

**CITY OF LA PINE  
BID DOCUMENTS  
FOR  
ENTRY MONUMENT SIGN AND  
FLAG POLES PROJECT**

**PLANS PREPARED FOR:  
THE CITY OF LA PINE**



**PLANS PREPARED BY:  
THE CITY OF LA PINE  
16345 SIXTH STREET  
P.O. Box 2460  
LA PINE, OREGON 97739**

**And**

**SZABO LANDSCAPE ARCHITECTURE  
1000 NW Wall Street, Suite 250  
Bend, OR 97703**

**BIDDER'S REQUIRED SUBMITTAL LISTING**

---

The required submittal listing for the “**Entry Monument Sign and Flag Poles Project**” is as follows:

<b>#</b>	<b>ITEM</b>	<b># OF PAGES</b>	√
1	BID SCHEDULE	5	
2	CONTRACTOR EXPERIENCE FORM	2	
3	BID BOND	2	
4	FIRST TIER SUBCONTRACTOR DISCLOSURE FORM	Not Req'd	
5	PROPOSAL	3	
6	NON-COLLUSION AFFIDAVIT	2	
7	PREVAILING WAGE COMPLIANCE STATEMENT	1	
8	DRUG TESTING POLICY STATEMENT	1	

**TOTAL BID PROPOSAL WILL CONTAIN A MINIMUM OF:**

**16 PAGES**

**INVITATION TO BID**

---

Sealed bids for the construction of the City of La Pine, **Entry Monument Sign and Flag Poles Project**, addressed to Ashley Williams, Office Utility Specialist, City of La Pine, Oregon will be received until 2:00 PM local time at City Hall, 16345 Sixth Street, P.O. Box 2460, La Pine, Oregon, on **April 17, 2018** and then publicly opened and read at 2:00 PM at City Hall, in La Pine, Oregon. Bids shall be clearly labeled: **Entry Monument Sign and Flag Poles Project**.

**Scope of Work:**

Improvements generally the construction of a monument sign, flag poles, and associated landscaping and irrigation system construction and incidental and appurtenant improvements.

The City estimates the cost of Base Bid construction items \$64,000. Please note that bid alternates are not included in the Base Bid estimate.

Construction plans titled, **Entry Monument Sign and Flag Poles Project** dated **March 2018**, consisting of **9** sheets and project specifications are herein incorporated into the bid documents for detail of the overall scope of the project including the scope of services for this portion of the project. **All workmanship, materials, and conditions shall conform to City of La Pine Water District Construction Standards and Oregon Department of Transportation Standards for Construction.**

**This is a Public Works Contract and subject to Oregon Bureau of Labor and Industries (BOLI) Prevailing Wage Rates Effective April 1, 2018 for Region 10**

**Completion:**

It is the intent of the City of La Pine to have construction complete by June 29, 2018.

**Project Timeline:**

Advertisement	April 2, 2018
Bid Opening	April 17, 2018
Bid Review	April 17, 2018
Intent to Award	April 17, 2018
City Council Approval	April 25, 2018
Contract Award	April 27, 2018
Work to Begin by	May 4, 2018
Work Completed by	June 29, 2018 (56 Calendar Days)

### **Liquidated Damages**

Liquidated damages will be assessed at \$200 per work day should the Contractor fail to complete the work within the time allowed.

### **Contract Documents**

Contract Documents may be examined at the following locations:

- City of La Pine, City Hall
- Premier Builders Exchange

Addendums issued during the advertisement phase of the project will be posted on the City of La Pine website and the Premier Builder's Exchange website only. Bidders shall submit their proposal on the proposal forms contained within the contract documents or on alternate forms as prescribed by the bid documents. The City of La Pine will not accept any bid that is not submitted as prescribed in the Bid Documents package.

All requests for plans and bid documents shall be made to Ashley Williams, Office Utility Specialist at City of La Pine, call 541.536.1432.

### **Requirements of Bidders**

Each proposal must be submitted on the prescribed forms and accompanied by a certified check or Bid Bond executed on the prescribed form, payable to the City of La Pine, Oregon, in an amount not less than 10% (10 percent) of the amount bid. The successful Bidder will be required to furnish the necessary additional bond(s) for the faithful performance of the Contract, as prescribed in the Contract Documents.

The attention of bidders is directed to the State government requirements and conditions of employment to be observed and minimum wage rates to be paid under the Contract.

The City of La Pine will closely review the Contractor's Experience form to ensure a Contractor with acceptable experience is awarded the Contract for the **Entry Monument Sign and Flag Poles Project**.

All Contractors submitting a bid must be registered with the Construction Contractors Board or the Landscape Contractors Board, or the bid will not be received or considered. A bid from an unregistered contractor will be rejected as unresponsive.

### **Pre-Bid Meeting**

There will be no pre-bid meeting for the Entry Monument Sign and Flag Poles Project. Direct all requests for clarification to City Engineer Erik Huffman, BECON Civil Engineering and Land Surveying, (541) 633-3140 or ehuffman@beconeng.com.

Verbal communications are not binding on the contract. All requests for clarification shall be made in writing and a Clarification Addenda will be issued prior to bid opening.

## **Proposals**

**The City reserves the right to reject all proposals or any proposal not conforming to the requirements of the Contract Documents, and postpone the awarding of the contract for a period of not more than 30 days from the bid opening date.**

## **Notification**

The notification of Intent to Award will be made to all responsible bidders within seven (7) calendar days of the bid opening. Protest of bid results and Intent to Award must be in writing, must be by a bidder in good legal standing, must be specific, and must be received within seven (7) calendar days of the date of issuance of the Intent to Award. The protest envelope must give bid title reference and must be addressed to Ashley Williams, City of La Pine, 16345 Sixth Street, P.O. Box 2460, La Pine, Oregon 97739.

## **INSTRUCTION TO BIDDERS**

---

**PROJECT TITLE:** Entry Monument Sign and Flag Poles Project

**LOCATION:** Hwy 97 at City Hall property, 16345 Sixth Street

**OWNER:** City of La Pine  
16345 Sixth Street  
P.O. Box 2460  
La Pine, Oregon

**PROPOSAL:** To be entitled to consideration, please include:

### **Bid Schedule**

1. Use bid schedule(s) provided. Fill in all blank spaces.
2. Bid shall be typed or prepared in blue ink, and signed in blue ink.
3. Complete without alterations or erasures.
4. Shall not contain any recapitulation of work to be done.
5. No oral, telephonic or telegraphic proposal or modifications will be considered.
6. Contractor must certify that it is or is not an Oregon business as per ORS 279A.120. ORS 279A.120 requires public contracting agencies, in determining the lowest responsible bidder, to add a percent increase to each out-of-state bidder's bid price which is equal to the percent of preference given to local bidders in the bidder's home state. The bidder shall certify that it is or is not an Oregon contractor as defined under ORS 279A.120, Preferences; Foreign Contractor, i.e., a foreign contractor is one who is not domiciled in or registered to do business in the State of Oregon.
7. All subcontractors are to be approved in writing by the Owner and carry the same insurance requirements as the prime contractor. Subcontractors shall submit Contractor's Board license number, Federal Identification Number, State Unemployment Number, and Certification of ORS 279A.120 as stated in the First Tier Subcontractor Disclosure Form.

### **Bid Bond**

Enclose a bidder's bond, certified check (or cashier's) check with made payable to the Owner in an amount equal to 10% of the total bid.

**First Tier Subcontractor Disclosure Form**

The submittal of the First Tier Subcontractor Disclosure Form is not mandatory for the Entry Monument Sign and Flag Poles Project.

**Proposal**

Enclose a completed Proposal form provided in the bid documents.

**Prevailing Wage Rate Statement**

The Prevailing Wage Rate Statement shall be completed and returned with the Bid Submittal per ORS 279C.800 – 279C.870.

