecology's Representative will notify Contractor in accordance with *RCW 39.76*.

6.06 RETAINAGE AND BOND CLAIM RIGHTS

RCW CHAPTERS 39.08 and 60.28, concerning the rights and responsibilities of Contractor and Ecology 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 is the stage in the progress of the Work (or portion thereof designated and approved by Ecology or Ecology's Representative) when the construction is sufficiently complete, in accordance with the Contract Documents, so Seattle Parks and Recreation Department (SPR) can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or punch list work will have been completed. Substantial Completion will not be 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 will be established in writing by Ecology or Ecology's Representative. Contractor may request an early date of Substantial Completion, which must be approved by Change Order. SPR's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

6.08 PRIOR OCCUPANCY

- A. Ecology 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 will not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Ecology 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. Notwithstanding anything in the preceding paragraph, Ecology will be responsible for loss or damage to the Work resulting from its prior occupancy. Contractor's 1-year duty to repair and any system warranties will begin on building systems activated and used by Ecology as agreed in writing by Ecology or Ecology's Representative and Contractor.

6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. Final Completion will be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved will be established by Ecology or Ecology's Representative in writing.
- B. Final Acceptance is the formal action of Ecology or Ecology's Representative acknowledging Final Completion. Prior to Final Acceptance, Contractor will, in addition to all other requirements in the Contract Documents, submit to Ecology or Ecology's Representative 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 will release Contractor or its sureties from any obligations of these Contract Documents or the Public Works Bond, or constitute a waiver of any claims by Ecology arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Acceptance of final payment by Contractor or any Subcontractor will constitute a waiver and release to Ecology or Ecology's Representative 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 Ecology or Ecology's Representative 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 SECTION 00 72 08.00 - CLAIMS AND DISPUTE RESOLUTION.

PART 7 - CHANGES

7.01 CHANGES IN THE WORK

- A. Ecology or Ecology's Representative 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 will be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Ecology or Ecology's Representative causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment will be made as provided in SECTION 00 72 07.02 or 00 72 07.03, respectively, and such adjustment(s) will be incorporated into a Change Order.
- B. If Ecology or Ecology's Representative desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor will submit a Change Order proposal within 7 days of the request from Ecology or Ecology's Representative, or within such other period as mutually agreed. Contractor's Change Order proposal will 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. 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 00 72 07.02 and 00 72 07.03, Ecology or Ecology's Representative may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Ecology or Ecology's Representative may direct Contractor to proceed immediately with the Change Order Work. Contractor will not proceed with any change in the Work until it has obtained Ecology or Ecology's Representative approval. All Work done pursuant to any Ecology's Respresentative-directed change in the Work will be executed in accordance with the Contract Documents.

- D. If Ecology or Ecology's Representative 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 will be incorporated in a Change Order. The Change Order will 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. If Ecology or Ecology's Representative 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 Ecology or Ecology's Representative. Ecology or Ecology's Representative will provide Contractor with its written response within 30 days of Contractor's request. Ecology or Ecology's Representative may also provide Contractor with a final offer at any time. If Contractor rejects Ecology's final offer or the parties are otherwise unable to reach agreement, Contractor's only remedy will be to file a Claim as provided in SECTION 00 72 08.00 CLAIMS AND DISPUTE RESOLUTION.

7.02 CHANGE IN THE CONTRACT SUM

A. General Application:

- 1. The Contract Sum will only be changed by a Change Order. Contractor will include any request for a change in the Contract Sum in its Change Order proposal.
- 2. If the cost of Contractor's performance is changed due to the fault or negligence of Ecology or anyone for whose acts Ecology Representative is responsible, Contractor will 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 will be allowed to the extent that 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 Ecology or Ecology's Representative; or the change is caused by an act of force majeure, as defined in SECTION 00 72 03.05.
 - a. A request for an equitable adjustment in the Contract Sum will be based on written notice delivered to Ecology or

Ecology's Representative 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 will immediately notify Ecology or Ecology's Representative and begin to keep and maintain complete, accurate, and specific daily records. Contractor will give Ecology or Ecology's Representative access to any such records and, if requested, will promptly furnish copies of such records to Ecology or Ecology's Representative.

- b. Contractor will 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 Ecology or Ecology's Representative. The written notice will 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, if any; and, to the extent possible, the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice will, to the extent Ecology's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
- Within 30 days of the occurrence of the event giving rise to C. the request, unless Ecology or Ecology's Representative agrees in writing to allow an additional time period to ascertain more accurate data, Contractor will supplement written notice provided in accordance with Subparagraph "a" (above) with additional supporting data. Such additional data will 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 Ecology or Ecology's Representative. When the request for compensation relates to a delay or other change in Contract Time, Contractor will demonstrate the impact on the critical path, in accordance

with SECTION 00 72 07.03C. Failure to provide such additional information and documentation within the time allowed or within the format required will, to the extent Ecology's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor will proceed diligently with performance of the Work.
- e. 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) will be submitted together.
- The value of any work covered by a Change Order or of any request for an equitable adjustment in the Contract Sum, will be determined by one of the following methods:
 - a. Based on a fixed price as determined in SECTION 00 72 07.02B.
 - b. By application of unit prices to the quantities of the items involved as determined SECTION 00 72 07.02C.
 - c. Based on time and material as determined in SECTION 00 72 07.02D.
- 4. When Ecology or Ecology's Representative has requested Contractor to submit a Change Order proposal, Ecology or Ecology's Representative may direct Contractor as to which method in Subparagraph 3 (above) to use when submitting its proposal. Otherwise, Contractor will determine the value of the Work or of a request for an equitable adjustment, based on the fixed price method.
- B. <u>Change Order Pricing Fixed Price</u>: 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 will apply:
 - Contractor's Change Order Proposal or request for adjustment in the Contract Sum will be accompanied by a complete itemization of the costs including labor, materials, subcontractor costs, and overhead and profit. The costs will be itemized in the manner set

forth below and will be submitted on breakdown sheets in a form approved by Ecology or Ecology's Representative.

- All costs will be calculated based on appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
- 3. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Ecology or Ecology's Representative, Contractor will clearly state them in the proposal or request for an equitable adjustment.
- 4. The cost of any additive or deductive changes in the Work will be calculated as set forth below, except that overhead and profit will 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. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor will 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 Ecology or Ecology's Representative to determine fair value.
- 6. 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 Ecology or Ecology's Representative 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
 - e. Insurance and bond costs as set forth below
- 7. Any request for adjustment of Contract Sum based upon the fixed price method will include only the following items:

- a. <u>Craft Labor Costs</u>: 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 will be based on the following:
 - 1) Basic Wages and Benefits: Hourly rates and benefits as stated on the L&I approved Statement Of Intent To Pay Prevailing Wages. Direct supervision will be a reasonable percentage not to exceed 15 percent of the cost of direct labor. No supervision markup will be allowed if a working supervisor's hours are included in the breakdown.
 - 3) 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 L&I.
 - 4) <u>Federal Insurance</u>: Direct contributions required by the Federal Insurance Compensation Act, Federal Unemployment Tax Act, and the State Unemployment Compensation Act.
 - 5) <u>Safety</u>: Costs incurred due to the *Washington Industrial Safety and Health Act*, which will be a reasonable percentage not to exceed 2 percent of the sum of the amounts calculated in SUBPARAGRAPHS (1), (2), and (3) above.
 - 6) <u>Travel Allowance</u>: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
- b. <u>Material Costs</u>: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs will be developed from actual known costs, supplier quotations, or standard industry pricing guides. Material costs will consider all available discounts. Freight costs, express charges, or special delivery charges will 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 will be developed from the current edition of one of the following sources:
 - Associated General Contractors Washington State Department of Transportation Equipment Rental Agreement; 1987 Edition, unless use of the 1982 edition is previously approved by Ecology or Ecology's Representative as appropriate for the particular Work covered by the change.
 - 2) The State of Washington Utilities and Transportation Commission for trucks used on highways.
 - 3) The National Electrical Contractors Association for equipment used on electrical work.
 - The Mechanical Contractors Association of America for equipment used on mechanical work.
 - 5) The Data Quest Rental Rate (Blue Book) will be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment will not exceed 50 percent of the applicable rate.
- d. Allowance for Small Tools, Expendables, and Consumable Supplies: Small tools consist of tools that cost \$250 or less and are normally furnished by the performing Contractor. The maximum rate for small tools will not exceed the following:
 - 1) For Contractor, 3 percent of direct labor costs.
 - 2) For Subcontractors, 5 percent of direct labor costs.

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

- e. <u>Subcontractor Costs</u>: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work will be calculated and itemized in the same manner as prescribed herein for Contractor.
- f. Allowance for Overhead and Profit: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Ecology or Ecology's Representative of any Change Order, or any request for additional Work or extra payment of any kind on the Project. This allowance will compensate Contractor for all non-craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost. Business and Occupation taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It will 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 following:
 - For Contractor, for any Work actually performed by Contractor's own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
 - 2) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
 - 3) For Contractor, for any Work performed by its Subcontractor(s), 8 percent of the first \$50,000 of the amount due each Subcontractor and 6 percent of the remaining amount, if any.
 - 4) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 8 percent of the first \$50,000 of the amount due the sub-Subcontractor and 6 percent of the remaining amount, if any.
 - 5) The cost to which overhead and profit is to be applied will be determined in accordance with SUBPARAGRAPHS a-e above.
- g. <u>Cost of Change in Insurance or Bond Premium</u>: 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
- Public Works Bond(s): The cost of the additional premium for Contractor's bond arising directly from the changed Work.

The costs of any change in insurance or bond premium will be added after overhead and profit are calculated in accordance with SUBPARAGRAPH "f" above.

C. Change Order Pricing - Unit Prices:

- 1. Whenever Ecology authorizes Contractor to perform Work on a unit-price basis, Ecology's authorization will clearly state:
 - a. Scope of work to be performed
 - Type of reimbursement including pre-agreed rates for material quantities
 - c. Cost limit of reimbursement

2. Contractor will:

- a. Cooperate with Ecology or Ecology's Representative and assist in monitoring the Work being performed. As requested by Ecology or Ecology's Representative, Contractor will identify workers assigned to the Change Order Work and areas in which they are working.
- b. Leave access as appropriate for quantity measurement.
- c. Not exceed any cost limit(s) without Ecology or Ecology's Representative prior written approval.
- 3. Contractor will submit costs in accordance with SECTION 00 72 07.02B and satisfy the following requirements:
 - a. Unit prices will include reimbursement for all direct and indirect costs of the Work, including overhead and profit and bond and insurance costs.
 - b. Quantities must be supported by field measurement statements signed by Ecology or Ecology's Representative.

D. Change Order Pricing - Time and Material Prices:

- 1. Whenever Ecology or Ecology's Representative authorizes Contractor to perform work on a time-and-material basis, Ecology's authorization will clearly state:
 - Scope of work to be performed
 - b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor
 - c. Cost limit of reimbursement

2. Contractor will:

- a. Cooperate with Ecology or Ecology's Representative and assist in monitoring the Work being performed. As requested by Ecology or Ecology's Representative, identify workers assigned to the Change Order Work and areas in which they are working.
- b. Identify on daily timesheets all labor performed in accordance with this authorization. Submit copies of daily timesheets within 2 working days for Ecology or Ecology's Representative review.
- c. Leave access as appropriate for quantity measurement.
- d. Perform all Work in accordance with this section as efficiently as possible.
- e. Not exceed any cost limit(s) without Ecology's prior written approval.
- Contractor will submit costs in accordance with SECTION 00 72 07.02B and additional verification supported by:
 - Labor detailed on daily timesheets
 - b. Invoices for material

7.03 CHANGE IN THE CONTRACT TIME

- A. The Contract Time will only be changed by a Change Order. Contractor will include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of *force majeure* or due to the fault or negligence of Ecology or Ecology's Representative or anyone for whose acts Ecology or Ecology's Representative is responsible, Contractor will 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 will 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. A request for an equitable adjustment in the Contract Time will 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 will immediately notify Ecology or Ecology's Representative and begin to keep and maintain complete, accurate, and specific daily records. Contractor will give Ecology or Ecology's Representative access to any such records and, if requested, will promptly furnish copies of such records to Ecology or Ecology's Representative.
 - Contractor will not be entitled to an adjustment in the Contract 2. Time for any events that occurred more than 7 days before Contractor's written notice Ecology or Ecology's to Representative. The written notice will 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 will, to the extent Ecology's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
 - Within 30 days of the occurrence of the event-giving rise to the request, unless Ecology or Ecology's Representative agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor will supplement the written notice provided in accordance with SECTION 00 72 07.03B.2 with additional supporting data. Such additional data will 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 Ecology or Ecology's Representative. Failure to provide such additional information and documentation within the time allowed or within the format required will, to the extent Ecology's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- 4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor will proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order or based on a request for an equitable adjustment in the Contract Time will 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 will demonstrate the impact on the critical path of the schedule. Contractor will 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 re-sequencing of the Work or other reasonable alternatives.
- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this section, 00 72 07.03D, subject to the following conditions:
 - The change in Contract Time will solely be caused by the fault or negligence of Ecology or Ecology's Representative or A/E.
 - 2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under SECTION 00 72 07.02.
 - 3. Contractor will follow the procedure set forth in SECTION 00 72 07.03B.
 - 4. Contractor will establish the extent of the change in Contract Time in accordance with SECTION 00 72 07.03C.

- 5. The daily cost of any change in Contract Time will be limited to:
 - a. Cost of nonproductive field supervision or labor extended because of the delay
 - b. Cost of weekly meetings or similar indirect activities extended because of the delay
 - c. Cost of temporary facilities or equipment rental extended because of the delay
 - d. Cost of insurance extended because of the delay
 - e. General and administrative overhead in an amount to be agreed upon, but not to exceed 3 percent of Contract Sum divided by the Contract Time for each day of the delay.

PART 8 - CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS PROCEDURE

- A. If the parties fail to reach agreement on the terms of any Change Order for Ecology or Ecology's Representative-directed Work as provided in *SECTION 00 72 07.01*, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in *SECTION 00 72 07.02* or the Contract Time as provided in *SECTION 00 72 07.03*, Contractor's only remedy will be to file a Claim with Ecology or Ecology's Representative as provided in this section.
- B. Contractor will file its Claim within the earlier of: 120 days from Ecology's final offer in accordance with either SECTION 00 72 07.01E or SECTION 00 72 07.04C; or the date of Final Acceptance.
- C. The Claim will be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It will be fully substantiated and documented. At a minimum, the Claim will contain the following information:
 - 1. 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. The date on which facts arose which gave rise to the Claim.
- 3. The name of each employee of Ecology or Ecology's Representative or A/E knowledgeable about the Claim.
- 4. The specific provisions of the Contract Documents that support the Claim.
- 5. The identification of any documents and the substance of any oral communications that support the Claim.
- 6. Copies of any identified documents, other than the Contract Documents, that support the Claim.
- 7. 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. 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 required by, SECTION 00 72 07.02.
- 9. 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 Ecology is liable.
- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of SECTIONS 00 72 07.00 and 00 72 08.00, Ecology or Ecology's Representative will respond, in writing, to Contractor as follows:
 - 1. If the Claim amount is less than \$50,000, with a decision within 60 days from the date the Claim is received; or
 - 2. 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. Ecology or Ecology's Representative will then respond with a written decision in such additional time.