**Drug Testing Policy Statement**

The Drug Testing Policy Statement shall be completed and returned with the Bid Submittal per ORS 279C.505 (2003 Chapter 794.138).

**Non-Collusion Affidavit**

The Non-Collusion Affidavit shall be completed and returned with the Bid Submittal.

**Bid Submittal**

Address and Deliver:

1. Address: City of La Pine  
16345 Sixth Street  
P.O. Box 2460  
La Pine, Oregon
  
2. Deliver: To Office Utility Specialist, in an opaque sealed envelope marked **Entry Monument Sign and Flag Poles Project**, with the name of the bidder, on or before **April 17, 2018 (2:00 pm)**.

**AWARD OF CONTRACT:**

Contract award will in general be made to lowest responsible bidder. The award will be based on the lowest cumulative total of the base bid amount and all bid alternates in the bid schedule. The City may elect to award any or all bid alternates whichever it determines to be in the best interest of the City. Supplemental unit price items are not part of the determination of cost for award, however, supplemental unit prices will be reviewed for consistency with base bid and bid alternate costs and the City will consider supplemental unit prices in the determination of responsible bidders. The City reserves the right to award only a portion of the project if it is in the best interest of the City.

The competency and responsibility of bidders and of their proposed subcontractors will be considered in making the award. Owner reserves the right to reject bid of any bidder who has previously failed to perform properly and to complete on time contracts of a similar

nature, who is not in a position to perform the Contract, who has habitually and without cause neglected the payment of bills or otherwise disregarded their obligation to subcontractors, material men or employees.

Bidder should notify Owner prior to bid opening date, should omissions or errors be found in Contract Documents. Owner will clarify by sending written instructions to all bidders in the form of Addenda which will become a part of the Contract.

Owner will not be responsible for any oral instructions or interpretations.

#### **EXAMINATIONS:**

**Bidder is responsible for verifying dimensions and bid quantities prior to bidding.**

Before submitting a proposal, the bidder shall carefully examine all Contract Documents, visit the site of the work, and fully inform themselves of all existing conditions and limitations. Bidders shall include in the Bid, sum or sums sufficient to cover the cost of all items in this Contract.

Bidder should notify Owner prior to bid opening date, should omissions or errors be found in Contract Documents. Owner will clarify by issuing instructions in the form of Addenda which will become a part of the Contract.

Owner will not be responsible for any oral instructions or interpretations.

**Bidder is responsible to review all documents he/she will submit in the Proposal as complete. All pages listed on the Bidder's Required Submittal Listing are required to be included in the Proposal.**

#### **ANY ADDENDA:**

Any addenda issued during the time of bidding are to be covered in the Proposal, and in closing a Contract they will become part thereof. Signed copy of the addenda is to be included with the bid submittal. All addenda will be made in PDF format, available on the City of La Pine and Premier Builders Exchange websites. The City of La Pine will not mail or fax notice of Addenda, but will publish notice of any addenda on the City of La Pine and Premier Builders Exchange. Bidders should frequently check the website at least once weekly until the week of bid opening. The City will issue the last addenda at least three business days prior to bid opening. Any addenda issued during the time of bidding are to be covered in the Proposal, and in closing a Contract they will become part thereof.

#### **SUBSTITUTIONS:**

In order to obtain approval of material, products, methods, as equal to those specified, submit to Owner substitution request at least five (5) days before bid opening.

#### **CONTRACT DOCUMENTS:**

The contractor and subcontractors shall comply with all Conditions of the Contract Documents.



**PAYMENT ON CONTRACT:**

**Payment will be made as provided in the Contract.** The contractor and subcontractors must pay not less than the minimum hourly rate of wage as determined by the Commissioner of the Oregon Bureau of Labor and Industries, and which is not less than prevailing wage. They or their sureties must execute a statement under oath in a form prescribed by the State Labor Commissioner, certifying the hourly rate of wage paid and that no workman was paid less than prevailing rate of wage or less than the minimum hourly rate of wage and file with the Clerk of the District prior to any disbursement under the Contract and in accordance with ORS 279C.800 thru 279C.870. Contractors shall make payments in accordance with the Contract, ORS 279C.840 to 279C.870 and the laws of the State of Oregon. Contractor is required to have a \$30,000 Public Works Bond filed with CCB before starting work on the project, unless exempt.(SB 477, Sections 2-5) Contractor is required to verify their subcontractors have filed bond.

**PECUNIARY INTEREST:**

No director or employee of Owner shall have any pecuniary interest in the project.

**LOCAL LABOR:**

Contractor and subcontractors are encouraged to use local labor when available.

**QUALIFICATIONS AS A CONDITION PRECEDENT TO BIDDING:**

All Contractors submitting a bid must be registered with the Construction Contractors Board, or the bid will not be received or considered. A bid from an unregistered contractor will be rejected as unresponsive.

**COMPLETION:**

---

The Project shall be completed by June 29, 2018.

**Project Contact**

**All design questions and clarification inquiries shall be made to Erik Huffman, Owner's Representative, BECON Civil Engineering, 541.633.3140.**

All questions will be responded to in a written Addendum issued 3 days prior to bid opening. It will be available on the City of La Pine website and at the Premier Builders Exchange. All questions received after this date will not receive response.

BID SCHEDULE

**City of La Pine Monument Signage & Flag Poles**

**Base Bid**

**BASE BID:** Bidder is to show the cost of all items included in the contract documents, complete-in-place including all materials, labor, overhead, profit and expenses to complete the work, as divided into the following items. Bidder hereby agrees that they will complete all of the work in accordance with Contract Documents.

**BASE BID ITEMS**

	<b><u>Quantity</u></b>	<b><u>Bid Price</u></b>
1. Mobilization	1 LS	\$ _____

This item covers all work necessary to move in personnel and equipment, set up all field offices and facilities required to prepare for construction. Incidental work for this bid item includes but is not limited to; providing required bonds and insurance, incidental traffic control measures, incidental clearing and grubbing, incidental excavation and earthwork, and cleanup after completion of all work on the project. All erosion control measures required in accordance with City of La Pine standards, state, and federal requirements are considered incidental to this bid item. Mobilization will be measured and paid on the lump sum basis.

2. Demolition	1 LS	\$ _____
---------------	------	----------

This item covers all work necessary for removal and legal disposal of existing signage, footings, and any incidental work related to required construction activity. Waste materials shall be disposed of off-site at the contractor's expense. Demolition will be measured and paid on the lump sum basis.

3. Monument Signage	1 LS	\$ _____
---------------------	------	----------

This item covers all work necessary to install the City of La Pine monument sign with in the stone planter. Incidental work for this bid item includes, but is not limited to; structural engineering, cmu structural core, grouting and reinforcing steel, concrete footing, compacted aggregate base course, wood framing, steel post-base supports, steel strapping, cor-ten sign fabrication and install with internal LED lighting and associated electrical, and all associated hardware and fasteners. This item does not include the stone veneer, see item #6. Monument Signage will be measured and paid on the lump sum basis.

4. Stone Planter Wall	1 LS	\$ _____
-----------------------	------	----------

This item covers all work necessary to install the stone planter wall. Incidental work for this bid item includes, but is not limited to: cmu, grouting, reinforcing steel, concrete footing, aggregate base course, waterproofing, conduit sleeving, weep holes. This item does not include the stone veneer, see item #6. Stone Planter Wall will be measured and paid on the lump sum basis.

BID SCHEDULE

5. Flagpole and Base EA (3) \$ \_\_\_\_\_

This item covers all work necessary to install the flag poles and bases. Incidental work for this bid item includes, but is not limited to, structural engineering, cmu, sleeving, footing, reinforcing steel, conduit connections, as well as the ordering, staging, & installing of flagpoles. This item does not include the stone veneer, see item #6. Flagpole and base will be measured and paid on a whole unit basis.

6. Stone Veneer 1 LS \$ \_\_\_\_\_

This item covers all work necessary to install stone veneer. Incidental work for this bid item includes, but is not limited to, stone selection and submittal to match existing, mortar, grout, stone cap, stone corner pieces, stone masonry ties, and all associated materials. Stone Veneer will be measured and paid on a whole unit basis.

7. Electrical 1 LS \$ \_\_\_\_\_

This item covers all work necessary to install the site up-lighting for the monument sign and light poles. Incidental work for this bid item includes, but is not limited to; conduit, junction boxes, switches, wires, connection to existing power source, fixtures, necessary sleeving, and trenching. This item does not include the internal LED lighting of the cor-ten sign but does include providing conduit and power connection(s) to its location. Electrical will be measured and paid on the lump sum basis.

8. Irrigation 1 LS \$ \_\_\_\_\_

This item covers all work necessary to install irrigation for the area inside the stone planter wall. Incidental work for this bid item includes but is not limited to; connection to existing city irrigation mainline, ensure and provide as necessary irrigation controller capacity for additional zones, trenching, controller wires, valves, irrigation piping, heads, in-line drip tubing, flush valves, air relief valves, and all associated material. Irrigation will be measured and paid on the lump sum basis.

9. Soil preparation 1 LS \$ \_\_\_\_\_

This item covers all work necessary to install soil amendments for the area inside the stone planter wall. Incidental work for this bid item includes but is not limited to; compost, humate, gypsum, fertilizers, soils testing, import and install of raised bed planter soil, herbicides, fine grading, and all associated material. Soil preparation will be measured and paid on the lump sum basis.

10. Planting 1 LS \$ \_\_\_\_\_

This item covers all work necessary to install plantings for the area inside the stone planter wall. Incidental work for this bid item includes but is not limited to; ordering, staging, care, planting, and maintenance of groundcover, perennials, grasses, shrubs, and trees until time of substantial completion. This item may also include; tree stakes, tree

BID SCHEDULE

ties, mulch, and all associated material. Planting will be measured and paid on the lump sum basis.

11. 90-Day Establishment Period 1 LS \$ \_\_\_\_\_

This item covers all work necessary to maintain healthy, thriving, and weed free plant material for the area inside the stone planter wall. 90-Day Establishment Period will be measured and paid on the lump sum basis.

**TOTAL LUMP SUM BASE BID AMOUNT:** \_\_\_\_\_

(In Words) \_\_\_\_\_

**Bid Alternates**

**BID ALTERNATE:** Bidder is to show the cost of material and labor associated with installation of each of the following bid items as specified on the drawings and in accordance with the specifications as referenced

<u><b>BID ALTERNATES</b></u>	<u><b>Quantity</b></u>	<u><b>Bid Alt Price</b></u>
1. Provide and install flagpole option with internal halyard	1 LS	\$ _____
2. Provide and install alternate signage option for City establishment date	1 LS	\$ _____
3. Raise the overall height of the planter wall, and internal finish grade of planter, from 12" to 18" above adjacent finish grade	1 LS	\$ _____
4. Provide and install upgraded natural stone veneer masonry and cap for monument sign, stone planter wall, and stone flagpole bases, in lieu of cultured stone veneer to match city hall	1 LS	\$ _____
5. Provide and install 2-Rail Split Cedar Fence	1 LS	\$ _____
6. Provide and install additional planting, soil amendments, and 90-day maintenance to area between split rail fence and the edge of the existing concrete sidewalk	1 LS	\$ _____
7. Provide and install additional irrigation for area between split rail fence and back of existing concrete sidewalk	1 LS	\$ _____

BID SCHEDULE

**SUPPLEMENTAL UNIT PRICE SCHEDULE**

The following prices are intended to be the basis for additions or deletions to the work, if required. Should the Bidder be required to perform more or less work than that shown on the drawings and specifications, an additional sum will be paid or shall be credited to the City on the basis of the unit prices quoted below. Listed prices shall be the sum total compensation for items complete and in place.

<b><u>ITEM DESCRIPTION</u></b>	<b><u>UNIT TYPE</u></b>	<b><u>UNIT PRICE</u></b>
1. Stone veneer (type A-Base bid)	Square Foot (SF)	\$ _____
2. Stone veneer (type B-Bid alt)	Square Foot (SF)	\$ _____
3. Electrical conduit	Lineal Foot (LN)	\$ _____
4. 6-8' HT. Evergreen tree	Each (EA)	\$ _____
5. Shrub / grass – 5 gallon	Each (EA)	\$ _____
6. Shrub / grass – 3 gallon	Each (EA)	\$ _____
7. Shrub / grass – 1 gallon	Each (EA)	\$ _____
8. Shrub / grass – 4" pot	Each (EA)	\$ _____
9. Bark mulch	Cubic Yard (CY)	\$ _____

**To Be Considered Responsive, the following must be signed and completed by your firm:**

We hereby certify to do the work as specified and at the price as quoted in conformance to all the City, State and Federal Regulations that are applicable and will indemnify the City of La Pine against all claims arising out of any actions caused by our company during the performance of this contract.

Bidders Official Company Name \_\_\_\_\_

Address \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_  
(Signature of Authorized Official and Title)

By \_\_\_\_\_ Phone \_\_\_\_\_  
(Type or Print Name)

Federal I.D.# \_\_\_\_\_ FAX # \_\_\_\_\_ Email: \_\_\_\_\_

**CONTRACTOR'S EXPERIENCE**

---

**Please list at least five similar projects to the Entry Monument Sign and Flag Poles Project that have been completed in the last five years.**

#1

---

PROJECT OWNER: \_\_\_\_\_

DESCRIPTION OF PROJECT: \_\_\_\_\_

PROJECT ENGINEER: \_\_\_\_\_

TOTAL COST OF PROJECT: \_\_\_\_\_

CONTACT NAME: \_\_\_\_\_

CONTACT NAME TELEPHONE #: \_\_\_\_\_

---

#2

---

PROJECT OWNER: \_\_\_\_\_

DESCRIPTION OF PROJECT: \_\_\_\_\_

PROJECT ENGINEER: \_\_\_\_\_

TOTAL COST OF PROJECT: \_\_\_\_\_

CONTACT NAME: \_\_\_\_\_

CONTACT NAME TELEPHONE #: \_\_\_\_\_

---

#3

---

PROJECT OWNER: \_\_\_\_\_

DESCRIPTION OF PROJECT: \_\_\_\_\_

PROJECT ENGINEER:

---

---

TOTAL COST OF PROJECT:

---

CONTACT NAME:

---

CONTACT NAME TELEPHONE #:

---

---

#4

PROJECT OWNER:

---

DESCRIPTION OF PROJECT:

---

PROJECT ENGINEER:

---

TOTAL COST OF PROJECT:

---

CONTACT NAME:

---

CONTACT NAME TELEPHONE #:

---

---

#5

PROJECT OWNER:

---

DESCRIPTION OF PROJECT:

---

PROJECT ENGINEER:

---

TOTAL COST OF PROJECT:

---

CONTACT NAME:

---

CONTACT NAME TELEPHONE #:

---



**BID BOND**

---

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_  
 hereinafter called the PRINCIPAL, and \_\_\_\_\_  
 a corporation duly organized under the laws of the State of \_\_\_\_\_, having its  
 principal place of business at \_\_\_\_\_, in the State of  
 \_\_\_\_\_, and authorized to do business in the State of Oregon, as SURETY, are  
 held and firmly bound unto the City of La Pine, Oregon, as obligee, hereinafter called  
 the CITY, in the penal sum of \_\_\_\_\_ dollars  
 (\$ \_\_\_\_\_) for the payment of which, well and truly to be made, we bind ourselves,  
 our heirs, executors, administrators, successors and assigns, jointly and severally, firmly  
 by these presents.