- E. To assist in the review of Contractor's Claim, Ecology or Ecology's Representative may visit the Project site or request additional information in order to fully evaluate the issues raised by the Claim. Contractor will proceed with performance of the Work pending final resolution of any Claim. Ecology's written decision, as set forth above, will be final and conclusive as to all matters set forth in the Claim unless Contractor follows the procedure set forth in SECTION 72 08.02.
- F. Any Claim of the Contractor against Ecology or Ecology's Representative for damages, additional compensation, or additional time will be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

8.02 ARBITRATION

- A. If Contractor disagrees with Ecology's decision rendered in accordance with SECTION 00 72 08.01D, Contractor will provide Ecology or Ecology's Representative with a written demand for arbitration. No demand for arbitration of any such Claim will be made later than 30 days after the date of Ecology's decision on such Claim. Failure to demand arbitration within said 30-day period will result in Ecology's decision being final and binding upon Contractor and its Subcontractors.
- B. Notice of the demand for arbitration will be filed with the American Arbitration Association (AAA), with a copy provided to Ecology or Ecology's Representative. The parties will 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:
 - Disputes involving \$30,000 or less will be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or
 - Disputes over \$30,000 will be conducted in accordance with the Construction Industry Arbitration Rules of the AAA, unless the parties agree to use the expedited rules.
- C. All Claims arising out of the Work will 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 will be maintained.

- D. Claims between Ecology and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Ecology and A/E will, upon demand by Ecology, be submitted in the same arbitration or mediation.
- E. If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution will be incorporated in a Change Order. The Change Order will 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. All Claims filed against Ecology or Ecology's Representative will 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 Ecology or Ecology's Representative to verify all or a portion of the Claim or to permit Ecology or Ecology's Representative access to the books and records of Contractor, or Subcontractors of any tier, will constitute a waiver of the Claim and will bar any recovery.
- B. In support of Ecology's audit of any Claim, Contractor will, upon request, promptly make available to Ecology or Ecology's Representative the following documents:
 - 1. Daily time sheets and supervisor's daily reports
 - 2. Collective bargaining agreements
 - 3. Insurance, welfare, and benefits records
 - Payroll registers
 - 5. Earnings records
 - 6. Payroll tax forms
 - 7. Material invoices, requisitions, and delivery confirmations
 - 7. Material cost distribution worksheet
 - 9. Equipment records (list of company equipment, rates, etc.)

- 10. Vendors', rental agencies', Subcontractors', and agents' invoices
- 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. Canceled 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, Ecology or Ecology's Representative may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work.
- 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 non-privileged 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. Worksheets 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 that establish the time periods, individuals involved, the hours for the individuals, and the rates for individuals.

- 24. Worksheets, software, and all other documents used by Contractor to prepare its bid.
- C. The audit may be performed by employees of Ecology or a representative of Ecology. Contractor and its Subcontractors will provide adequate facilities acceptable to Ecology or Ecology's Representative for the audit during normal business hours. Contractor and all Subcontractors will make a good-faith effort to cooperate with Ecology's auditors.

PART 9 – TERMINATION OF THE WORK

9.01 TERMINATION BY ECOLOGY FOR CAUSE

- A. Ecology or Ecology's Representative may, upon 7 days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Ecology) the Work or any part of it for cause upon the occurrence of any one or more of the following events:
 - Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time.
 - Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed because of its insolvency.
 - 3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents.
 - 4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment.
 - 5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor.
 - 6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction.
 - 7. Contractor is otherwise in material breach of any provision of the Contract Documents.

- B. Upon termination, Ecology may at its option:
 - 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 pursuant to SECTION 00 72 05.21.
 - 3. Finish the Work by whatever other reasonable method it deems expedient.
- C. Ecology'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. When Ecology terminates the Work in accordance with this section, Contractor will take the actions set forth in SECTION 00 72 09.02B and will not be entitled to receive further payment until the Work is accepted.
- E. 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 Ecology or Ecology's Representative in completing the Work, or as a result of Contractor's actions, such excess will be paid to Contractor. If such costs exceed the unpaid balance, Contractor will pay the difference to Ecology. These obligations for payment will survive termination.
- F. Termination of the Work in accordance with this section will not relieve Contractor or its surety of any responsibilities for Work performed.
- G. If Ecology terminates Contractor for cause, and it is later determined that none of the circumstances set forth in SECTION 00 72 09.01A exist, then such termination will be deemed a termination for convenience pursuant to SECTION 00 72 09.02.

9.02 TERMINATION BY ECOLOGY FOR CONVENIENCE

A. Ecology may, upon written notice, terminate (without prejudice to any right or remedy of Ecology or Ecology's Representative) the Work or any part of it for the convenience of Ecology or Ecology's Representative.

- B. Unless Ecology directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor will promptly:
 - 1. Stop performing Work on the date and as specified in the notice of termination.
 - 2. 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 all orders and subcontracts, upon terms acceptable to Ecology or Ecology's Representative, to the extent that they relate to the performance of Work terminated.
 - 4. Assign to Ecology or Ecology's Representative all of the right, title, and interest of Contractor in all orders and subcontracts.
 - 5. Take such action as may be necessary or as directed by Ecology or Ecology's Representative to preserve and protect the work, Project site, and any other property related to this Project in the possession of Contractor in which Ecology or Ecology's Representative has an interest.
 - 6. Continue performance only to the extent not terminated.
- C. If Ecology terminates the Work or any portion thereof for convenience, Contractor will 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 a reasonable allowance for overhead and profit on Work performed prior to termination and the reasonable administrative costs of the termination but will not be entitled to any other costs or damages whatsoever, provided however, the total sum payable upon termination will not exceed the Contract Sum reduced by prior payments. Contractor will be required to make its request in accordance with the provisions of SECTION 00 72 07.00.
- D. If Ecology terminates the Work or any portion thereof for convenience, the Contract Time will be adjusted as determined by Ecology.

PART 10 - MISCELLANEOUS PROVISIONS

10.01 GOVERNING LAW

The Contract Documents and the rights of the parties herein will be governed by the laws of the State of Washington. Venue will be in Thurston County unless otherwise specified by Ecology.

10.02 SUCCESSORS AND ASSIGNS

Ecology 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 will 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 will nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

10.03 MEANING OF WORDS

Unless otherwise stated in the Contract Documents, words that 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 the code of any governmental authority, whether such reference be specific or by implication, will 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 will apply to as many such articles as are shown on the Drawings or are required to complete the installation.

10.04 RIGHTS AND REMEDIES

No action or failure to act by Ecology or Ecology's Representative or A/E will constitute a waiver of a right or duty afforded them under the Contract Documents, nor will such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

10.05 CONTRACTOR REGISTRATION

Pursuant to RCW 39.06, Contractor will 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

When computing any period of time, the day of the event from which the period of time begins will 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

The wage, payroll, and cost records of Contractor and its Subcontractors, and all records subject to audit in accordance with *SECTION 00 72 08.03*, will be retained for a period of not less than 6 years after the date of Final Acceptance.

10.08 THIRD-PARTY AGREEMENTS

The Contract Documents will not be construed to create a contractual relationship of any kind between A/E and Contractor; Ecology or Ecology's Representative and any Subcontractor; or any persons other than Ecology and Contractor.

10.09 ANTITRUST ASSIGNMENT

Ecology 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 Ecology 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 that result from antitrust violations commencing after the Contract Sum is established and that are not passed on to Ecology or Ecology's Representative under a Change Order. Contractor will 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 Ecology by Contractor.

END OF SECTION

PART 1 – SUPPLEMENTAL CONDITIONS

- 1.01 Insurance
- 1.02 Permits
- 1.03 Changes
- 1.04 Schedule
- 1.05 Right-of-Way
- 1.06 Codes
- 1.07 Inspection
- 1.08 Payment Withheld
- 1.09 Existing Facilities and Structures
- 1.10 Not Used
- 1.11 Trade Name Reference
- 1.12 Prevailing Wage
- 1.13 Required Payroll Documents
- 1.14 Liquidated Damages
- 1.15 Proposal Guarantee or Bid Bond
- 1.16 Not Used
- 1.17 Offshore Items
- 1.18 Subcontractor List

In accordance with the GENERAL CONDITIONS, SUPPLEMENTAL CONDITIONS take precedence over GENERAL CONDITIONS.

1.01 INSURANCE

A. <u>Contractor's Liability Insurance</u>: **This section supplements SECTION 2.01 of the GENERAL CONDITIONS.**

Insurance carriers providing insurance in accordance with Contract Documents will be listed in the Authorized Insurance Company List in the State of Washington as maintained by the Office of the Insurance Commissioner with a minimum B+ rating by A. M. Best.

B. Required Coverage's: This section supplements SECTION 2.02 of the GENERAL CONDITIONS.

Bodily Injury Liability and Property Damage Liability Insurance: The Contractor will take out and maintain during the life of the Contract and for a 24-month tail on "claims made" insurance.

- 1. For a Contract under \$250,000, the Coverage required is:
 - a. Comprehensive General Bodily Injury Liability Insurance

EACH OCCURRENCE \$500,000

b. Comprehensive Property Damage Insurance

EACH OCCURRENCE \$500,000 \$1,000,000

or \$1,000,000 each occurrence/aggregate Bodily Injury and Property Damage combined single limit.

AGGREGATE

\$1,000,000

c. Comprehensive Automobile Bodily Injury Insurance

 PER PERSON
 PER ACCIDENT

 \$500,000
 \$1,000,000

d. Comprehensive Automobile Property Damage Insurance

EACH OCCURRENCE \$250,000

or \$1,000,000 each occurrence/aggregate Bodily Injury and Property Damage combined single limit.

- e. Employer's Liability Insurance, on an occurrence basis, in an amount not less than \$500,000.
- 2. For a Contract over \$250,000 the required Coverage, in addition to the requirements listed for a Contract under \$250,000, is:

Excess Liability Insurance in an amount not less than \$1,000,000 each occurrence/aggregate excess of primary liability policies.

- 3. For a Contract containing hazardous waste (Asbestos Abatement, PCB, etc.), the Coverage Required is:
 - a. On a Contract where the only work is hazardous waste, the Contractor will provide the following limits of insurance:

Comprehensive General Bodily Injury Liability Insurance:

EACH OCCURRENCE \$500,000

<u>AGGREGATE</u>

\$500,000

Comprehensive Property Damage Insurance:

EACH OCCURRENCE \$500,000

AGGREGATE

\$500,000

or \$500,000 each occurrence/aggregate Bodily Injury and Property Damage combined single unit.

b. On a Contract including other work along with hazardous waste work, the Contractor will provide a Certificate of Insurance complying with the requirements listed for a Contract under or over \$250,000; and will also provide a Certificate of Insurance from the Contractor or Subcontractor performing hazardous waste work for the limits of insurance

as listed in *Paragraph "3a"* above. A statement must appear on the face of the insurance certificate confirming that the insurer is covering hazardous waste. Should limits be secured on a "claims made" basis, "tail" coverage will be required at completion of project for a minimum duration of 24 months. This will be a condition of the project acceptance.

- c. <u>Self-Insured</u>: The Ecology may accept a Contractor to be self-insured if it receives acceptable: (1) current financial statement; (2) irrevocable letter of credit equal to the Contract amount; (3) construction "work in process" schedule with Contract values; (4) if "stop loss" involved, provide limit amount; (5) if Third Party Administrator, provide name, address, and telephone number; and (6) a current *Dunn and Bradstreet Report*, the cost of which to be borne by the Contractor.
- C. <u>Insurance Coverage Certificates</u>: **This section supplements SECTION 2.03(A)** of the **GENERAL CONDITIONS**.

The Contractor will furnish acceptable proof of insurance coverage on the State of Washington Certificate of Insurance Form SF 500A, dated 07/02/92.

1.02 PERMITS

This section supplements SECTION 5.02 of the GENERAL CONDITIONS.

All permits or fees required by local, state, or federal governmental agencies necessary for the accomplishment of this project will be obtained and paid for by the Contractor unless otherwise listed.

1.03 CHANGES

This section supplements SECTION 7 of the GENERAL CONDITIONS.

The Ecology or Ecology's Representative reserves the right to determine fair value for Contract changes in the following order:

- A. Negotiation of costs using lump-sum totals.
- B. Review and negotiation of cost breakdown as detailed in SECTION 7.02(B) or (C).

C. If no agreement is reached with the Contractor, costs of the change will be based on time and materials as detailed in SECTION 7.02D.

1.04 SCHEDULE

This section supplements SECTION 3.02 of the GENERAL CONDITIONS.

- A. The Contractor will notify Ecology or Ecology's Representative or Engineer at least 2 weekdays in advance, if work is to be performed on a Saturday, Sunday, and/or legal holiday.
- B. No excavation work, as defined by SECTION 00 72 05.09, will be allowed on Saturdays, Sundays, and/or legal holidays unless specifically authorized by Ecology or Ecology's Representative or Engineer.

1.05 RIGHT OF WAY

This section supplements SECTION 5.08(A) of the GENERAL CONDITIONS.

The Ecology has acquired ownership and/or easement of lands for the construction as indicated on the Drawings without cost to the Contractor. It is understood and agreed by the Contractor that if it should appear at any time that Ecology has not acquired title to all of the right-of-ways and lands necessary for the performance of the Work under the provisions of this Contract, and that if any delay in the performance of said Work occasioned by the failure of Ecology, its officers, or employees to acquire a title of any of said lands or right-of-way, such failure will extend the Contract completion date the number of days equal to the period of such delay. The Contractor waives any and all claims for damages against Ecology or Ecology's Representative, its officers, and employees, which the Contractor may sustain because of delay in the Work.

1.06 CODES

This section supplements SECTION 5.02 of the GENERAL CONDITIONS.

The Contractor will conform to all local, state, and national codes in all phases of this project. Where conflicts arise between Drawings, Specifications, and code requirements, the code will prevail unless the Drawings or Specifications are more stringent.

1.07 INSPECTION

This section supplements SECTION 5.16 of the GENERAL CONDITIONS.

In addition to any inspections required by local authorities or permitting agencies, the State will appoint its own inspector for the project. Construction inspectors employed by the State will assist the Engineer in making all necessary inspections and measurements and will enforce a strict compliance with the terms of the Contract and the orders of the Engineer. The Inspector will have the authority to reject materials or workmanship that does not fulfill the requirements of these Specifications. In case of dispute, the Contractor may appeal to the Engineer whose decision will be final. The acceptance of any material by the Inspector will not hinder its subsequent rejection if found defective. Rejected materials and workmanship will be replaced promptly or be made good by the Contractor, without additional cost to Ecology.

1.08 PAYMENT WITHHELD

This section supplements SECTION 6.05 of the GENERAL CONDITIONS.

The Engineer may also withhold any part or all of any payment or payments to such an extent as may be necessary in his opinion to protect Ecology from loss or damage including, but not limited to:

- A. Liens properly filed per *RCW Chapters* 39.08 and 60.28 for material, equipment, etc. supplied to the job and not sufficiently covered in the retained percentage.
- B. Failure to comply with the requirement for utilization of Minority/Women's Business Enterprises as stipulated in the Contract Documents.
- C. Failure to provide documents required in 1.12.

1.09 EXISTING FACILITIES AND STRUCTURES

This section supplements SECTION 5.11 of the GENERAL CONDITIONS.

In general, the locations of existing major utilities and equipment, whether aboveground or underground, are indicated on the Drawings. This information has been obtained from utility maps and verbal descriptions. The Engineer does not guarantee the accuracy or completeness of this information. It is to be understood that other aboveground or underground facilities not shown on the Drawings may be encountered during the course of the Work. It is the responsibility of the Contractor to properly locate and identify these facilities in the construction area.

Existing aboveground and underground facilities and appurtenant structures, including but not limited to power transmission and distribution, telephone, alarm

systems, sanitary sewers, gas services, water service, house or yard drains, and fences will be located, protected, maintained, relocated, rerouted, removed, and restored as may be necessary by the Contractor for completion of the Work, but in a manner satisfactory to owners and operators of the services and to the Engineer with the least possible interruption to existing services.

1.11 TRADE NAME REFERENCE

This section supplements SECTION 5.13 of the GENERAL CONDITIONS.

It will be the responsibility of the Contractor to furnish proof of equality in all respects to specified items when proposing alternate brands or items. Any significant deviations from Specifications, Drawings, or equality must be noted by the Contractor when submitting alternate materials for approval. The Engineer will be the sole judge of the equality and suitability of any products, materials, or components proposed by the Contractor as alternates to specified items. The Contractor will, AT ITS OWN EXPENSE, make any secondary changes required to incorporate an approved substitute or alternate into the project. No offers for substitution will be acknowledged from suppliers, distributors, manufacturers, or Subcontractors.

1.12 PREVAILING WAGE

This section supplements SECTION 5.04 of the GENERAL CONDITIONS.

All laborers, mechanics, and other workers employed by the Contractor or Subcontractors to work on construction projects financed by federal assistance must be paid wages not less than those established for the locality of the project by the U.S. Secretary of Labor (40 Stat 1494, Mar. 3, 1921, Chap. 411, 40 USC276A-276A-S).

1.13 REQUIRED PAYROLL DOCUMENTS

Certified payrolls are required to be submitted by the Contractor to the Engineer for the Contractor and all Subcontractors or agents on all federally funded projects, and when requested in writing by the Engineer, on projects funded with only Contracting Agency funds. If these payrolls are not supplied within 10 calendar days of the end of the proceeding weekly payroll period for federally funded projects, or within 10 calendar days from the date of the written request on projects with only Contracting Agency funds, any or all payments may be withheld until compliance is achieved. Also, failure to provide these payrolls could result in other sanctions as provided by state laws (*RCW 39.12.050*) and/or federal regulations (*29 CFR 5.12*). All certified payrolls will be complete and

explicit. Employee work classification codes used on certified payrolls will coincide exactly with the occupation codes listed on the minimum wage schedule, unless the Engineer specifically approves an alternate method to identify the occupation coding used by the Contractor to compare with the codes listed. When an apprentice is shown on the certified payroll at a rate less than the minimum prevailing journey wage rate, the apprenticeship registration number for that employee from the State Apprenticeship and Training Council will be shown, along with the correct employee classification code.

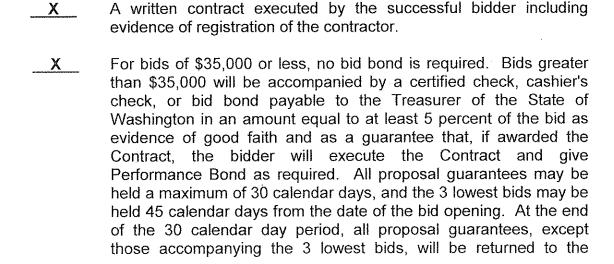
1.14 LIQUIDATED DAMAGES

This section supplements SECTION 3.07 of the GENERAL CONDITIONS.

Since it is not possible to determine at this time the amount of financial damages the State will suffer if the Contract work is not completed on time, it is mutually agreed that the State will withhold from the Contractor as liquidated damages a sum (not to exceed) of \$250 per calendar day. Said sum includes inspection, engineering, and other costs to the State incurred by such delay.

1.15 CONTRACT, BONDS AND INSURANCE

All contractors are required to be locally licensed, have a state contractor's license, and accounts with the Washington Department of revenue and the Washington Labor and Industries Agency. <u>CONTRACTOR REGISTRATION IS PREREQUISITE TO SUBMITTING A RESPONSIBLE BID PROPOSAL</u>. Under certain circumstances, some or all of the following may be required. If any of the following items are checked, the successful bidder will provide the necessary documentation and be subject to those requirements.



respective bidders. After the Contract and bonds have been executed, the remaining 3 proposal guarantees will be returned to their respective bidders.

Only a cashier's check or certified check will be accepted in lieu of a bid bond. State statute requires deposit of negotiable receipts at the time of receipt. The bidder should be prepared to accept an additional 60 to 90 day delay in obtaining repayment from the State Treasurer. Subsequent fiscal procedures in preparing repayment are time consuming, and result in the requirement for additional time. Failure to comply with this section will cause bid to be considered nonresponsive.

- A performance and Payment Bond: The successful bidder will, before entering into Public Works Contract, furnish a bond with a surety company as surety, in the form furnished by the State in the full amount of the contract price, conditioned on the faithful performance of all of the provisions of the contract and on the payment to all laborers, mechanics, subcontractors, material suppliers, and to all persons who will supply the Contractor or subcontractors with provisions and supplies to carry out the work. The Surety Company must be licensed to do business in the State of Washington. A deposit in lieu of bond will not be acceptable.

 X A written contract executed by the successful bidder including evidence of registration of the contractor.
- X Washington State Contractors Business License. (Unified Business Identification Number.)
- X Certificates of Insurance
- 1.17 OFFSHORE ITEMS

GENERAL CONDITIONS SECTION 5.14 is deleted in its entirety.

1.18 SUBCONTRACTOR LIST

When a bid is in excess of \$100,000 for the Public Works described in these documents, the bidder must submit as part of the bid the names of the subcontractor(s) whose subcontract amount is more than 10 percent of the Contract price with whom the bidder, if awarded the Contract, will subcontract for performance of the categories of work designated on the list. Failure to include this list with the bid or to name such subcontractors may render the bid nonresponsive and, therefore, void.

END OF SECTION

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 10 00 - Summary

Provisions of the "Project Specific Requirements" of the contract are by this reference a part of this Section and shall govern work under this section where applicable.

01 10 05 - ADMINISTRATIVE REQUIREMENTS

The Contractor shall provide an overall schedule for the project within ten (10) days of project award and shall provide a schedule update on Monday of each week outlining activities for that week.

01 10 11 - CONTRACTOR EXPERIENCE

The Contractor will be relied upon to manage the project. The Contractor must also be able to inform the Ecology Project Manager and/or Ecology's Representative with information throughout the project so that they can make informed and effective decisions.

01 10 15 - SAFETY

The Contractor shall establish and maintain a safe work place in compliance with all applicable Federal, State, and local codes. The Contractor shall also submit a site-specific health and safety plan to Ecology before starting work. This health and safety plan must be followed and a copy kept on site at all times. The Contractor shall furnish, erect, and maintain such fences, barriers, lights, and signs and provide such flagging and guards as are necessary in the opinion of Ecology to give adequate warning to the public of the construction and of any dangerous condition which may be encountered as a result thereof. The Contractor shall also maintain a minimum of one operable fire extinguisher on site during the entirety of construction operations which all staff are notified of.

All personnel working on or visiting the site will wear a protective hard hat, appropriate clothing, and gloves. Air purifying respirators and appropriate splash garments will be available when a potential for spill or the release of health threatening levels of air contaminants exists. Personal flotation devises shall be worn while working on docks or overwater.

The Contractor shall also be familiar with and meet the requirements of the following Washington Administrative Codes (WAC) and recommended industry standards.

- WAC 173-303 Dangerous Waste Regulations.
- 40 Hour Health & Safety Training for all on-site workers.

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 10 00 - Summary

01 10 16 - COMPLETION DATE

Final completion shall occur on or before February 15, 2013. Substantial completion shall occur on or before February 8, 2013.

01 10 17 - REQUEST AND APPROVALS

Any request by the Contractor for approval of items, or proposals for change in the work of whatever nature, shall be submitted in writing to the Ecology Project Manager. The Contractor shall, at his own expense, make any secondary changes required to incorporate an approved substitute into the project.

Any approvals or change orders shall be issued to the Contractor in writing by the Ecology Contracts Officer. No verbal agreement or conversation with any officer, agent, or employee of the State shall effect or modify the terms of obligation of this contract.

01 10 18 - SITE RESTORATION

Upon completion of the work, a site walk will be made with the Ecology Project Manager and SPR to ensure that the work has been completed and is acceptable.

01 10 25 - PAYMENTS

Monthly payments will be made on this contract. On or about the 15th of each month, the Contractor shall submit the State Payment Estimate form, after approval of the percentages completed by the Ecology Project Manager. Payment estimate with voucher (A19) will be processed for payment within the following month. Contractor shall exercise the escrow option and any addition to the bid payment itemization prior to the first payment.

A retention of 5% of each payment, shall be made and held in escrow as a trust fund for the protection and payment of persons, subcontractors, suppliers, due under this contract. In accordance with RCW 60.28, this fund shall be retained for 30 days after completion of the work or longer until all releases are received from the State.

No payment made or estimate approved shall be evidence of the performance of the contract, either wholly or in part, against the claim of the State to the contrary, and no payment shall be construed to be an acceptance of any defective work, which may appear.

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 10 00 - Summary

The Contracts Officer may withhold any part or all of any payment to such an extent as may be necessary in his opinion to protect Washington State from loss or damage including, but not limited to:

- A. Defective work not remedied.
- B. A reasonable doubt that contract can be completed for the balance then unpaid.
- C. Liens properly filed for material, equipment etc., supplied to the job and not sufficiently covered in the retained percentage.
- D. Failure to comply with the requirement for utilization of minority/women business enterprises as stipulated on the contract documents.

The Contractor shall maintain all records of payments to individuals and subcontractors in conjunction with this public works project for a period of six years from the day of the final payment. The records shall be available to the State Auditor upon request.

01 10 90 - REFERENCE STANDARDS

The Contractor shall also comply with all local, state, and federal laws and codes.

END OF SECTION

PART 1 - GENERAL

1.01 RELATED WORK DESCRIBED ELSEWHERE

- A. The provisions and intent of the Contract, including the General and Supplemental Conditions, apply to this work as if specified in this section. Work related to this section is described throughout these Specifications.
- B. Individual submittals are required in accordance with the pertinent sections of these Specifications

1.02 PAYMENT PROCEDURES

- A. "Pencil Copies" of the monthly pay estimates will be presented to Ecology or Ecology's Representative not more than three (3) days before the anticipated submittal of the "formal" pay estimate. The Contractor will hold a meeting with Ecology or Ecology's Representative, and required subcontractor representatives, to discuss the quantities to be included in the pay estimate for the respective month. Upon agreement of the quantities performed, the Contractor will complete the pay estimate for submittal
- B. Monthly pay estimates will clearly identify the work performed for the given time period based on a percentage of work completed for lump sum bid items and actual quantities installed for unit price items. Prior to submitting pay estimates to Ecology, the Contractor and Ecology or Ecology's Representative will review the work accomplished to determine the actual quantities including labor, materials and/or equipment charges to be billed. Following review, the Contractor will prepare an original pay estimate with complete supporting documentation attached and submit to the attention of Randy Newman, Contracts Officer. The pay estimate may be mailed, or hand delivered to:

Attn: Randy Newman Washington State Department of Ecology Toxics Cleanup Program, PO Box 47600 Olympia, WA 98504

The Ecology Contracts Officer will review the amount invoiced to verify costs are in accordance with the Ecology Project Manager's recommendations, authorized scope of work, proposed rates, and the terms and conditions of Contract. Once verified, the Ecology Contracts Manager will forward to Ecology for approval and authorization to make payment. Payments for approved pay estimates will be made within thirty (30) days of receipt by the Contracts Manager, unless pay estimate has been returned for

revision(s) and resubmittal. Pay estimates requiring revision(s) will be returned to the Contractor per Article 7.04 Progress Payments of the General Conditions.

1.03 PAYMENT PRICING

- A. Pricing for the various lump sum or unit prices in the Bid Form, as further specified herein, will include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for 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.
- B. Pricing also includes all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- C. No separate payment will be made for any item that is not specifically set forth in the Bid Form, and all costs therefore will be included in the prices named in the Bid Form for the various appurtenant items of work.
- D. All other work not specifically mentioned in the measurement and payment sections identified below will be considered incidental to the work performed and merged into the various unit and lump sum prices bid. Payment for work under one item will not be paid for under any other item.
- E. Ecology reserves the right to make changes should unforeseen conditions necessitate such changes. Where work is on a unit price basis, the actual quantities occasioned by such changes will govern the compensation.

1.04 MEASUREMENT FOR PAYMENT

- A. Measurement for payment will be in accordance with the schedules below and will be based upon bid items as stipulated in the Bid Form Table 1. Payment will be considered full compensation for furnishing all labor, materials and equipment to complete the Work specified.
- B. Lump Sum/Known Quantity Bid items are described as follows:
- 1. Bid Item No. 1 MOBILIZATION AND DEMOBILIZATION
 - a. Payment for MOBILIZATION AND DEMOBILIZATION will be for preparatory work and operations performed by the Contractor including, but not limited to, those necessary for the movement of its personnel, equipment, supplies and

incidentals to the Project Site; for the establishment of its offices, buildings and other facilities necessary for work on the Project; for premiums on bonds and insurance for the Project and for other work and operations which it must perform or costs it must incur before beginning production work on the various items on the Project Site.

- b. Mobilization and Demobilization will be paid at the lump sum price listed in the bid, but not to exceed a maximum of five percent (5%) of the Total Base Bid. Incremental payment will be made as follows:
 - 1) 50% after completion of 5% of the total contract amount of other bid items have been earned.
 - 2) 30% after completion of 70% of the total contract amount of other bid items have been earned.
 - 3) 20% after completion of all work on the project has been completed, including cleanup and acceptance of the project by Ecology.
- c. Execute the Mobilization and Demobilization work as required by the various sections of Division 00 and Division 01 and other parts of the Contract Documents.