THE CONDITIONS OF THIS BOND ARE SUCH That, whereas the PRINCIPAL herein  
 is herewith submitting his or its bid proposal for the **Entry Monument Sign and Flag  
 Poles Project**, said bid proposal, by reference thereto, being hereby made a part  
 hereof.

NOW, THEREFORE, if the said bid proposal submitted by the said PRINCIPAL be  
 accepted, and the contract be awarded to said PRINCIPAL, and if the said PRINCIPAL  
 shall execute the proposed Agreement and shall furnish such performance and payment  
 bonds as required by the bidding and Contract Documents within the time fixed by said  
 documents, then this obligation shall be void; if the PRINCIPAL shall fail to execute the  
 proposed Agreement and furnish said bond, the SURETY hereby agrees to pay to the

CITY the penal sum as liquidated damages.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
By

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

\_\_\_\_\_  
By Attorney-in-fact

(A certified copy of the agent's power-of-attorney must be attached hereto.)

**FIRST TIER SUBCONTRACTOR DISCLOSURE FORM (THIS FORM IS NOT MANDATORY)**

**PROJECT NAME:** *Entry Monument Sign and Flag Poles Project*

**BID SUBMITTAL:**

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

**DISCLOSURE DEADLINE:**

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

List below the Name, Address, Contact Name and Telephone Number of each subcontractor that will be furnishing labor or labor and materials that are required to be disclosed. Enter "NONE" if there are no subcontractors that need to be disclosed. (Attach additional sheets if needed).

Name/Address	Nature of Work Performed	Contact Phone #	Contract Amount
1.			
2.			
3.			
4.			
5.			

The above listed First-Tier Subcontractor(s) are providing labor or labor and materials with a dollar value equal to or greater than:

5% of the total Contract Price, but at least \$15,000 (including all alternates). If the dollar value is less than \$15,000 do not list the subcontractor above; or, \$350,000 regardless of the percentage of the total Contract Price.

**FORM SUBMITTED BY (BIDDER NAME):** \_\_\_\_\_

**CONTACT NAME** \_\_\_\_\_ **PHONE #:** \_\_\_\_\_

**DELIVER FORM TO AGENCY:** City of La Pine

**PERSON DESIGNATED TO RECEIVE FORM:** Office Utility Specialist  
**PHONE #:** 541.536.1432

**AGENCY ADDRESS:** 16345 Sixth Street, P.O. Box 2460, La Pine, OR 97739

**UNLESS OTHERWISE STATED IN THE ORIGINAL SOLICITATION, THIS DOCUMENT SHALL NOT BE FAXED. IT IS THE RESPONSIBILITY OF THE BIDDERS TO SUBMIT THIS DISCLOSURE FORM AND ANY ADDITIONAL SHEETS, WITH THE PROJECT NAME CLEARLY MARKED, AT THE LOCATION INDICATED BY THE SPECIFIED DISCLOSURE DEADLINE. SEE INSTRUCTIONS TO BIDDERS.**

Rev: 03-09-2000 Agency will insert "N/A" above if the Contract amount value is anticipated to be less than \$100,000. Otherwise this form must be submitted within two working hours of the advertised bid closing date and time; no later than the DISCLOSURE DEADLINE stated above. Bids which are submitted by Bid Closing, but for which the separate disclosure submittal has not been made by the specified deadline, are Not Responsive and shall not be considered for Contract award.

**PROPOSAL**  
**Entry Monument Sign and Flag Poles Project**

**BIDDER'S DECLARATION:**

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this proposal are those named herein, that this proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the City, and that the proposal is made without any connection or collusion with any person making another proposal on this Agreement.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, and that this proposal is made according to the provisions and under the terms of the Contract Documents, which documents are hereby made a part of this proposal.

The Bidder further declares that the provisions required by ORS 279C.800 to 279C.870 relating to prevailing wage rates shall be complied with.

The Bidder further agrees that he has exercised his own judgment regarding subsurface condition and has utilized all data which he believes pertinent from the City and other sources in arriving at his conclusions.

**CONTRACT EXECUTION:**

The Bidder agrees that if this proposal is accepted, he will, within seven (7) days, not including Sundays and legal holidays, after notice of award, sign the Agreement in the form annexed hereto, and will at that time, deliver to the City of La Pine the PERFORMANCE BOND and the PAYMENT BOND required herein, and will to the extent of his proposal, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete the work in the manner, in the time, and according to the methods specified in the Contract Documents and required by the City thereunder.

In the event that the Bidder shall fail to enter into a contract within such time, the bid security in the amount stated in the INVITATION TO BID and deposited herewith, shall be retained by the City and it is agreed that said sum is a fair measure of the amount of damage that the City will sustain because of such failure to enter into a contract.

**CERTIFICATES OF INSURANCE:**

The bidder further agrees to furnish the City, before commencing the work under the Contract, the certificates of insurance as specified in these documents.

CONSTRUCTION TIME LIMITS:

The Bidder agrees to begin work within seven (7) calendar days after the date of the City's written notice to proceed, and to complete all work to be done under the contract in the time frames noted in the INVITATION TO BID after the date of the City's written notice to proceed.

LIQUIDATED DAMAGES:

In the event the Bidder is awarded the Agreement and shall fail to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Bid Documents, liquidated damages shall be paid to the City per the Bid Documents.

SUBCONTRACTORS:

The Bidder will list all proposed subcontractors by their proper corporate name and the portion of the work the subcontractor intends to perform in the spaces provided below. Contractor is also required to comply with the regulations regarding First Tier Subcontractors and applicable submittals.

Subcontractor	Work item to be performed
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____

The City reserves the right to reject any subcontractor that the City deems unfit for the scope of the work proposed.

LUMP SUM OR UNIT PRICES:

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum or unit price amounts. The Bidder agrees that the lump sum prices and the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

The City reserves the right to reject any and all bids, to waive any informalities and to accept the bid of the lowest responsible Bidder.

**ADDENDA:**

The Bidder acknowledges that addenda numbers \_\_\_\_\_  
(Bidder insert number of each addendum received)  
have been received and examined as part of these Contract Documents.

**SURETY:**

If the bidder is awarded the construction contract on this proposal, the surety who provides the "Performance Bond" and "Payment Bond" will be:

\_\_\_\_\_  
Name: Address:

**BIDDER:**

The name of the bidder submitting this proposal:

\_\_\_\_\_  
Name: Address:

The above stated address is the address to which all communications concerned with this proposal and with the contract are to be sent. The names of the principal officers of the corporation, or partnership, or of all persons interested in this proposal as principals are as follows:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**If sole proprietor or partnership:**

In witness hereto the undersigned has set his (its) hand this  
\_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Title

**If corporation:**

In witness whereof the undersigned corporation has caused this instrument to be executed by its duly authorized officers this

\_\_\_\_\_ day of \_\_\_\_\_, 2018 \_\_\_\_\_  
Name of Corporation

By \_\_\_\_\_  
President



Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

(SEAL)

\_\_\_\_\_  
NOTARY PUBLIC OF OREGON  
My commission expires: \_\_\_\_\_



**PREVAILING WAGE RATE COMPLIANCE STATEMENT**

---

The bidder states that provisions of ORS 279C.800 – 279C.870 (Oregon Prevailing Wage Rates) will be complied with on the **Entry Monument Sign and Flag Poles Project.**