2. Bid Item No. 2 - PROJECT ADMINISTRATION

- a. Payment for PROJECT ADMINISTRATION will be full compensation for all administrative costs, including but not limited to supervision, coordination of all work, Contractor utilities and overhead for the project.
- b. Payments will be made at the contract lump sum price for Project Administration. This bid item will include all cost to provide labor, materials, equipment, and appurtenances necessary to perform at a minimum the items of work, which may be identified further in separate sections of these specifications and/or on the plans.
- c. Coordination with Ecology or Ecology's Representative, coordination with other contractors, temporary utilities, submittals, and the cost of performing any element of work not included in the other bid items.

3. Bid Item No. 3 - FIELD ENGINEERING

a. Payment for FIELD ENGINEERING will be for all work necessary for field engineering including verifying survey reference points, and for conducting preconstruction, progress, and post-construction bathymetric surveys and utility locates. b. Payment for Field Engineering will be made at the contract lump sum price as stated in the bid and will be full compensation for furnishing all labor, equipment and incidentals required to accomplish the work as specified in Section 01 71 23 - Field Engineering of these Specifications.

4. Bid Item No. 4 - TEMPORARY FACILITIES AND CONTROL

- a. Payment for TEMPORARY FACILITIES AND CONTROL will be for all labor and materials necessary to provide and implement the temporary facilities and controls work plan described in **Section 01 50 00** that defines temporary traffic controls, utilities, site maintenance, air pollution control, noise abatement, and decontamination facility requirements.
- b. The quantity for payment for completed work will be an estimated percentage of the lump sum amount, agreed to between Ecology and Contractor, payable in monthly progress payments in increments proportional to the work performed.

5. Bid Item No. 5 - HEALTH AND SAFETY

- a. Payment for HEALTH AND SAFETY will be for the requirements for health and safety provisions necessary for all work at the site for this project. The work also includes compliance with all laws, regulations and ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security or traffic as defined in **Section 01 35 29 Health, Safety, and Emergency Response Procedures** of these Specifications.
- b. Health and Safety will be paid at the lump sum price listed in the bid.
- 6. Bid Item No. 6 DEBRIS REMOVAL AND DISPOSAL
 - a. Payment for DEBRIS REMOVAL AND DISPOSAL will be for all material and labor necessary to complete the aspects of the work described in **Section 35 20 23 Dredging**, as well as related design sheets.
 - b. Payment will be made on a Lump Sum basis.

7. Bid Item No. 7 - DREDGING

a. Payment for DREDGING will be for all material and labor necessary to complete the aspects of the work described in **Section 35 20 23 – Dredging**, as well as related design sheets.

- b. Payment will be made on a Lump Sum basis and is based on the in-place dredge prism volume (8,000 cubic yards) plus the allowable overdredge volume (2,000 cubic yards).
- c. In the event that the full 6-inch overdredge allowance is not exercised, the Unit Price for OVERDREDGE, as provided below, will be used to deduct the appropriate amount from the final contract price.

8. Bid Item No. 8 - OFFSITE DISPOSAL

- a. Payment for OFFSITE DISPOSAL will be for all labor and material costs associated with characterization, transload, transportation and tipping fees associated with disposing dredged sediments at an appropriate upland disposal facility.
- b. Payment will be made on a per ton basis as measured at the landfill.

9. Bid Item No. 9 - THIN LAYER PLACEMENT

- a. Payment for THIN LAYER PLACEMENT will be for all labor and material costs associated with placing the 6-inch thick layer of protective sand cap, as described in **Section 35 20 23 Dredging**.
- b. Payment will be made on a Lump Sum basis.

10. Bid Item No. 10 - PROJECT CLOSEOUT

- a. Payment for PROJECT CLOSEOUT will be for all material and labor necessary for complete the project, including operations and maintenance manuals, project as-built drawings, certificates, and cleanup. PROJECT CLOSEOUT will be paid on a Lump Sum basis.
- b. Project Closeout will be paid at the lump sum price listed in the bid and will be full compensation for furnishing all labor, equipment and incidentals required to accomplish the work to substantial completion on or before February 8, 2013, as specified in Section 01 70 00 - Execution and Closeout Requirements of these Specifications.

END OF SECTION

DIVISION 01 – GENERAL REQUIREMENTS Section 01 31 00 - Project Management and Coordination

PART 1 - GENERAL

1.01 MEETINGS

The Contractor will attend, at a minimum, the following meetings with Ecology or Ecology's Representative:

A. PRECONSTRUCTION MEETING

Following the award, Ecology or Ecology's Representative will notify the selected bidder of the time and date of a preconstruction meeting. The preconstruction meeting will be conducted at the Site. The following are requested to attend and suggested agenda:

- 1. Ecology or Ecology's Representatives:
 - a. Ecology Contracts Manager
 - b. Ecology Project Manager
 - c. Ecology's Representative- Ecology's A&E (Consultants)
- 2. Contractor's Representatives:
 - a. Project Manager (Superintendent)
 - b. Contract Administrator
 - c. Major Subcontractors
 - d. Major Suppliers
- Suggested Agenda:
 - a. Communications and routing
 - b. Pre-contract Submittals
 - 1) Certificate of Insurance
 - 2) Performance Bond
 - 3) Labor and Materials Payment Bond
 - 4) Schedule of Values
 - c. Execution of the Contract
 - d. Discussion of the General Conditions
 - e. Discussion of the Special Conditions
 - f. Discussion of the Project Specific Requirements
 - g. Discussion of the Technical Specifications
 - h. Change Order
 - Terms and Conditions of Payment
 - i. Site visit
 - k. Others if any

B. Weekly Progress Meetings:

- 1. Ecology or Ecology's Representative will schedule and administer weekly progress meetings throughout progress of the work.
- Ecology or Ecology's Representative will arrange meetings, prepare standard agenda with copies for participants, preside at meetings, record minutes and distribute copies within 10 working days to the Contractor, meeting participants, and others affected by decisions made.
- 3. Attendance is required for the Contractor's job superintendent, major subcontractors and suppliers, Ecology or Ecology's Representative, and others as appropriate to the agenda topics for each meeting.

4. Standard Agenda

- a. Review minutes of previous meeting.
- b. Review of work progress.
- c. Field observations, problems, and decisions.
- d. Identification of problems that impede planned progress.
- e. Maintenance of Progress Schedule (3 weeks ahead; 1 week back).
- f. Corrective measures to regain projected schedules.
- g. Planned progress during succeeding work period.
- h. Coordination of projected progress.
- i. Maintenance of quality and work standards.
- i. Effect of proposed changes on progress schedule and coordination.
- k. Demonstration that the project record drawings are up-to-date.
- I. Other business relating to the work.

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C. Special Meetings

Contractor shall attend special meetings that may be held at Ecology's or Ecology's Representative's request when a problem or deficiency is present or likely to occur. The purpose of these meetings will be to define and discuss a problem or recurring work deficiency, review alternative solutions, and identify a plan to efficiently and effectively resolve the problem or deficiency.

Contractor's project manager and/or project superintendent will attend other meetings at Ecology's or Ecology's Representative's request to coordinate Contractor's activities with related work being conducted by Ecology or Ecology's Representative.

Contractor's attendance at off-site meetings with regulatory agencies or other parties will be arranged as necessary. Contractor will participate in offsite meetings at no additional cost to Ecology.

D. Health and Safety Meetings

Contractor will conduct health and safety meetings for Contractor personnel as required by Contractor's health and safety plan, including but not limited to daily tailgate safety meetings. Ecology or Ecology's Representative may attend Contractor's health and safety meetings, as needed, to be aware of work conditions or health and safety concerns that could affect the normal business activities of Ecology's or Ecology's Representative's employees or tenants, or the coordination or execution of work under other contracts.

1.02 NOTIFICATION POINTS

The Contractor will notify Ecology or Ecology's Representative at the following points in the project, prior to proceeding further, to allow inspection of the Contractor work progress. Ecology or Ecology's Representative may request additional Notification points based on review of the above information provided by the Contractor.

- A. After installation of traffic controls per **Section 01 50 00**
- B. After installation of temporary erosion and sediment control measures

PART 2 – PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

DIVISION 01 – GENERAL REQUIREMENTS Section 01 31 00 - Project Management and Coordination

END OF SECTION

PART 1 - SUBMITTAL REQUIREMENTS

1.01 RELATED WORK DESCRIBED ELSEWHERE

- A. The provisions and intent of the Contract, including the General and Supplemental Conditions, apply to this work as if specified in this section. Work related to this section is described throughout these Specifications
- B. Individual submittals required in accordance with the pertinent sections of these specifications. Other submittals may be required during the course of the project and are considered part of the normal work to be completed under the Contract.
- C. The list below may be incomplete and it is the Contractor's responsibility to ensure that the Contractor has met all conditions of the contract requirements.

1.02 PRECONSTRUCTION SUBMITTALS

The following is a list of required submittals, applicable reference section and/or minimum requirements for each. The following documents shall be submitted to Ecology or Ecology's Representative within 14 days after Notice to proceed and prior to commencement of work unless stated otherwise.

A. Construction Quality Assurance Plan (CQAP)

The Contractor will provide a comprehensive Construction Quality Assurance Plan (CQAP) in writing before commencing the work. The CQAP will include sketches as applicable. Ecology or Ecology's Representative may request additional information if deemed necessary based on review of the Contractor's proposed activities. The CQAP will be submitted to Ecology or Ecology's Representative within 14 days after Notice to Proceed and prior to commencement of work. The CQAP will include detailed construction plans for each of the primary elements of the work.

B. Project Schedule

The Contractor will submit a Preliminary Project Schedule no later than seven (7) days after the date the Contract is executed and the Notice to Proceed issued. The schedule will be a Critical Path Method (CPM) schedule developed by the Precedence Diagramming Method (PDM). The Project Schedule will display the following information, at a minimum:

DIVISION 01 – GENERAL REQUIREMENTS Section 01 33 00 - Submittals

- Construction Start Date
- Critical Path
- Identification and sequencing of contract work by Work Area
- Listing of Each Contract Bid Item
- Activity Description
- Activity Duration
- Predecessor Activities
- Successor Activities
- Identification of necessary coordination dates with Ecology or Ecology's Representative to coordinate tenant interaction
- Interruptions to utility service
- Roadway closures
- Parking lot closures
- Physical completion Date

The Contractor will update the Project Schedule on a weekly basis, and bring the required number of copies to the Weekly Construction Meeting. At a minimum, schedule updates will reflect the following information:

- The actual duration and sequence of as-constructed Work activities, including changed Work.
- Approved time extensions.
- Unresolved requests for time extensions will be reflected in the Schedule Update by assuming no time extension will be granted, and by showing the effects to follow-on activities necessary to physically complete the project within the currently authorized time for completion.
- Any construction delays or other conditions that affect the progress of the Work.
- Any modifications to the as-planned sequence or duration of remaining activities.
- Any modifications to the Critical Path.
- The Physical Completion of all remaining Work in the remaining Contract time.

Refer to Section 00 72 00 – General Conditions, Part 3.02 – Construction Schedule for additional requirements.

C. Site-Specific Health and Safety Plan

Assess the potential safety risks to on-site personnel and the environment and develop a site-specific health and safety plan to safely execute the work under this Contract. The Contractor is responsible for independently evaluating the physical and chemical hazards associated, or potentially associated with the project site and the work under this Contract and developing a plan that adequately addresses these hazards in compliance with applicable local, state, and federal regulations. The Contractor will submit the health and safety plan to Ecology or Ecology's Representative for review and general concurrence. A copy of the approved Health and Safety Plan will be maintained on site at all times.

D. Temporary Facilities and Control Plan

The Contractor shall develop and implement a Temporary Facilities and Control Plan that defines temporary traffic controls, utilities, site maintenance, air pollution control, noise abatement, and decontamination facility requirements. These measures will be planned and implemented by Contractor including, but not limited to, the components shown on the Drawings, and described in the **Section 01 50 00**.

E. Quality Control Plan

The Contractor will establish a Quality Control Plan to perform inspection and testing of all items of work required by the Contract Documents, including those performed by subcontractors. The Contractor will ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Plan will be effective for control of all construction work performed under this Contract and will specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control. The Quality Control Plan will, at a minimum, include and address the following:

- General and Project Specific requirements
- Contractors quality control and project management organization
- A comprehensive summary of the inspection and testing requirements
- A comprehensive list of inspection and test methods, schedules, and procedures
- Documentation methods and procedures
- Requirements for corrective action when quality control and/or acceptance criteria are not met
- Procedures to be followed to comply with the Record Document requirements
- Any additional elements that the Contractor deems necessary to adequately control all construction processes required by this contract.

1.03 PERIODIC SUBMITTALS

The contractor will provide the following submittals to Ecology or Ecology's Representative at specified intervals.

A. Contractor Weekly Construction Report

The Contractor Weekly Construction Report will contain a summary description of all work performed during that week, including Daily Field Reports/Logs, names of Contractor employees, equipment, hours worked, and a seven day look ahead for anticipated project activities. In addition, the Contractor Weekly Construction Report will include quantities of work accomplished for all Pay Items identified in the Bid Form and a projection for work activities to be completed over the following week. The Contractor Weekly Construction Report will be submitted to Ecology or Ecology's Representative at the end of each work week or one day prior to the weekly progress meeting, whichever is sooner.

Final Completion Report and As-Built Drawings as defined in Section 01
 70 00 – Execution and Close-Out Requirements.

PART 2 - PRODUCTS

2.01 COMPLIANCE

A. Failure to comply with these requirements shall be deemed as the Contractor's agreement to furnish the exact materials specified or materials selected by Ecology or Ecology's Representative based on these specifications.

2.02 SHOP DRAWINGS

- Ecology will not accept shop drawings that prohibit Ecology from making copies for its own use.
- B. Quality: Shop drawings shall be prepared accurately to a scale sufficiently large to indicate all pertinent features of the products and the method of fabrication, connection, erection, or assembly with respect to the work.
- C. All drawings submitted to Ecology or Ecology's Representative for approval shall be drawn on full-size (ANSI D) copy or half-scale sets on 11 inches by 17 inches, bond paper only. Electronic versions of the drawings will also be submitted in the following formats on CD-ROM:
 - 1. DWG (Computer Assisted Design programs filename extension)

- 2. TIF (Temporary Internet Files)
- 3. PDF (Portable Document Format) Formatted to print to half-scale set on 11" x17" paper.

D. Type of Prints Required:

- 1. The Contractor shall submit six (6) paper copies of all shop drawings or supplemental working drawings in accordance with the General Conditions.
- 2. In lieu of the above, the Contractor may submit shop drawings or supplemental working drawings in the form of one sepia transparency of each sheet plus one blue line or black line print of each sheet. Blueprint submittals will not be acceptable.
- 3. Distribution: In the event the action described in D.2. above is selected by the Contractor, Ecology will review the drawings, mark the sepia with appropriate notations, prepare the required number of prints for their use, and return the marked sepia to the Contractors. The Contractor may then order as many additional copies as required for Contractor's work.
- E. In lieu of the above, submittals typically provided on paper may be submitted electronically as Adobe portable document format (PDF).

2.03 MANUFACTURERS' LITERATURE

- A. The Contractor shall submit six (6) paper copies of manufacturers' literature for approval.
- B. Catalog cuts or brochures shall show the type, size, ratings, style, color, manufacturer, and catalog number of each item and be complete enough to provide for positive and rapid identification in the field. Catalog data shall be submitted in an orderly bound form. General catalogs or partial lists will not be accepted.
- C. In lieu of the above, submittals typically provided on paper may be submitted electronically as Adobe portable document format (PDF). The manufacturer's original electronic issue is preferred.

2.04 SAMPLES

- A. The sample submitted shall be the exact or precise article proposed to be furnished.
- B. Samples, color chips, finish styles, etc., shall be submitted in sufficient number as to provide Ecology or Ecology's Representative with alternate choices.

2.05 SUBSTITUTIONS

- A. Refer to the **General Conditions 00 72 00**, paragraph 3.07.
- B. Catalog data for equipment approved by Ecology or Ecology's Representative does not in any case supersede the Contract Documents. The approval by Ecology or Ecology's Representative shall not relieve the Contractor from responsibility for deviations from Drawings or Specifications, unless Contractor has in writing called Ecology's or Ecology's Representative's attention to such deviations at the time of the submission, nor shall it relieve it from responsibility for errors of any sort in the items submitted. The Contractor shall check the work described by the catalog data with the Contract Documents for deviations and errors.

PART 3 - EXECUTION

3.01 TRANSMITTALS

- A. General: The Contractor shall submit all shop drawings, catalog cuts, brochures and mailable samples accompanied with a "Shop Drawing Multi-Transmittal" form supplied by Ecology. Six (6) copies of each submittal shall be transmitted. All drawings become part of the public record for the Site.
- B. Preparation: A separate submittal form shall be prepared for each product or procedure and shall be further identified by referencing the Specification Section and paragraph number and each submittal shall be numbered consecutively.
- C. Mailing: The original shall be sent in every instance and will be the Contractor's record and final correspondence for every submittal.
- D. In lieu of the above, submittals typically provided on paper may be submitted electronically as Adobe portable document format (PDF).

3.02 COORDINATION

- A. Shop and detail drawings shall be submitted in related packages. All equipment or material details which are interdependent or are related in any way must be submitted indicating the complete installation. Submittals shall not be altered once approved for Construction. Revisions shall be clearly marked and dated. Major revisions must be submitted for approval.
- B. The Contractor shall thoroughly review all shop and detail drawings, prior to submittal, to assure coordination with other parts of the work. The Contractor's failure to do this will be the cause for rejection. Submittals shall bear this approval stamp and initials.
- C. Components or materials which require shop drawings and which arrive at the job site prior to approval of shop drawings shall be considered as not being made for this project and shall be subject to rejection and removal from the premises.

END OF SECTION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work includes the requirements for health and safety provisions necessary for all work at the site for this project. The work also includes compliance with all laws, regulations, and ordinances with respect to safety, noise, dust, fire and police action, civil disobedience, security, or traffic.

1.02 SUBMITTALS

- A. The Contractor shall prepare a Spill Prevention, Control, and Countermeasure (SPCC) Plan prior to the start of any Work. The Contractor may submit the Health and Safety Plan (HASP) and SPCC Plan as one comprehensive document or may submit the plans as separate documents.
- B. Prior to the start of any Work, the Contractor shall provide a site specific HASP, which meets all the requirements of local, state, and federal laws, rules, and regulations and the pertinent regulations listed in **Section 01 10 15 Safety**. The HASP shall address all requirements for general health and safety and shall include but not be limited to:
 - Description of work to be performed and anticipated chemical and/or physical hazards associated with the work.
 - 2. Map of the site illustrating the location of the anticipated hazards and areas of control for those hazards.
 - 3. Hazardous material inventory and material safety data sheets (MSDSs) for all chemicals which will be brought on site.
 - Signage appropriate to warn site personnel and visitors of anticipated site hazards.
 - 5. Documentation that the necessary workers have completed the required 40-hour HAZWOPER training, as defined in **Section 00 72 00, Article 5.07 (Safety Precautions)**.
 - 6. Engineering controls/equipment to be used to protect against anticipated hazards.

- 7. Personal protective equipment and clothing including head, foot, skin, eye, ear, and respiratory protection, and personal flotation devises.
- 8. Procedures which will be used for:
 - a. Lockout/Tagout;
 - b. Fall Protection;
 - c. Trenching and shoring;
 - d. Oxygen deficient conditions;
 - e. Hazards;
 - f. Suspect Materials;
 - g. Confined-space entry;
 - h. Odorous conditions and toxic gases.
- 9. Safety procedures for working over water.
- 10. Exposure monitoring to be used to evaluate actual hazards compared with anticipated conditions.
- 11. Site housekeeping procedures and personal hygiene practices.
- 12. Personnel and equipment decontamination plan.
- Administrative controls.
- 14. Emergency plan including locations of and route to nearest hospital.
- 15. Medical surveillance program for site personnel before, during, and after completion of site work.
- 16. Medical removal protection.
- 17. Record keeping including:
 - a. Documentation of appropriate employee training.
 - Respirator fit testing.
- 18. Name and qualifications of person preparing the HASP and person designated to implement and enforce the plan.

19. Signatory page for site personnel to acknowledge receipt, understanding, and agreement to comply with the plan.

1.03 POTENTIAL CHEMICAL HAZARDS

A. Site Contaminants

1. The Contractor must provide site workers with Hazard Communication standard information for potential site contaminants (in accordance with WAC 296-62-054). The Contractor shall ensure that all site workers are aware of and understand this information. Additional information shall also be provided by the Contractor, as necessary, to meet the Hazard Communication Standard and HASP requirements as noted in WAC 296-62-054 and 296-62-300. Workers shall be instructed on basic methods or techniques to assist in detecting suspicious material.

B. Potential Exposures Routes

- 1. Inhalation: Airborne dust may be created during site activities. Inhalation of vapors or gases may occur if volatile contaminants or hydrogen sulfide are present.
- 2. Skin and Eye Contact: Dusts generated during site work activities may settle on the skin or clothing of site workers. Also, workers may contact contaminated soil, or water in the normal course of their work. Precautions to prevent skin or eye contact with hazardous materials shall be included in the HASP.
- 3. Ingestion: Inadvertent transfer of site contaminants from hands or other objects to the mouth could occur if site workers eat, drink, smoke, chew tobacco, or engage in similar activities in contaminated areas. This could result in ingestion of site contaminants. Precautions to prevent accidental or inadvertent ingestion of hazardous materials shall be included in the HASP.
- 4. Injection: Potentially contaminated debris material at the site presents a potential injection hazard in the event of accidental puncture, laceration, or abrasion of the skin, causing internal exposure to the contaminant(s) present.
- C. Chemical hazards may also result from Contractor operations resulting in inadvertent release of fuel, oil, or other chemicals in a manner that would expose workers.

1.04 POTENTIAL PHYSICAL AND OTHER HAZARDS

- A. The Work of the Contractor is described elsewhere in these specifications. Precautions to prevent all anticipated physical and other hazards, including heavy equipment and vessels, shall be addressed in the HASP.
- B. Specific aspects of construction resulting in physical hazards anticipated for this project include, but are not limited to the following:
 - 1. Slips, trips, and falls.
 - 2. Operation of equipment and vehicles presenting hazards of entrapment, ensnarement, and being struck by moving parts.
- C. Other anticipated physical hazards include, but are not limited to the following:
 - 1. Heat stress, such as that potentially caused by impermeable clothing (may reduce the cooling ability of the body due to evaporation reduction).
 - 2. Cold stress, such as that potentially caused during times when temperatures are low, winds are high, especially when precipitation occurs during these conditions.
 - 3. Biological hazards, such as insect stings or bites.

PART 2 - PRODUCTS

2.01 PRODUCTS SPECIFIED FOR HEALTH AND SAFETY

- A. Provide the equipment and supplies necessary to support the work as described in the site-specific HASP. Equipment and supplies as needed may include but are not limited to:
 - 1. Hazardous materials inventory and MSDSs for the chemicals brought on site;
 - 2. Enclosure equipment (for dust control as needed);
 - 3. Fencing and barriers;
 - 4. Warning signs and labels;

- 5. Trenching equipment;
- Fire extinguishers;
- 7. Equipment to support lockout/tag-out procedures;
- 8. Fall protection equipment;
- 9. Personal protective equipment (hard hats, foot, skin, eye, ear, and respiratory protection);
- 10. Personal flotation devises;
- 11. Area and personnel exposure monitoring equipment;
- 12. Demolition equipment and supplies;
- Decontamination equipment and supplies;
- First aid equipment;
- Release prevention equipment; and
- 16. Field documentation logs/supplies
- B. The Contractor's HASP shall be amended as needed to include special work practices warranted by site conditions actually encountered.
- C. The Contractor shall maintain the HASP and SPCC on site at all times.

PART 3 – EXECUTION

3.01 WORK AREA PREPARATION

A. Contractor shall comply with health and safety rules, regulations, and ordinances promulgated by the local, state, and federal government, the various construction permits, and other sections of the Contract Documents. Such compliance shall include, but not be specifically limited to any and all protective devices, equipment and clothing; guards; restraints; locks; latches; switches; and other safety provisions that may be required or necessitated by state and federal safety regulations. The Contractor shall determine the specific requirements for safety provisions and shall cause inspections and reports by the appropriate safety

authorities to be conducted to ensure compliance with the intent of the regulations.

- B. Contractor shall inform employees and subcontractors and their employees of the potential danger in working with any potentially contaminated materials, equipment, soils, and groundwater at the project site.
- C. Contractor shall perform whatever work is necessary for safety and be solely and completely responsible for conditions of the job site, including safety of all persons (including employees and representatives of Ecology and the Contractor) and property during the Contract period. This requirement applies continuously and is not limited to normal working hours. Contractor employees, subcontractors, employees of subcontractors, and visitors shall be required to read and adhere to the Contractor's HASP.
- D. Ecology's or Ecology's Respresentative's review of the Contractor's performance does not include an opinion regarding the adequacy of, or approval of, the Contractor's safety supervisor, the site specific HASP, safety program, or any safety measures taken in, on, or near the construction site.
- E. Accidents causing death, injuries, or damage must be reported immediately to Ecology or Ecology's Representative in person or by telephone or messenger. In addition, promptly report in writing to Ecology or Ecology's Representative all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.
- F. If a claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing within 24 hours after occurrence to Ecology or Ecology's Representative, giving full details of the claim.

3.02 SITE SAFETY AND HEALTH OFFICER

A. Contractor shall provide a person designated as the Site Safety and Health Officer, who is thoroughly trained in rescue procedures, HAZWOPER, and the use of all necessary safety equipment, air monitoring equipment, and gas detectors. The person must be present at all times while work is being performed and conduct testing, as necessary.

- B. The Contractor's site Health and Safety Officer or designee shall conduct inspections of the site in accordance with the HASP to determine the HASP's effectiveness and shall immediately correct any deficiencies identified.
- C. The Site Safety and Health Officer shall be empowered with the delegated authority to order any person or worker on the project site to follow the safety rules. Failure to observe these rules is sufficient cause for removal of the person or worker(s) from this project.
- D. The Site Safety and Health Officer is responsible for determining the extent to which any safety equipment must be utilized, depending on conditions encountered at the site.

3.03 FIRST AID

- A. The Contractor shall have available at the site, at all times, a person(s) holding a valid certificate of first-aid training. A valid first-aid certificate is one that is less than three years old. The Contractor's crew leaders, supervisors, or persons in direct charge of crews (i.e., a group of two or more employees working at the site) shall posses a valid first-aid certificate.
- B. The Contractor shall provide first-aid supplies at the work site for its employees as required by WAC 296-155-125.

3.04 SPILL PREVENTION AND CONTROL

- A. The Contractor shall be responsible for prevention, containment, and cleanup of spilled oil, fuel, and other petroleum products used in the Contractor's operations. All such prevention, containment, and cleanup costs shall be borne by the Contractor.
- B. The Contractor shall prepare and submit a SPCC Plan prior to the start of construction activity. SPCC Plan shall address cleanup of spilled oil, fuel, and other petroleum products used in the Contractor's operations. Although LNAPL release is not anticipated, the SPCC Plan shall address cleanup of LNAPL if it is liberated from the dredge prism. The SPCC Plan shall identify the Contractor's spill response subcontractor.
- C. The Contractor is advised that discharge of oil from equipment or facilities into state waters or onto adjacent land is not permitted under state water quality regulations.

- D. The Contractor shall, at a minimum, take the following measures regarding oil spill prevention, containment, and cleanup.
 - 1. Fuel hoses, lubrication equipment, hydraulically operated equipment, oil drums, and other equipment and facilities shall be inspected regularly for drips, leaks, or signs of damage, and shall be maintained and stored properly to prevent spills. Proper security shall be maintained to discourage vandalism.
 - All land-based oil and product storage tanks shall be diked, contained, and/or located so as to prevent spills from escaping into the water. Diking and containment area surfaces shall be lined with impervious material to prevent oil from seeping through the ground and dikes.
 - 3. All visible floating oils shall be immediately contained with booms, dikes, or other appropriate means and removed from the water prior to discharge into state waters. All visible oils on land shall be immediately contained using dikes, straw bales, or other appropriate means and removed using sand, ground clay, sawdust, or other absorbent material, which shall be properly disposed of by the Contractor. Waste materials shall be temporarily stored in drums or other leak-proof containers after cleanup and during transport for disposal. Waste materials shall be disposed off site in accordance with applicable local, state, and federal regulations.
 - 4. In the event of any oil or product discharges into public waters, or onto land with a potential for entry into public waters, the Contractor shall immediately notify the parties as indicated in **Section 01 35**43 Environmental Procedures.
- E. The Contractor shall maintain the following materials (as a minimum) at each of the project sites:
 - 1. Oil-absorbent booms: 4 each, 5 feet long.
 - 2. Oil-absorbent pads or bulk material, adequate for coverage of 200 square feet of surface area.
 - 3. Oil-skimming system.
 - Oil dry all, gloves, and plastic bags.

END OF SECTION

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 35 43 - Environmental Procedures

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The Work shall consist of completing notifications and other actions required for the Contractor as summarized in Table 01 35 43-01. Other notifications and actions will be performed by Ecology or Ecology's Representative as listed in the table. These notifications and actions listed constitute environmental procedures for the project.

1.02 SUBMITTALS

- A. Applicable Contractor submittals include, but are not limited to:
 - 1. Off-site shipment and disposal documentation for all dredged material shall be transmitted to Ecology or Ecology's Representative in accordance with **Section 35 20 23**.
 - Documentation of imported materials quality.

1.03 REFERENCES

- A. The following rules, requirements, and regulations that apply to this work include but are not limited to:
 - 1. Chapter 173-340 WAC Model Toxics Control Act Cleanup Regulations.
 - 2. Joint Aquatic Resource Permit Application (JARPA)

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.01 CONTRACTOR ENVIRONMENTAL PROCEDURES

- A. In addition to Contractor submittals listed above in this section, required environmental procedures by the Contractor include but are not limited to:
 - Controlling, managing, and monitoring sediment dewatering water in accordance with Contractor Quality Assurance Plan.