COMPANY NAME \_\_\_\_\_

SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

- Applicable prevailing wage rates are those in effect at the time the initial specifications are first advertised for bid solicitation. ORS 279C.830(1)(c); OAR 839-025-0020(4) and (5) The workers must be paid not less than the applicable state prevailing wage rate. ORS 279C.830; OAR 839-020-0115(3)
- The contractor and every subcontractor must have a public works bond filed with the Construction Contractors Board before starting work on the project. ORS 279C.830(2)(a) Every subcontractor is required to have a public works bond filed with the Construction Contractors Board before starting work on the project. ORS 279C.830(2)(b)
- If the contractor fails to pay for labor and services, the City can pay for them and withhold these amounts from payments to the contractor. ORS 279C.515; OAR 839.025.0020(2)(a)
- The contractor must pay daily, weekly, weekend and holiday overtime as required. ORS 279C.520; OAR 839-025-020(2)(c)
- The contractor must make prompt payment for all medical services for which the contractor has agreed to pay, and for all amounts for which the contractor collects or deducts from the worker’s wages. ORS 279C.530; OAR 839-025-0020(2)(d)
- The employer must give written notice to the workers of the number of hours per day and days per week they may be required to work. OAR 839-025-0020(2)(c)

BOLI Contact:

Bureau of Labor and Industries  
 Wage and Hour Division  
 Prevailing Wage Unit  
 800 N.E. Oregon Street, #32  
 Portland, OR 97232  
[www.oregon.gov/BOLI](http://www.oregon.gov/BOLI)

**DRUG TESTING POLICY STATEMENT**

---

The bidder states that provisions of ORS 279C.505 [Chapter 794.138] requiring an employee drug-testing program will be complied with the **Entry Monument Sign and Flag Poles Project.**

\_\_\_\_\_  
COMPANY NAME:

\_\_\_\_\_  
SIGNATURE:

\_\_\_\_\_  
TITLE:

\_\_\_\_\_  
DATE:



## PERFORMANCE BOND

**(NOTE: CONTRACTOR MUST USE THIS FORM, NOT A SURETY COMPANY FORM. MUST BE ACCOMPANIED BY A POWER OF ATTORNEY FOR THE SURETY'S OFFICER AUTHORIZED TO SIGN)**

We the undersigned \_\_\_\_\_  
 as PRINCIPAL (hereinafter called CONTRACTOR), and \_\_\_\_\_  
 \_\_\_\_\_ a corporation organized and existing under and by virtue of the laws of the  
 state of \_\_\_\_\_ duly authorized to do surety business in the  
 state of Oregon and named on the current list of approved surety companies acceptable  
 on federal bonds and conforming with the underwriting limitations as published in the  
 Authorized Insurance List in the State of Oregon published by the Office of the Insurance  
 Commissioner and which carries an "A" rating and is of the appropriate class for the bond  
 amount as determined by Best's Rating System, as SURETY, hereby hold and firmly bind  
 ourselves, our heirs, executors, administrators, successors and assigns, jointly and  
 severally, to pay to CITY OF LA PINE as OBLIGEE (hereinafter called CITY OF LA PINE),  
 the amount of \_\_\_\_\_  
 (equal to 100% of the total bid amount) in lawful money of the United States of America.

WHEREAS, the CONTRACTOR entered into a contract with CITY OF LA PINE  
 dated \_\_\_\_\_ which Contract is hereunto annexed and made a part hereof,  
 for accomplishment of the all contract terms for the project described as follows: **Entry  
 Monument Sign and Flag Poles Project**

NOW, THEREFORE, the condition of this obligation is such that if the  
 CONTRACTOR shall promptly, truly and faithfully perform all the undertakings,  
 covenants, terms, conditions, and agreements of the aforesaid contract and having  
 performed its obligations thereunder, then this obligation shall be null and void; otherwise  
 it shall remain in full force and effect.

Whenever CONTRACTOR shall be declared by CITY OF LA PINE to be in default  
 under the Contract Documents for the project described herein, the SURETY may  
 promptly remedy the default by completing the project in accordance with the Contract  
 Documents and the project Specifications with a contractor approved by the CITY OF LA  
 PINE. SURETY, for value received, further stipulates and agrees that all changes,  
 extensions of time, alterations, or additions to the terms of the Contract or Specifications

for the above described contract are within the scope of the SURETY's undertaking on this bond, and SURETY hereby waives notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications. Any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications shall automatically increase the obligation of the Surety hereunder in a like amount, provided that such increase shall not exceed twenty-five percent (25%) of the original amount of the obligation without the consent of the Surety.

This obligation shall continue to bind the PRINCIPAL and SURETY, notwithstanding successive payments made hereunder, until the full amount of the obligation is exhausted.

SURETY shall indemnify, defend, and protect the CITY OF LA PINE against any claim of direct or indirect loss resulting from the failure of the CONTRACTOR (or any of the employees, subcontractors, or lower tier subcontractors of the CONTRACTOR) to faithfully perform the terms of the contract.

No right of action shall accrue on this bond to or for the use of any person or corporation other than CITY OF LA PINE or its heirs, executors, administrators, successors or assigns.

If more than one SURETY is on this bond, each SURETY hereby agrees that it is jointly and severally liable for obligations on this bond.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
SURETY

\_\_\_\_\_  
CONTRACTOR

By:\_\_\_\_\_

By\*:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City State ZIP

\_\_\_\_\_  
City State ZIP

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Phone Number

\* Must be signed by president or vice-president of Contractor.



**PAYMENT BOND**

**(NOTE: CONTRACTOR MUST USE THIS FORM, NOT A SURETY COMPANY FORM. MUST BE ACCOMPANIED BY A POWER OF ATTORNEY FOR THE SURETY'S OFFICER AUTHORIZED TO SIGN)**

KNOW BY ALL MEN BY THESE PRESENTS:

We the undersigned \_\_\_\_\_  
 as PRINCIPAL (hereinafter called CONTRACTOR), and \_\_\_\_\_  
 \_\_\_\_\_ a corporation organized and existing under and by virtue of the laws of the  
 state of \_\_\_\_\_ duly authorized to do surety business in the  
 state of Oregon and named on the current list of approved surety companies acceptable  
 on federal bonds and conforming with the underwriting limitations as published in the  
 Authorized Insurance List in the State of Oregon published by the Office of the Insurance  
 Commissioner and which carries an "A" rating and is of the appropriate class for the bond  
 amount as determined by Best's Rating System, as SURETY, hereby hold and firmly bind  
 ourselves, our heirs, executors, administrators, successors and assigns, jointly and  
 severally, to pay to CITY OF LA PINE as OBLIGEE (hereinafter called CITY OF LA PINE),  
 the \_\_\_\_\_ amount \_\_\_\_\_ of  
 \_\_\_\_\_ in lawful  
 money of the United States of America.

WHEREAS, the CONTRACTOR entered into a contract with CITY OF LA PINE  
 dated \_\_\_\_\_, which Contract is hereunto annexed and made a part  
 hereof, for accomplishment of the all contract terms for the project described as follows:  
**Entry Monument Sign and Flag Poles Project**

NOW, THEREFORE, the condition of this obligation is such that if the  
 CONTRACTOR shall promptly, truly and faithfully perform all the undertakings,  
 covenants, terms, conditions, and agreements of the aforesaid contract and having  
 performed its obligations thereunder and promptly make payments to all persons, firms,  
 subcontractors, corporations and/or others furnishing materials for or performing labor in  
 the prosecution of the Work provided for in the aforesaid contract, then this obligation  
 shall be null and void; otherwise it shall remain in full force and effect.

Whenever CONTRACTOR shall be declared by CITY OF LA PINE to be in default  
 under the Contract Documents for the project described herein, the SURETY shall  
 promptly remedy the default by completing the project in accordance with the Contract  
 Documents and the project Specifications with a contractor approved by the CITY OF LA  
 PINE. SURETY, for value received, further stipulates and agrees that all changes,

extensions of time, alterations, or additions to the terms of the Contract or Specifications for the above described contract are within the scope of the SURETY's undertaking on this bond, and SURETY hereby waives notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications. Any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the Specifications shall automatically increase the obligation of the Surety hereunder in a like amount, provided that such increase shall not exceed twenty-five percent (25%) of the original amount of the obligation without the consent of the Surety.

This obligation shall continue to bind the PRINCIPAL and SURETY, notwithstanding successive payments made hereunder, until the full amount of the obligation is exhausted.

SURETY shall indemnify, defend, and protect the CITY OF LA PINE against any claim of direct or indirect loss resulting from the failure of the CONTRACTOR (or any of the employees, subcontractors, or lower tier subcontractors of the CONTRACTOR) to faithfully perform the terms of the contract.

No right of action shall accrue on this bond to or for the use of any person or corporation other than CITY OF LA PINE or its heirs, executors, administrators, successors or assigns.

If more than one SURETY is on this bond, each SURETY hereby agrees that it is jointly and severally liable for obligations on this bond.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
SURETY

\_\_\_\_\_  
CONTRACTOR

By:\_\_\_\_\_

By\*:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City State ZIP

\_\_\_\_\_  
City State ZIP

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Phone Number

\* Must be signed by president or vice-president of Contractor.

**AFFIDAVIT #1**

---

TO: CITY OF LA PINE, OREGON

RE: **Entry Monument Sign and Flag Poles Project**

GENTLEMEN:

COMES NOW \_\_\_\_\_ ,

doing business as \_\_\_\_\_ ,

who being first duly sworn, deposes and says:

That all sums due to suppliers, material men, subcontractors, sub-subcontractors, employees and government agencies for wages, goods, services, products, or equipment furnished in connection with the above project have been paid in full. Except as hereinafter stated, this includes, but not limited to all State and Federal withholding taxes, worker's compensation insurance, Oregon unemployment insurance, FUTA unemployment insurance, and social security taxes.

The only obligations which have not been paid and which are known to us are as follows:

1. \_\_\_\_\_ \$ \_\_\_\_\_

2. \_\_\_\_\_ \$ \_\_\_\_\_

3. \_\_\_\_\_ \$ \_\_\_\_\_

4. \_\_\_\_\_ \$ \_\_\_\_\_

5. \_\_\_\_\_ \$ \_\_\_\_\_

If extra space is needed, please attach an extra sheet, date and sign.





**AGREEMENT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_, hereinafter called "OWNER"  
(Name or Owner)

and \_\_\_\_\_ doing business as (an individual,) or (a partnership, or (a corporation) hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of the **Entry Monument Sign and Flag Poles Project.**

2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within \_\_\_\_\_ calendar days after the date of the NOTICE TO PROCEED and will complete the same within \_\_\_\_\_ calendar days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.

4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ \_\_\_\_\_, or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

- A Invitation to Bid
- B Bid Schedule
- C Contractor’s Experience Form
- D Bid Bond
- E First Tier Contractor Disclosure Form

F	Proposal
G	Non-Collusion Affidavit
H	Prevailing Wage Rate Compliance Statement
I	Drug Testing Policy Statement
J	Performance Bond
K	Payment Bond
L	Affidavit #1
M	Agreement
N	State of Oregon Contract Conditions
O	Exhibit "A" Public Contracting Code
P	Prevailing Wage Rates
Q	City of La Pine Public Works Standards
R	Oregon Standard Specifications for Construction 2015
U	Drawings dated March, 2018
V	Specifications dated March, 2018
W	ADDENDA:

---

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in \_\_\_\_\_ number of copies, each of which shall be deemed an original on the date first above written.

OWNER

\_\_\_\_\_  
By \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

(Seal)

ATTEST:

\_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

CONTRACTOR:

\_\_\_\_\_  
By \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

(Seal)

ATTEST:

\_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_

**STATE OF OREGON**

**GENERAL CONDITIONS**

**FOR**  
**PUBLIC IMPROVEMENT**  
**CONTRACTS**



**NOTICE TO STATE AGENCIES AND PUBLIC IMPROVEMENT CONTRACTORS**

**January 1, 2012 Edition**

Changes to the General Conditions (including any additions, deletions or substitutions) should only be made by Supplemental General Conditions, unless the General Conditions are specifically modified in the Public Improvement Agreement (which has a higher order of precedence under Section A.3 of the General Conditions). The text of these General Conditions should not otherwise be altered.

**NOTE: THE FOLLOWING GENERAL CONDITIONS HAVE BEEN REVIEWED AS TO FORM BY THE OREGON DEPARTMENT OF JUSTICE. THE LEGAL SUFFICIENCY AND APPROVAL REQUIREMENTS OF ORS 291.047 ARE STILL APPLICABLE FOR INDIVIDUAL PROCUREMENTS OF STATE AGENCIES, UNLESS AN EXEMPTION HAS BEEN GRANTED PURSUANT TO THAT STATUTE AND ADMINISTRATIVE RULES AT OAR CHAPTER 137, DIVISION 45.**

**STATE OF OREGON**  
**GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS**  
**JANUARY 1, 2012**

TABLE OF SECTIONS

**SECTION A**  
**GENERAL PROVISIONS**

- A.1 DEFINITION OF TERMS
- A.2 SCOPE OF WORK
- A.3 INTERPRETATION OF CONTRACT DOCUMENTS
- A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE
- A.5 INDEPENDENT CONTRACTOR STATUS
- A.6 RETIREMENT SYSTEM STATUS AND TAXES
- A.7 GOVERNMENT EMPLOYMENT STATUS

**SECTION B**  
**ADMINISTRATION OF THE CONTRACT**

- B.1 OWNER'S ADMINISTRATION OF THE CONTRACT
- B.2 CONTRACTOR'S MEANS AND METHODS
- B.3 MATERIALS AND WORKMANSHIP
- B.4 PERMITS
- B.5 COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS
- B.6 SUPERINTENDENCE
- B.7 INSPECTION
- B.8 SEVERABILITY
- B.9 ACCESS TO RECORDS
- B.10 WAIVER
- B.11 SUBCONTRACTS AND ASSIGNMENT
- B.12 SUCCESSORS IN INTEREST
- B.13 OWNER'S RIGHT TO DO WORK
- B.14 OTHER CONTRACTS
- B.15 GOVERNING LAW
- B.16 LITIGATION
- B.17 ALLOWANCES
- B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
- B.19 SUBSTITUTIONS
- B.20 USE OF PLANS AND SPECIFICATIONS
- B.21 FUNDS AVAILABLE AND AUTHORIZED
- B.22 NO THIRD PARTY BENEFICIARIES

**SECTION C**  
**WAGES AND LABOR**

- C.1 MINIMUM WAGES RATES ON PUBLIC WORKS
- C.2 PAYROLL CERTIFICATION; ADDITIONAL RETAINAGE; FEE REQUIREMENTS
- C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS
- C.4 PAYMENT FOR MEDICAL CARE
- C.5 HOURS OF LABOR

**SECTION D**  
**CHANGES IN THE WORK**

- D.1 CHANGES IN THE WORK
- D.2 DELAYS
- D.3 CLAIMS REVIEW PROCESS

**SECTION E**  
**PAYMENTS**

- E.1 SCHEDULE OF VALUES
- E.2 APPLICATIONS FOR PAYMENT
- E.3 PAYROLL CERTIFICATION REQUIREMENT
- E.4 DUAL PAYMENT SOURCES
- E.5 RETAINAGE
- E.6 FINAL PAYMENT

**SECTION F**  
**JOB SITE CONDITIONS**

- F.1 USE OF PREMISES
- F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC
- F.3 CUTTING AND PATCHING
- F.4 CLEANING UP
- F.5 ENVIRONMENTAL CONTAMINATION
- F.6 ENVIRONMENTAL CLEAN-UP
- F.7 FORCE MAJEURE