- Completing sampling, testing, and reporting to meet imported fill materials quality requirements prior to importing any material. Thin layer placement material specifications are described in **Section 35** 20 23.
 - a. Prior to delivery of any imported fill material, the Contractor shall submit documentation of the fill quality.
 - b. The supplier must provide an environmental certification, signed by the owner or officer of the supplier, that the material is free of contamination.
 - c. If the material is from a WSDOT-approved source, the certification and acceptance information must be submitted.
 - d. If the material is from a non-WSDOT-approved borrow pit, the supplier must provide documentation of the source area land use and operational history and chemical composition sufficient to identify the site as free from environmental contamination.
 - e. For purposes of these specifications, environmental contamination is defined as concentrations of petroleum hydrocarbons (gasoline, diesel, or heavy oil) and carcinogenic PAHs above MTCA Method A Soil Cleanup Levels for Unrestricted Land Use, concentrations of RCRA 8 heavy metals above Puget Sound background levels defined by Ecology, TEC concentrations of dioxins 5 ppt² /furans 3 ppt), or any other characteristics (e.g., unpleasant odor) making the material unsuitable for use.
 - f. Acceptance of fill material quality is at Ecology or Ecology's Representative discretion.
 - g. In the absence of adequate soil quality testing documentation, the Contractor or fill source owner will be required to submit the results of analytical testing from the fill source, at their sole expense, at a sampling frequency as follows: Five (5) samples for the first 5,000 cubic yards of material and one (1) additional sample for every additional 2,000 cubic yards.
 - h. Necessary analytical test methods will be determined by Ecology or Ecology's Representative.
 - i. The Contractor shall allow five (5) working days for review by Ecology or Ecology's Representative. If the submitted

2.

 $^{^2}$ ppt = ng/kg

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 35 43 - Environmental Procedures

documentation or test results are unsatisfactory, additional testing will be required.

3.02 SPILL REPORTING

A. Any person observing a spill of any material to the ground surface, to surface water, or groundwater shall immediately report the condition as noted in Table 013543-1.

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 35 43 - Environmental Procedures

Table 01 35 43-1 - Actions, Notifications, and Responsible Parties

Action	Responsible Parties and Notifications	Specification Sections
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END OF SECTION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

This section describes the Contractor's general quality control requirements, duties, and responsibilities during execution of the Contract Work. Detailed quality control requirements are presented in individual specification sections.

The Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction conform to requirements of the Contract Documents and Manufacturer recommendations. Although the guidelines are established and certain minimum requirements are specified herein and elsewhere in the Contract Documents, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall be prepared to discuss and present, at the Preconstruction Meeting, its understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Plan has been reviewed and approved by Ecology or Ecology's Representative.

1.02 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturer's instructions, including each step in the sequence.
- C. Should manufacturer's instructions conflict with contract Documents, request clarification from Ecology or Ecology's Representative before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce required and specified quality.

1.03 REFERENCES AND STANDARDS

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with the requirements of the standard, except where more rigid requirements are specified by applicable codes.
- B. Conform to reference standard by date of issue current on date of contract documents, except where a specific date is established by code.
- Obtain copies of standards where required by product specification sections.

1.04 TESTING SERVICES

- A. Necessary materials testing shall be performed by an independent testing laboratory during the execution of the Work and paid for by Ecology, unless otherwise specified. Access to the area necessary to perform the testing and/or to secure the material for testing shall be provided by the Contractor.
- B. Testing does not relieve the Contractor from performing work to contract requirements.
- C. Retesting required because of non-performance to specified requirements shall be performed by the same independent firm. Payment for retesting will be charged to the contractor by deducting testing charges from the contract sum.
- D. Subsequent sampling and testing, required as the work progresses to assure continued control of materials and compliance with all requirements of Contract documents, shall be the responsibility of Ecology, except as required by other sections of these specifications.

1.05 SUBMITTALS

The Contractor shall provide the Quality Control Plan to Ecology or Ecology's Representative in accordance with **Section 01 33 00 – Submittals**.

PART 2 - PRODUCTS

2.01 CONTRACTORS DAILY REPORT REQUIREMENTS

- A. Date the report is issued.
- B. Project name and Ecology number.
- C. Work performed each day.
- D. Name of workers, subcontractors performing work each day including hours worked by each person.
- E. Type of equipment and hours used each day.
- F. Identification of bid item quantities used each day, or percent complete for lump sum items.
- G. Identification of potential items that may result in schedule overruns or added costs.

PART 3 - EXECUTION

3.01 CONTRACTOR QUALITY CONTROL

A. Quality Control Plan

The Contractor shall establish a Quality Control Plan to perform inspection and testing of all items of work required by the Contract Documents, including those performed by subcontractors. The Contractor shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Plan shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

The Quality Control Plan shall, at a minimum, include and address the following:

- 1. General requirements
- 2. Quality control organization
- A comprehensive summary of the inspection and testing requirements

- 4. A comprehensive list of inspection and test methods, schedules, and procedures
- 5. Documentation methods and procedures
- 6. Requirements for corrective action when quality control and/or acceptance criteria are not met
- 7. Procedures to be followed to comply with the Record Document requirements (Section 01 70 00 Execution and Closeout Requirements)
- 8. Any additional elements that the Contractor deems necessary to adequately control all construction processes required by this contract.

B. Documentation

The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, proposed corrective action; and corrective actions taken.

C. Noncompliance

Ecology or Ecology's Representative may notify the Contractor of any non-compliance with project quality control requirements. The Contractor shall, after receipt of such notice, immediately take corrective action.

In cases where quality control activities do not comply with either the Contractor's Quality Control Plan or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by Ecology or Ecology's Representative, Ecology or Ecology's Representative may:

- 1. Direct the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.
- 2. Carry out the functions and operations of the Contractor's Quality Control Plan. Costs incurred by Ecology to operate the Quality Control Program plan or to otherwise remedy the Contractor's non-compliance with quality-related provisions of the Contract shall be

deducted from the total amount due the Contractor.

 Order the Contractor to stop operations until appropriate corrective actions are taken.

Any failure by Ecology or Ecology's Representative to notify the Contractor of any non-compliance with any of the foregoing requirements shall not be deemed as a waiver of its enforcement rights hereunder and that the Contractor is still bound by the terms and conditions of said requirement.

3.02 CONTRACTOR QUALITY ASSURANCE PLAN

The Contractor will submit a Construction Quality Assurance Plan (CQAP) that contains the components specified in **Section 01 33 00**. These components include:

- 1. Project Schedule
- 2. Site Specific Health and Safety Plan
- 3. Excavation and Disposal Plan
- 4. Traffic Access and Control Plan

3.03 CONTRACTORS DAILY REPORT

Contractor shall provide Ecology or Ecology's Representative with a written daily report at the end of each day's work. The Contractors Daily Report shall describe the work accomplished that day and address each item listed in Part 2.01 of this Section. The Contractors Dailey Reports will be one of the agenda items discussed at the weekly project meeting described in **Section 01 33 00**.

END OF SECTION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This section describes the requirements to provide the temporary facilities required by both the contractor and Ecology or Ecology's Representative until final completion of the Work. The Work includes compliance with all controls and ordinances with respect to safety, noise, security, traffic, temporary utilities, site maintenance and air pollution control.
 - 1. The Contractor shall be responsible for cordoning off the work site with temporary fencing as shown on the Drawings.
 - 2. These facilities and controls shall be in place to Ecology's or Ecology's Representative's satisfaction prior to commencement of construction activities.
 - 3. During the construction, the Contractor shall pre-plan and coordinate with Ecology or Ecology's Representative to minimize interference with traffic adjacent to the site, parking in the adjacent parking spaces, and traffic accessing nearby operating businesses and as required under the Traffic Control Plan to be approved by the City of Seattle and Ecology or Ecology's Representative.
 - The Contractor shall be responsible for traffic control and coordination as described herein during the entire period of activities under this contract.
 - 5. The contractor will provide temporary utilities, site maintenance, air pollution control, noise control; and operate a decontamination facility as discussed below.

1.02 SUBMITTALS

- A. In addition to the Traffic Control Plan, the Contractor shall provide a Temporary Facilities and Controls Work Plan that details management of environmental conditions presented during the performance of the Work and provides methods for how the work will be performed. This Plan can be combined with the SPCC and other plans identified in Section 01 33 00.
- B. Plan shall be submitted to Ecology or Ecology's Representative for approval prior to beginning Work. The temporary Facilities and Control

DIVISION 01 – GENERAL REQUIREMENTS Section 01 50 00 - Temporary Facilities and Controls

Plan shall include at a minimum:

- 1. A general description of the construction work to be performed discussing anticipated chemical and physical hazards associated with the Work.
- 2. Methods for site maintenance and security.
- 3. Description of air pollution control procedures.
- 4. Methods for management of noise.
- 5. Methods to protect groundwater and other critical areas from contamination and methods to decommission monitoring wells.
- 6. Run-off Management Plan detailing controls to be used during dust control, and any other use of water during the project which may impact the stormwater system.
- 7. Oil Spill Response and Prevention Procedures.

PART 2 - PRODUCTS

The contractor is responsible for identifying and procuring all materials, products, equipment, etc. necessary to complete all of the Work described herein.

PART 3 - EXECUTION

3.01 TEMPORARY TRAFFIC CONTROLS

The Contractor must maintain traffic flow along N. Northlake Way, in both directions at all times.

3.02 CONSTRUCTION TRAFFIC

The Contractor shall minimize interference with the activities of adjacent property owners as described below, and by other means identified and agreed upon during the course of the project:

- A. The Contractor shall minimize vehicular traffic into and out of the site.
- B. Construction vehicles shall enter and exit the site from N. Northlake Way.

- C. A Contractor's employee shall oversee any vehicle's entrance to or exit from the site, and direct the construction vehicle and any non-construction traffic as needed to prevent accidents and ensure smooth traffic flow around the site.
- D. If an open traffic lane needs to be temporarily blocked for purposes of placing or removing equipment, coordinate such activities in advance with adjacent property owners to minimize disruption to their activities. The duration of the blocking activity shall be kept to a minimum and the estimated duration is to be communicated to the adjacent property owners prior to commencement. The Contractor shall be responsible for directing both the construction and non-construction traffic during such times that the through-lane is blocked.

3.03 PEDESTRIAN TRAFFIC

The Contractor shall not restrict pedestrian along N. Northlake Way. When ongoing material delivery or export activities require closure of pedestrian sidewalk or walkway entrances to the Site, a Contractor's employee shall oversee the closure and ensure that alternative pedestrian routing is established to prevent accidents and ensure smooth pedestrian and vehicular traffic flow around the site.

3.04 TEMPORARY UTILITIES

The contractor will provide adequate facilities for Contractor's Operation at contractor's expense including:

A. Water

- Fresh drinking water for employees shall be provided in sanitary containers by the Contractor. The Contractor shall arrange with the City of Seattle to supply construction water for the duration of the contract.
- All connections to the water supply shall be furnished and installed by the Contractor and be removed at the completion of the Work to the satisfaction of Ecology or Ecology's Representative.

B. Construction Electricity

- The contractor will make arrangements with the local utility to provide a power drop within the project site. The contractor shall have the power meter registered in its name during the construction period.
- C. Toilet Room Facilities

1. Contractor shall install and maintain temporary sanitary toilet facilities during the term of this contract. Toilets shall be of the chemical type, and removed at the completion of the Work.

D. Communications

 Contractor shall install and maintain the appropriate equipment to allow for the efficient communication via voice, fax and the internet with Ecology or Ecology's Representative and with outside parties at all times during the term of this contract. Remove at the completion of work. All accounts to be registered in the name of the Contractor.

E. Fences and Enclosures

- 1. Temporary fences shall consist of woven wire mesh not less than 6 feet in height, complete with metal or wood posts and all required bracing and with truck and pedestrian gates, as required to accomplish the work.
- 2. Contractor shall furnish its own fence to further protect its materials and equipment.

F. Contractor Field Office

- Contractor shall install and maintain necessary field office space during the Work and remove at Substantial Completion of Work, to the satisfaction of Ecology or Ecology's Representative.
- Contractor's office space shall include a meeting area/room of sufficient size to hold weekly construction meetings. The contractor shall assume that up to two (2) Ecology or Ecology's representatives shall attend the meeting.

3.05 SITE MAINTENANCE

- A. Contractor shall keep the work site, staging areas, and contractor's facilities clean and free from dirt, rubbish, and debris at all times. Materials and equipment shall be removed from the site when they are no longer necessary. Before Final Completion of Work, the work site shall be cleared of equipment, unused materials, and dirt and rubbish to present a clean and neat appearance. Disturbed areas shall be restored per Ecology's or Ecology's Representative's direction.
- B. Waste material of any kind shall not be permitted to accumulate, remain at the site of the Work, nor on adjacent streets.
- C. In the event that waste material, refuse, debris or rubbish is not removed from the work area or on adjacent streets by the Contractor, Ecology or Ecology's Representative reserves the right to have such material

DIVISION 01 – GENERAL REQUIREMENTS Section 01 50 00 - Temporary Facilities and Controls

removed and the cost of the removal and disposal charged to the Contractor.

3.06 AIR POLLUTION CONTROL

- A. Contractor shall not discharge smoke, dust, or other contaminants into the air that violate local, state or federal regulations. Internal combustion engines shall not be allowed to idle for prolonged periods of time. Exhaust emissions that are determined to be excessive by Ecology or Ecology's Representative shall be repaired or the equipment replaced at the Contractors expense.
 - B. Contractor shall minimize nuisance dust by cleaning, sweeping, vacuum sweeping, sprinkling with water, or other means. The use of water, in amounts that result in mud on public streets or runoff to on-site or off-site drain catchments is not acceptable as substitute for sweeping or other methods.
 - C. Contractor shall minimize dust and waste during demolition. Water misting during demolition may be utilized for dust control. Water from misting operations shall not be allowed to discharge off site, into surface water, nor to the storm water system.

3.07 NOISE CONTROL

- A. Construction involving noisy operations, including starting and warming up of equipment shall be in compliance with local noise ordinances.
- B. Contractor shall comply with all local controls and noise level rules, regulations and ordinances which apply an any work pursuant to the Contract.
- C. Workers shall not be exposed to noise levels equipment that exceed 90 dBA as measured under the noisiest operating conditions. Equipment that cannot meet these levels, shall be quieted by use of improved exhaust mufflers, portable acoustical screens, or other means. Equipment not modified to meet these requirements shall be removed from the project.

DIVISION 01 – GENERAL REQUIREMENTS Section 01 50 00 - Temporary Facilities and Controls

3.08 DECONTAMINATION FACILITY AND CONTAMINATION EXCLUSION ZONE

The Contractor shall provide decontamination facilities for equipment and workers (including Ecology or Ecology's representatives) based upon the requirements listed below:

- 1. Equipment responsible for excavating, placing and regarding existing surface soils shall be decontaminated to prevent tracking potentially contaminated soils from leaving the site. The contractor shall collect decontamination water and incidental runoff and dispose of them appropriately.
- The decontamination facility and the contamination exclusion zone shall conform to the Contractor Health and Safety Plan specified in Section 01 35 29.
- 3. Because of the small footprint of the site, the designated contamination zones are likely to change as work proceeds from one portion of the site to another. Contractor shall use signs or flagging to designate areas as needed.

END OF SECTION

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 70 00 – Execution and Closeout Requirements

PART 1 - GENERAL

1.01 RELATED WORK DESCRIBED ELSEWHERE

- A. The provisions and intent of the Contract, including the General Conditions and other sections of the Project Specific Requirements apply to this work as if specified in this section.
- B. Prior to requesting final inspection, the Contractor shall assure itself that the project is complete in all aspects.

PART 2 - PRODUCTS

2.01 WARRANTY

- A. The Contractor warrants the labor, materials, and equipment delivered under the contract to be free from defects in design, material, or workmanship, and against damage caused prior to final inspection. Unless otherwise specified, this warranty extends for a period of two (2) years from the date of Substantial Completion.
- B. The Contractor shall promptly (within 48 hours) repair or replace all defective or damaged items delivered under the contract. The Contractor will haul away all defective or damaged items prior to Substantial Completion.
- C. In the event of equipment failure, during such time or in such a location that immediate repairs are mandatory, the Contractor shall respond promptly, irrespective of time. If the Contractor is not available, Ecology or Ecology's Representative will effect repairs. The Contractor shall then reimburse Ecology or Ecology's Representative for parts and labor necessary to correct deficiencies as defined within the warranty clause and time.

PART 3 - EXECUTION

3.01 FINAL DOCUMENTS

A. Project As-Built Drawings

 Project As-Built Drawings shall be compiled by the Contractor and submitted to Ecology or Ecology's Representative for translation to the Record Drawings on a monthly basis.

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 70 00 – Execution and Closeout Requirements

- 2. The Project As-Built Drawings will be submitted on paper full-sized (ANSI D) copy.
- 3. Drawings shall be kept current and shall be done at the time the material and equipment is installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:
 - a. Additions Red
 - b. Deletions Green
 - c. Comments Blue
 - d. Dimensions Graphite
- Project As-Built Drawings must be complete and accepted by Ecology or Ecology's Representative before Final Completion is issued.
- 5. As-Built Drawings shall be in accordance with horizontal and vertical control as shown on the drawings.

B. Final Survey

- 1. See Section 01 71 23 Field Engineering for Final Survey requirements. The Final Survey shall be completed and submitted to Ecology or Ecology's Representative within 30 days of Substantial Completion. Final Survey must be complete and accepted by Ecology or Ecology's Representative before Final Completion is issued.
- C. Final Documents shall be submitted by the Contractor to Ecology or Ecology's Representative prior to Final Completion, as defined in Section 01 33 00 - Submittals and Reporting Requirements and Division 00 -Procurement and Contracting Requirements.

3.02 CLEANUP

A. Final completion requirements are defined in the General Conditions, Article 6.09, and cleanup requirements during the course of the work are defined in **Section 01 50 00, Article 3.05**. Those paragraphs are supplemented to provide the following:

DIVISION 01 – PROJECT SPECIFIC REQUIREMENTS Section 01 70 00 – Execution and Closeout Requirements

- 1. General: Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris, and waste.
- 2. Site: Unless otherwise specifically directed by Ecology or Ecology's Representative, all public sidewalks and streets shall be thoroughly cleaned by means of a street sweeper and arrangements shall be made with the City of Seattle to have catch basins that may have been impacted by the project cleaned. All costs associated with this work shall be paid by the Contractor. Completely remove all resultant debris.
- B. Timing: Schedule final cleaning as approved by Ecology or Ecology's Representative to enable Northlake Shipyard to fully occupy a completely clean project.

END OF SECTION

PART 1 - GENERAL

1.01 RELATED SECTIONS

- A. The provisions and intent of the Contract, including the General Conditions and Project Specific Requirements, apply to this work as if specified in this section. Coordinate related requirements in other sections of the Specifications, including but not limited to the following:
 - 1. Section 01 33 00 Submittals
 - 2. Section 01 70 00 Execution and Closeout Requirements

1.02 DESCRIPTION OF WORK

A. This section describes the general requirements for site surveying and grade control including pre-construction, pre-finish grading and post-construction topographic surveys, utilities and record drawings, construction progress surveying for excavation limits and import materials, final limits of remedial excavations, record keeping, and submittals. In addition, establish and maintain design lines and grades shown on the Contract Documents.

1.03 QUALITY ASSURANCE

- A. It is the responsibility of the Contractor to schedule Contractor's survey and to verify that it has met the Contract requirements prior to proceeding to the next sequence of work. Ecology or Ecology's Representative shall review and approve each survey or survey increment prior to the Contractor proceeding to the next phase of work in that specific area. The Contractor shall allow up to five (5) business days for Ecology or Ecology's Representative's review. This review period will run in parallel with the period for sample analysis prior to Ecology or Ecology's Representative's determination that backfilling or additional excavation will be required in the area surveyed. Surveys of the Project shall be surveyed using the same vertical datum and horizontal coordinate system as the Contract Drawings. Surveys may need to be completed in small increments to document work progress, sequential excavation and backfill, and temporary sheet pile installation alignments. Survey requirements include:
 - Pre-Construction Surveying: The Contractor shall conduct a preconstruction bathymetric survey. The survey shall be approved by Ecology or Ecology's Representative prior to commencement of construction. This survey shall include the existing project site

bathymetry and location of all Site features within the work area. The Contractor shall establish local horizontal and vertical control on the project site. Local control shall be established using local survey markers. The Contractor shall ensure closure of all survey loops. The survey shall be adequate resolution to allow subsequent accurate calculations of dredged volumes.

- Post-Dredge Survey: Upon completion of all dredge activities, the Contractor shall conduct a bathymetric survey of the dredge prism for the purposes of verifying the dredge prism conforms to the plans and specifications. The survey shall be adequate resolution to allow subsequent accurate calculations of dredged volumes.
- 3. Post-Thin Layer Placement Survey: A third and final bathymetric survey will be completed following placement of the 6-inch thin layer placement. The survey shall be adequate resolution to allow subsequent accurate calculations of the thin layer placement thickness/volume.
- B. All surveys for verification of pay quantities shall be performed and stamped by a Professional Land Surveyor registered in the State of Washington, independent of the Contractor, and acceptable to Ecology. The independent surveyor shall have actively engaged in land survey operations for the past ten (10) years, and shall have equipment and work force separate from the Contractor's.
- C. The surveyor shall have insurance that has limits that meet or exceed the requirements of the General and Supplemental Conditions.
- D. Ecology reserves the right to retain an independent surveyor to periodically check the Contractor's survey. Surveying performed by Ecology will be at no cost to the Contractor.

1.04 SUBMITTALS

- A. General submittals required in accordance with this section include:
 - 1. Name, address, telephone number, and statement of qualifications of Professional Land Surveyor before starting survey work. This surveyor shall be responsible for stamping and signing all work as noted below.

- On request, field notes and documentation verifying accuracy of survey work, to include cross section of interim surveys by the Contractor.
- 3. Project survey data shall be stored as electronic files on a compact disc formatted as a) DWG; b) TIF; c) PDF and printed to a mylar sheet. At a minimum, data for each survey point shall include a sequential reference number, the elevation, and appropriate northing and easting coordinates.
- 4. Field notes, Drawings, quantity computations, and point data for each survey shall be submitted to Ecology or Ecology's Representative.
- 5. Progress surveys shall be conducted to monitor the accuracy of the work being performed. Progress surveys shall be submitted prior to submittal of progress payment requests.
- 6. Closure calculation for horizontal and vertical control. Submit prior to commencing preconstruction survey work.
- 7. Pre-Construction and Pre-Finish Grading Surveys, as well as progress surveys to confirm as-built excavation limits.

B. As-Built Drawings:

- 1. Contractor shall provide a single final as-built drawing representing the extent of work performed at the site.
- 2. Contractor electronic files for the As-Builts shall be fully editable and manipulatable so as to allow future changes by Ecology. The Contractor shall submit the electronic version of the As-Built drawings with hard copies as specified.

1.05 SURVEY VERTICAL DATUM

A. Project survey elevations shall reference the vertical datum, NAVD88.

1.06 SURVEY HORIZONTAL DATUM

A. Project horizontal datum based on Washington State Plane Coordinate System, North Zone, NAD 83 (91).

PART 2 - PRODUCTS - NOT USED

PART 3 – EXECUTION

3.01 GENERAL

A. At the Preconstruction Meeting, the Surveyor shall meet with Ecology or Ecology's Representative to discuss the survey proceedings, methods, and equipment to be employed for the Contractor's surveys, and the survey submittal schedules.

3.02 SURVEY REFERENCE POINTS

- A. Verify locations of survey control points prior to starting work. Promptly notify Ecology or Ecology's Representative in writing of any discrepancies discovered.
- B. Mark and protect survey control points prior to starting site work. Make no change without prior written notice to Ecology or Ecology's Representative.
- C. Promptly report to Ecology or Ecology's Representative the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- D. Replace or relocate dislocated survey control points, or establish new control points, based on original survey control at no added cost to Ecology.

3.03 PROCEDURES

- A. Contractor survey procedures (positioning modes, equipment calibration, and data reduction, adjustment, processing, and plotting) shall conform to industry standards.
- B. Failure to perform and process such surveys in accordance with recognized standards will result in a rejection and nonpayment for work performed.
- C. All systems, methods, and procedures shall be described in the Work Plan and be subject to Ecology's or Ecology's Representative's approval.

3.04 NEW CONSTRUCTION

A. Contractor shall develop and make all detailed surveys necessary for construction of new work, including setting bench marks for location of working points, verification of existing structures and critical topographic features, cut sheets, slope stakes and other surveys as required to ensure the work is performed and installed in accordance with the Contract Documents. Contractor is responsible for notifying Ecology or Ecology's Representative of any discrepancies found as a result of the detailed survey.

END OF SECTION

PART 1 - GENERAL

1.01 Related Work Specified Elsewhere

The provisions and intent of the Contract, including the General Conditions, Supplemental Conditions, and General Requirements, apply to this work as if specified in this section. Work related to this section is described in the following sections:

- A. Section 00 31 24 Environmental Assessment Information
- B. Section 01 33 00 Submittals
- C. Section 01 35 43 Environmental Procedures
- D. Section 01 45 00 Quality Control
- E. Section 01 50 00 Temporary Facilities and Controls
- F. Section 01 70 00 Execution and Closeout Requirements
- G. Section 01 71 23 Field Engineering

1.02 DESCRIPTION OF WORK

The project is located in Lake Union, Seattle, Washington. The project involves dredging approximately 2.5 acres of sediment to a depth of 2 feet that has been impacted by sand blast grit at the Northlake Shipyard and State Owned Aquatic Land. The general location of the grit is immediately beneath and adjacent to the two existing dry docks as identified on the plans. Sand blast grit contains elevated concentrations of metals.

Debris, including two large vessels, will also be removed. The total dredge prism volume is estimated at 8,000 cubic yards. The most recent bathymetric survey at the site indicates that a steep lake bottom near the bank gradually flattens to an elevation of approximately -20 feet mean lower low water (MLLW) - U.S. Army Corps of Engineers (USACE) - Locks datum. The dredged sediment will be dewatered on a barge and transported to an off-site, upland disposal facility. Following dredging, 6 inches of clean sand will be placed over the dredged area.

1.03 DEFINITIONS

A. Debris: Debris is defined as solid waste materials other than sediment excavated as part of the dredging operations, such as logs, wire, cable, steel bands, anchors, lumber, trash, concrete, etc.

DIVISION 35 – Waterway and Marine Construction Section 35 20 23 - Dredging

- B. Hard Material: Hard material is defined as material requiring the use of special equipment for economical removal, and includes boulders or fragments too large to be removed in one piece by the dredge.
- C. Required Dredge Elevation: The elevation within a dredge area above which the Contractor is required to remove all material.
- D. Allowable Overdepth Dredging: An additional increment of 0.5 foot below the required dredge elevation will be paid to accommodate equipment tolerance.
- E. Excessive Dredging: Material outside of the dredging limits and below the allowable overdepth dredging is excessive dredging. The Contractor will not be paid for excessive dredging.
- F. Thin Layer Placement: Placement of a 0.5 foot of clean sand over dredged area.

1.04 MATERIAL TO BE REMOVED

The material to be removed is sediment and sand blast grit-impacted sediment. Sediment cores indicate the material ranges from organic silt/clay to sand. Sand-blast grit, wood fragments, and bivalve shells were also identified in shallow sediments. In addition to sediment, it is anticipated that debris may be encountered during dredging.

A. Hard Material: Hard material in its natural state is not anticipated to be encountered under this Contract.

1.05 ARTIFICIAL OBSTRUCTIONS

Based on previous investigations, discussions with current Site personnel, and underwater videograpy, Ecology has knowledge of debris such as, but not limited to, batteries (30-40 batteries based on anecdotal evidence), metal bands, pallets, pieces of broken cable, rope, fire hose, and broken piles. At least one sunken vessel and one rectangular structure, potentially a barge or sunken dock section were observed in the bathymetric survey, along with large amounts of piles and/or pipes and various other unidentified debris.

Prior to dredging, the Contractor shall rake the dredge areas and shall remove debris encountered. Debris removed from the dredged area shall be removed from the water. Disposal shall be the responsibility of the Contractor and disposal shall be at an approved upland facility.

The two known large debris items (vessel and barge) will also be removed by the contractor prior

DIVISION 35 – Waterway and Marine Construction Section 35 20 23 - Dredging

to dredging. Any pollutants associated with the vessels should be removed and disposed of properly.

1.06 QUANTITY OF MATERIAL

The total estimated amount of material to be removed from within the specified limits, including side slopes, but excluding overdepths, is 8,000 cubic yards. The maximum amount of allowable overdepth dredging is estimated to be 2,000 cubic yards. The estimated quantity for bidding purposes shall be 10,000 cubic yards. The quantities listed are estimates only. Within the limits of available funds, complete the work specified whether the quantities involved are greater or less than those estimated.

1.07 OVERDEPTH DREDGING

To cover unavoidable inaccuracies of dredging processes, material actually removed to a depth of 0.5 foot below the depth specified and within the dredging limits will be measured and paid for at full contract price.

1.08 SIDE SLOPES

There will be no side slopes because of the shallow dredge depth. Minor sloughing of adjacent material is expected.

1.09 PERMITS

The Contractor shall be responsible for adhering and conforming to all applicable provisions, conditions, and requirement of the permits listed below. Any conflict between these contract specifications and issued permits will be brought to the attention of Ecology and the Engineer. Nothing whatsoever shall be deemed to authorize violation of these permits. Permits, approvals, certification, or orders for dredging and disposal work under this contract from the entities listed below will be issued prior to Notice of Award, and copies will be provided to the Contractor prior to Notice to Proceed:

- A. Washington Department of Fish & Wildlife, Hydraulic Project Approval (HPA).
- B. Washington Department of Ecology Section 401 Water Quality Certification.