**SECTION G**  
**INDEMNITY, BONDING AND INSURANCE**

- G.1 RESPONSIBILITY FOR DAMAGES/INDEMNITY
- G.2 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND
- G.3 INSURANCE

**SECTION H**  
**SCHEDULE OF WORK**

- H.1 CONTRACT PERIOD
- H.2 SCHEDULE
- H.3 PARTIAL OCCUPANCY OR USE

**SECTION I**  
**CORRECTION OF WORK**

- I.1 CORRECTIONS OF WORK BEFORE FINAL PAYMENT
- I.2 WARRANTY WORK

**SECTION J**  
**SUSPENSION AND/OR TERMINATION OF THE WORK**

- J.1 OWNER'S RIGHT TO SUSPEND THE WORK
- J.2 CONTRACTOR'S RESPONSIBILITIES
- J.3 COMPENSATION FOR SUSPENSION
- J.4 OWNER'S RIGHT TO TERMINATE CONTRACT
- J.5 TERMINATION FOR CONVENIENCE
- J.6 ACTION UPON TERMINATION

**SECTION K**  
**CONTRACT CLOSE-OUT**

- K.1 RECORD DRAWINGS
- K.2 OPERATION AND MAINTENANCE MANUALS
- K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS
- K.4 COMPLETION NOTICES
- K.5 TRAINING
- K.6 EXTRA MATERIALS
- K.7 ENVIRONMENTAL CLEAN-UP
- K.8 CERTIFICATE OF OCCUPANCY
- K.9 OTHER CONTRACTOR RESPONSIBILITIES
- K.10 SURVIVAL

**SECTION L**  
**LEGAL RELATIONS AND RESPONSIBILITY**  
**TO THE PUBLIC**

- L.1 LAWS TO BE OBSERVED
- L.2 FEDERAL AGENCIES
- L.3 STATE AGENCIES
- L.4 LOCAL AGENCIES

**STATE OF OREGON  
GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS  
("General Conditions")**

**SECTION A  
GENERAL PROVISIONS**

**A.1 DEFINITION OF TERMS**

In the Contract Documents the following terms shall be as defined below:

**ARCHITECT/ENGINEER**, means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities of the Owner's Authorized Representative to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

**CHANGE ORDER**, means a written order issued by the Owner's Authorized Representative to the Contractor requiring a change in the Work within the general scope of the Contract Documents, issued under the changes provisions of Section D.1 including Owner's written change directives as well as changes reflected in a writing executed by the parties to this Contract and, if applicable, establishing a Contract Price or Contract Time adjustment for the changed Work.

**CLAIM**, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these General Conditions.

**CONTRACT**, means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

**CONTRACT DOCUMENTS**, means the Solicitation Document and addenda thereto, the State of Oregon Public Improvement Agreement Form, General Conditions, Supplemental General Conditions, if any, the accepted Offer, Plans, Specifications, amendments and Change Orders.

**CONTRACT PERIOD**, as set forth in the Contract Documents, means the total period of time beginning with the issuance of the Notice to Proceed and concluding upon Final Completion.

**CONTRACT PRICE**, means the total of the awarded Offer amount, as increased or decreased by the price of approved alternates and Change Orders.

**CONTRACT TIME**, means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the project schedule.

**CONTRACTOR**, means the Person awarded the Contract for the Work contemplated.

**DAYS**, are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

**DIRECT COSTS**, means, unless otherwise provided in the Contract Documents, the cost of materials, including sales tax, cost of delivery; cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; worker's compensation insurance; project specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater); bond premiums, rental cost of equipment, and machinery required for execution of the work; and the additional costs of field personnel directly attributable to the Work.

**FINAL COMPLETION**, means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any, released.

**FORCE MAJEURE**, means an act, event or occurrence caused by fire, riot, war, acts of God, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to this Contract who is asserting Force Majeure.

**NOTICE TO PROCEED**, means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted to Owner in a suitable form.

**OFFER**, means a bid in connection with an invitation to bid and a proposal in connection with a request for proposals.

**OFFEROR**, means a bidder in connection with an invitation to bid and a proposer in connection with a request for proposals.

**OVERHEAD**, means those items which may be included in the Contractor's markup (general and administrative expense and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), expenses of Contractor's offices at the job site (e.g. job trailer) including expenses of personnel staffing the job site office, and Commercial General Liability Insurance and Automobile Liability Insurance.

**OWNER**, means the State of Oregon acting by and through the governmental entity identified in the Solicitation Document.

**OWNER'S AUTHORIZED REPRESENTATIVE**, means those individuals identified in writing by the Owner to act on behalf of the Owner for this project. Owner may elect, by written notice to Contractor, to delegate certain duties of the Owner's Authorized Representative to more than one party, including without limitation, to an Architect/Engineer. However, nothing in these General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

**PERSON**, means an entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, or any other entity possessing the legal capacity to contract.

**PLANS**, means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

**PUNCHLIST**, means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

**RECORD DOCUMENT**, means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer to Owner, operational and maintenance manuals, shop drawings, Change Orders, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.9.1 of these General Conditions, recording all Services performed.

**SOLICITATION DOCUMENT**, means an invitation to bid or request for proposal or request for quotes.

**SPECIFICATION**, means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

**SUBCONTRACTOR**, means a Person having a direct contract with the Contractor, or another Subcontractor, to perform one or more items of the Work.

**SUBSTANTIAL COMPLETION**, means the date when the Owner accepts in writing the construction, alteration or repair of the improvement to real property or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.4.2.

**SUBSTITUTIONS**, means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Approval of any substitute item shall be solely determined by the Owner's Authorized Representative. The decision of the Owner's Authorized Representative is final.

**SUPPLEMENTAL GENERAL CONDITIONS**, means those conditions that remove from, add to, or modify these General Conditions. Supplemental General Conditions may be

included in the Solicitation Document or may be a separate attachment to the Contract.

**WORK**, means the furnishing of all materials, equipment, labor, transportation, services and incidentals necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents.

## **A.2 SCOPE OF WORK**

The Work contemplated under this Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all construction work in connection with the project described in the Contract Documents. The Contractor shall perform all Work necessary so that the project can be legally occupied and fully used for the intended use as set forth in the Contract Documents.

## **A.3 INTERPRETATION OF CONTRACT DOCUMENTS**

A.3.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

1. Contract amendments and Change Orders, with those of later date having precedence over those of an earlier date;
2. The Supplemental General Conditions;
3. The State of Oregon Public Improvement Agreement Form;
4. The General Conditions
5. The Plans and Specifications
6. The Solicitation Document and any addenda thereto;
7. The accepted Offer.

A.3.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner or Owner's Authorized Representative's interpretation in writing.

A.3.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner or Owner's Authorized Representative. Matters concerning performance under, and interpretation of requirements of, the Contract Documents will be decided by the Owner's Authorized Representative, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owner's Authorized Representative (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness.



Interpretations and decisions of the Owner's Authorized Representative (or Architect/Engineer) will be consistent with the intent of and reasonably inferable from the Contract Documents. Contractor shall not proceed without direction in writing from the Owner's Authorized Representative (or Architect/Engineer).

- A.3.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the project is occurring on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

#### **A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE**

- A.4.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.
- A.4.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.
- A.4.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner's Authorized Representative, including without limitation, any nonconformity with applicable laws, statutes, ordinances, building codes, rules and regulations.
- A.4.4 If the Contractor believes that additional cost or Contract Time is involved because of clarifications or instructions issued by the Owner's Authorized Representative (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner's Authorized Representative denies Contractor's request for additional compensation, additional Contract Time, or other relief that Contractor believes results from

the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to perform the obligations of Sections A.4.1 to A.4.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

#### **A.5 INDEPENDENT CONTRACTOR STATUS**

The service or services to be performed under this Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner.

#### **A.6 RETIREMENT SYSTEM STATUS AND TAXES**

Contractor represents and warrants that it is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under this Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual. Unless the Contractor is subject to backup withholding, Owner will not withhold from such payments any amount(s) to cover Contractor's federal or state tax obligations.