C. US Army Corps of Engineers Section 10 and Section 404.

1.10 Underground utilities

The Engineer is not aware of any utilities or pipelines laying or buried within the dredge footprint or in the immediate vicinity of the project area. It is the Contractor's responsibility to ascertain the locations and depths of any utilities or pipelines that may be buried below the lake in the dredge footprint. If any utilities are encountered during dredging, the work at that location shall be terminated immediately and Ecology or Ecology's Representative shall be notified. It will also be the Contractor's responsibility to repair to the pre-project condition, at the Contractor's expense any damage to buried utilities or pipeline caused by the dredging operations.

1.11 BASIS FOR BIDS

For unit price bid, see Section 00 41 43 Bid Form.

PART 2 - PRODUCTS

2.01 THIN LAYER PLACEMENT MATERIAL

- A. Thin layer placment materials shall be clean, free-draining, sandy gravel or gravelly sand obtained from natural deposits. Individual particles shall be free from all objectionable coating. The materials shall contain no organic matter or soft friable particles in quantities considered objectionable by Ecology.
- B. Materials shall be graded between the limits specified below:

Sieve Size	Percent Passing (by weight)
³ / ₄ -inch	100
U.S. No. 4	90 to 100
U.S. No. 10	40 to 90
U.S. No. 40	2 to 40
U.S. No. 200	0 to 2

PART 3 - EXECUTION

3.01 INSPECTION

The Contractor shall inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. The Contractor, at the request of Ecology or Ecology's Representative, shall furnish boats, boatmen, laborers, and materials necessary for inspecting, supervising, and surveying the work. When required, the Contractor shall provide transportation for the Ecology or Ecology's Representative and inspectors to and from the disposal area and between the dredging plant and adjacent points on shore.

3.02 CONDUCT OF DREDGING WORK

A. Interference with Navigation

- Minimize interference with the use of Lake Union and Ship Canal. Ecology or Ecology's Representative will direct the shifting or moving of dredges or the interruption of dredging operations to accommodate the movement of vessels and floating equipment, if necessary.
- The dry docks at Northlake Shipyards may be moved to allow for dredging operations. Effort should be made to leave one dry dock in operation at all times. Dry docks shall be returned to their original locations after work is complete.

B. Compensation for Interruption of Operations

If dredging operations are interrupted due to the movement of vessels or floating equipment, an adjustment in the contract price or time for completion, or both, will be made as provided by the contract. Ecology or Ecology's Representative will notify the Contractor 7 days prior to ship movements that will affect dredging operations.

C. Lights

Each night, between sunset and sunrise and during periods of restricted visibility, provide lights for floating plants, pipelines, ranges, and markers. Also, provide lights for buoys that could endanger or obstruct navigation. If night work is required, maintain lights from sunset to sunrise for the observation of dredging operations. Lighting shall conform to United States Coast Guard requirements for visibility and color.

D. Ranges, Gages, and Lines

Furnish, set, and maintain ranges, buoys, and markers needed to define the work and to facilitate inspection. Establish and maintain gages in locations observable from each part of the work so that the depth may be determined. Suspend dredging when the gages or ranges cannot be seen or followed. Ecology or Ecology's Representative will furnish, upon request by the Contractor, survey lines, points, and elevations necessary for the setting of ranges, gages, and buoys.

E. Plant

Maintain the plant, scows, coamings, barges, pipelines, and associated equipment to meet the requirements of the work. Promptly repair leaks or breaks along pipelines. Remove dredged material placed due to leaks and breaks.

F. Salvaged Material

Anchors, chains, firearms, and other articles of value, which are brought to the surface during dredging operations, shall remain or become the property of Ecology or Ecology's Representative and shall be deposited on shore at a convenient location near the site of the work, as directed.

G. Safety of Structures

The prosecution of work shall ensure the stability of piers, bulkheads, and other structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations. Repair damage resulting from dredging operations, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the contract.

H. Plant Removal

Upon completion of the work, promptly remove plant, including ranges, buoys, piles, and other markers or obstructions.

3.03 Water Quality Monitoring

During the contractor's in-water activities, Ecology or Ecology's Representative will perform periodic water quality monitoring in accordance with the Water Quality Monitoring Plan included in the appendix. The purpose of the water quality monitoring is to provide ongoing assessment of the water quality impacts of dredging and thin layer placement. The Contractor will be responsible for providing transportation to/from the monitoring locations.

3.04 SURVEYS

Contractor shall take soundings before and after dredging. A multibeam bathymetric hydrographic survey was conducted at the site in 2008 (reported in Survey Report, Hydrographic and Geophysical Surveys at Northlake Shipyard, Seattle, Washington. Submitted to Ecology and Environment, Inc by Tetra Tech EC, Inc. December 2008). This survey was used as the basis for developing the plans and quantity estimates and is available in the appendix to these specifications.

A predredge hydrographic survey will be performed by the Contractor prior to the start of work, and will form the basis for calculation of pay quantities.

The Contractor shall notify Ecology at least five (5) days prior to completing all dredging, as demonstrated by daily Contractor progress surveys, and conduct a post-dredge survey. If all of the required dredging has not been satisfactorily completed, as determined by Ecology or the Engineer, the Contractor shall dredge the "high spots" indicated in the survey and the area(s) will be rechecked by the Engineer. The cost for the re-survey will be borne by the Contractor. The post-dredge survey will be used as the basis for determining the final pay volumes and acceptance of the work.

3.05 POSITIONING EQUIPMENT AND METHODS

The Contractor shall employ a suitable method to locate and control horizontal dredging position that may include: Differential Global Positioning System (DGPS); theodolite/transit angle triangulation; or theodolite/transit angle EDM distance intersection triangulation. Observation data will be recorded in standard surveying field book format. Automated position determinations will be accomplished by standard trilateration procedures whereby lengths to two or more shore-based control points are electronically measured by either time delay or phase comparison techniques. Observed ranges are corrected for scale, calibration, and/or automatic variations when present. Horizontal accuracy of dredge position shall be within +/- 3 feet.

3.06 Dredging Execution

- A. All dredging, including rework if required, shall be completed on or before April 1, 2013.
- B. The Contractor shall excavate the dredge prism to the lines, grades, slopes, and elevations shown on the drawings.

- C. The Contractor should use an environmental bucket or approved equivalent instead of a traditional clamshell bucket.
- D. The Contractor shall pay particular attention to the conditions of issued regulations and authorizations requiring minimizing turbidity and loss of resuspended sediments during dredging and transport operations and adherence to water quality requirements. Dredging shall be conducted such that re-suspension of solids is limited. The Contractor shall adopt methods to accomplish this and to meet water quality conditions specified in the project permits, including but not limited to:
 - 1. Controlling production speed to minimize turbidity.
 - 2. Eliminating multiple bites while the bucket is on the bottom. Each pass should be complete.
 - 3. No temporarily stockpiling of dredged material on the seabed.
 - 4. No seabed leveling.
 - 5. Dredging shall proceed downward from the top of the slope.
 - Other conditions as specified in the Clean Water Act Section 401
 Water Quality Certification for this project prepared by the Washington Department of Ecology.
- E. The Contractor shall provide a daily report of dredging and disposal activities to Ecology. This report shall be included with the daily construction report.
- F. Appropriate BMPs shall be employed to minimize sediment loss and turbidity generation during dredging. Depending on the results of the water quality monitoring program, BMPs may include, but are not limited to the following:
 - 1. A turbidity curtain will be placed around the perimeter of the dredging area.
 - 2. A containment boom will be placed around the perimeter of the project site during construction. Any floating debris in the containment boom shall be removed by the end of the work day or when the boom is removed, whichever occurs first. Captured material shall be placed in the debris stockpile/container.

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- Contingency measures to be implemented should water quality violations occur.
- G. An on-site representative of Ecology will visit the site during construction. The role of the representative will be to observe contract and permit compliance. The representative and the Contractor will each have a copy of Contract Plans and Specifications on site and will be aware of all permit requirements. The on-site representative is Ecology's representative and shall be allowed to access the Contractor's equipment when requested.

3.07 DREDGE MATERIAL DEWATERING ON BARGE

Dewatering sediment material in barges is permitted if the water quality requirements for the return water (i.e., effluent) can be achieved at the compliance boundary specified in the Washington Department of Ecology 401 Water Quality Certification.

The Contractor shall place the dredged material onto a flatbed scow or barge that that is equipped with sideboards and scuppers located around the perimeter of the deck line. The bucket shall be paused for several seconds at the water surface during retrieval to release excess water from within the bucket. The material shall be slightly heaped to promote drainage of excess water to the scuppers. No overtopping of the sideboards will be allowed.

The Contractor shall cover the scuppers by materials such as filter fabric (or similarly approved material) to filter and retain sediment while allowing water to drain back into the surface water. Free water shall not be directly discharged back into the surface water without passing through filter media to prevent release of suspended sediment.

3.08 Control of pollutants other than sediment

All pollutants other than sediment that occur on site during construction shall be handled and disposed of in a manner that does not contaminate stormwater or surface water. Fueling of Contractor's equipment shall be performed away from storm drain outlets. Extreme care shall be taken to prevent fuel spills. A Contractor's representative shall be present at all times when equipment is being fueled. In the event of a spill the Fire Department or Coast Guard (if the spill occurs in Lake Union) shall be called. Absorbent oil pads and drip pans shall be placed beneath the vehicle being fueled and under parked vehicles (overnight and otherwise).

Absorbent materials, shovels, and five gallon buckets shall be provided and maintained for spill cleanup. No vehicle maintenance other than emergency repair shall be performed on the project site, nor are engine fluids to be stored on the project site.

3.09 Offloading and disposal of Dredged Material

Provide for safe transportation and disposal of dredged materials. The deposit of dredged materials in unauthorized places is forbidden.

Deposit dredged material by hopper dredge. See Sheet G3.0 for transload location. Contractor should employ measures to minimize sediment loss during transfer of materials from barge to trucks. Material will be disposed at either the Wenatchee Regional Landfill or Chemical Waste Management in Arlington, OR depending on if the material is categorized as non-hazardous or hazardous.

Dredged material will be categorized for disposal as specified in Section 00 31 24 Environmental Assessment Information.

- A. The Contractor shall provide measures to prevent material spillage during the transfer of the dredged material from the barge to the offloading area. No transfer can begin until these measures are approved by Ecology and are in place. Any such spillage shall be promptly cleaned up.
- B. Any free water and interstitial water in the dredge sediment that drains off during the offloading process shall be routed in such as manner as to prevent uncontrolled release of suspended sediment back into Lake Union. Surface drainage water that contains suspended dredged material or debris shall be filtered using means selected by the Contractor (e.g. silt fence, hay bales, etc.) to remove suspended sediment from the runoff prior to discharge to the adjacent surface waters.
- C. Upon completion of the work, the Contractor shall remove all vestiges of dredged sediments, offloading structures, barrier system and other materials and clean up the site to the pre-project condition.

3.10 POST DREDGING SAMPLING

The contractor shall collect 6 post-dredge bottom samples to be analyzed for PAHs and metals (arsenic, copper, lead, and zinc). Locations to be specified by Ecology.

3.11 MISPLACED MATERIAL

Should the Contractor, during the execution of the work, lose, dump, throw overboard, sink or misplace any material, cap, barge, machinery, or appliance, the Contractor shall promptly recover and remove the same. The Contractor shall give immediate verbal notice, followed by written confirmation, of the description and location of such

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obstructions to Ecology or Ecology's representative and shall mark and buoy such obstructions until they are removed. Should the Contractor refuse, neglect, or delay compliance with this requirement, such obstructions may be removed by Ecology or Ecology's representative, and the cost of such operations may be deducted from any money due to the Contractor, or may be recovered from the Contractor's bond. The liability of the Contractor for the removal of a vessel wrecked or sunk without his fault or negligence shall be limited to that provided in Sections 15, 19, and 20 of the River and Harbor Act of 3 March 1899 (33 U.S.C. 410 et seq.).

3.12 MEASUREMENT

Contractor shall take soundings before and after dredging.

A. Method of Measurement

The material removed will be measured by cubic yard in place, by means of soundings taken before and after dredging. The drawings represent existing conditions based on current available information, but will be verified and corrected, if necessary, by soundings taken before dredging in each locality. Soundings will be taken by lead line or sonic methods, or both, as determined by Ecology or Ecology's Representative; results of soundings by either or both methods will be the basis for payment.

B. Surveys During Progress of Work

Contract depth will be determined by soundings or sweepings taken behind the dredge as work progresses. The Contractor shall take progress soundings or sweepings.

3.13 Thin Layer Placement

A. Layout of Work: An accurate method of horizontal control shall be established by the Contractor before placement begins. The proposed method and maintenance of the horizontal control system shall be subject to the approval of Ecology and if, at any time, the method fails to provide accurate location for the placement operation, the Contractor may be required to suspend its placement operation. The Contractor shall furnish at its own expense all stakes, templates, platforms, equipment, range markers, transponder stations, and labor as may be required to lay out the work from the control points. It shall be the responsibility of the Contractor to maintain all points established for the work until authorized to remove them. If such points are destroyed by the Contractor or

disturbed through its negligence prior to authorized removal, they shall be replaced by the Contractor at own expense.

B. Placement of Clean Material: Thin Layer Placement material shall be placed from the bottom (toe) of the slope upward. The Contractor shall pay particular attention to the conditions of issued permits and authorizations requiring minimizing turbidity and siltation and adherence to water quality requirements. Barges may be positioned utilizing spuds and/or upstream anchors. Spudding within the placement area can only occur within unplaced portions of the area. No anchoring will be allowed within the placement area.

C. Best Management Practices (BMPs) during Placement:

- 1. The rate of Thin Layer Placement material distribution over the project area should be slow to avoid turbidity clouds, re-suspension of contaminated bottom sediments into the water column, and impacts to any fish species that may be present.
- 2. The thickness of material placed will be equivalent to 6 inches evenly throughout the site.
- 3. If fish kill occurs or fish are observed in distress, the project activity shall immediately cease and WDFW Habitat Program shall be notified immediately.
- 4. The bucket used to distribute clean material above water shall not be used under water to change the bottom elevation of the site.

D. No compaction is required.

3.14 FINAL EXAMINATION AND ACCEPTANCE

See Section 3.04 Surveys.

After the completion of the dredging, the contactor shall collect 3 samples at locations specified by Ecology outside of the footprint of the dredge prism to be analyzed for PAHs and metals (arsenic, copper, lead, and zinc).

When areas are found to be in a satisfactory condition, the work therein will be accepted as complete. Final estimates will be subject to deductions or correction of deductions previously made because of excessive overdepth, dredging outside or authorized areas, or disposal of material in an unauthorized manner.

END OF SECTION