#### **A.7 GOVERNMENT EMPLOYMENT STATUS**

- A.7.1 If this payment is to be charged against federal funds, Contractor represents and warrants that it is not currently employed by the Federal Government. This does not preclude the Contractor from holding another contract with the Federal Government.
- A.7.2 Contractor represents and warrants that Contractor is not an employee of the State of Oregon for purposes of performing Work under this Contract.

### **SECTION B ADMINISTRATION OF THE CONTRACT**

#### **B.1 OWNER'S ADMINISTRATION OF THE CONTRACT**

- B.1.1 The Owner's Authorized Representative will provide administration of the Contract as described in the Contract Documents (1) during construction (2) until final payment is due and (3) during the one-year period for correction of Work. The Owner's Authorized Representative will act on behalf of the Owner to the extent provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner's Authorized Representative may rely on the Architect/Engineer or other consultants to perform some or all of these tasks.
- B.1.2 The Owner's Authorized Representative will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner's Authorized Representative

will not make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner's Authorized Representative will neither have control over or charge of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.

- B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall endeavor to communicate with each other through the Owner's Authorized Representative or designee about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner's Authorized Representative.
- B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner's Authorized Representative, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

**B.2 CONTRACTOR'S MEANS AND METHODS:**  
**MITIGATION OF IMPACTS**

- B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures.
- B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the project, including those caused by authorized changes, which may affect cost, schedule, or quality.
- B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, and Subcontractors on the project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

**B.3 MATERIALS AND WORKMANSHIP**

- B.3.1 The intent of the Contract Documents is to provide for the construction and completion in every detail of the Work described. All Work shall be performed in a professional manner and unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted

and used by the industry, in accordance with industry standards.

- B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's expense.
- B.3.3 Work done and materials furnished shall be subject to inspection and/or observation and testing by the Owner's Authorized Representative to determine if they conform to the Contract Documents. Inspection of the Work by the Owner's Authorized Representative does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.
- B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner's Authorized Representative to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms. Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.
- B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner's Authorized Representative and include the cost of the Samples in the Contract Price.

**B.4 PERMITS**

Contractor shall obtain and pay for all necessary permits and licenses, except for those specifically excluded in the Supplemental General Conditions, for the construction of the Work, for temporary obstructions, enclosures, opening of streets for pipes, walls, utilities, environmental Work, etc., as required for the project. Contractor shall be responsible for all violations of the law, in connection with the construction or caused by obstructing streets, sidewalks or otherwise. Contractor shall give all requisite notices to public authorities. The Contractor shall pay all royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent or other proprietary rights and save harmless and blameless from loss, on account thereof, the State of Oregon, and its departments, divisions, members and employees.

**B.5 COMPLIANCE WITH GOVERNMENT LAWS AND REGULATIONS**

- B.5.1 Contractor shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following as applicable: i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended (vi) all regulations and administrative rules established pursuant to the foregoing laws; and (vii) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. Owner's performance under the Contract is conditioned upon Contractor's compliance with the provisions of ORS 279C.505, 279C.510, 279C.515, 279C.520, and 279C.530, which are incorporated by reference herein.

B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations; and

(a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts.

(b) Contractor shall maintain, in current and valid form, all licenses and certificates required by law, regulation, or this Contract when performing the Work.

B.5.3 Unless contrary to federal law, Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work as described in ORS 701.005 under this Contract unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time they submit their bids to the Contractor.

B.5.4 Unless contrary to federal law, Contractor shall certify that each landscape contractor, as defined in ORS 671.520(2), performing Work under this Contract holds a valid landscape contractor's license issued pursuant to ORS 671.560.

B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503)232-1987.

B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a breach of Contract and constitute grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

## **B.6 SUPERINTENDENCE**

Contractor shall keep on the site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the site. Directions given to the superintendent by the Owner's Authorized Representative shall be confirmed in writing to the Contractor.

## **B.7 INSPECTION**

B.7.1 Owner's Authorized Representative shall have access to the Work at all times.

B.7.2 Inspection of the Work will be made by the Owner's Authorized Representative at its discretion. The Owner's Authorized Representative will have authority to reject Work that does not conform to the Contract Documents. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner's Authorized Representative, shall be removed and replaced at the Contractor's expense.

B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner's Authorized Representative timely notice of when and where tests and inspections are to be made so that the Owner's Authorized Representative may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner's Authorized Representative.

B.7.4 As required by the Contract Documents, Work done or material used without inspection or testing by the Owner's Authorized Representative may be ordered removed at the Contractor's expense.

B.7.5 If directed to do so any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without sufficient notice to the Owner's Authorized Representative, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner's Authorized Representative, the uncovering and restoration will be paid for as a Change Order.

B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's Authorized Representative's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.

B.7.7 When the United States government participates in the cost of the Work, or the Owner has an agreement with other public or private organizations, or if any portion of the Work is being performed for a third party or in close proximity to third party facilities, representatives of these organizations have the right to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner's Authorized Representative.

## **B.8 SEVERABILITY**

If any provision of this Contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected and the rights and obligations of the parties shall be construed and

enforced as if the Contract did not contain the particular provision held to be invalid.

#### **B.9 ACCESS TO RECORDS**

B.9.1 Contractor shall keep, at all times on the Work site, one record copy of the complete Contract Documents, including the Plans, Specifications, Change Orders and addenda, in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner's Authorized Representative access thereto.

B.9.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access to, for a period not less than ten (10) years, all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Contract is involved in litigation, Contractor shall retain all such records until all litigation is resolved. The Owner and/or its agents shall continue to be provided full access to the records during litigation.

#### **B.10 WAIVER**

Failure of the Owner to enforce any provision of this Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of this Contract.

#### **B.11 SUBCONTRACTS AND ASSIGNMENT**

B.11.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.

B.11.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.

B.11.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under this Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of this Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with

the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.

#### **B.12 SUCCESSORS IN INTEREST**

The provisions of this Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

#### **B.13 OWNER'S RIGHT TO DO WORK**

Owner reserves the right to perform other or additional work at or near the project site with other forces than those of the Contractor. If such work takes place within or next to the project site, Contractor will coordinate work with the other contractors or forces, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all forces involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner's Authorized Representative will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner's Authorized Representative will establish work priority (including the Work) which generally will be in the sequence that the contracts were awarded.

#### **B.14 OTHER CONTRACTS**

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of this Contract. The Contractor of this Contract will fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in section B.13.

#### **B.15 GOVERNING LAW**

This Contract shall be governed by and construed in accordance with the laws of the State of Oregon without regard to principles of conflict of laws.

#### **B.16 LITIGATION**

Any Claim between Owner and Contractor that arises from or relates to this Contract and that is not resolved through the Claims Review Process in Section D.3 shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the State of Oregon on any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR BY EXECUTION OF THIS CONTRACT HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION B.16.

#### **B.17 ALLOWANCES**

B.17.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such

amounts and by such persons or entities as the Owner may direct.

B.17.2 Unless otherwise provided in the Contract Documents:

- (a) when finally reconciled, allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- (b) Contractor's costs for unloading and handling at the site, labor, installation costs, Overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;
- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (i) the difference between actual costs and the allowances under Section B.17.2(a) and (2) changes in Contractor's costs under Section B.17.2(b).
- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

**B.18 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

B.18.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner's Authorized Representative if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples which are described below:

- (a) Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any sub-subcontractor), manufacturer, supplier or distributor to illustrate some portion of the Work.
- (b) Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- (c) Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

B.18.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed

in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.

B.18.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect/Engineer without action.

B.18.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

B.18.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.

B.18.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.

B.18.7 In the event that Owner elects not to have the obligations and duties described under this Section

B.18 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owner's Authorized Representative.

### **B.19 SUBSTITUTIONS**

The Contractor may make Substitutions only with the consent of the Owner, after evaluation by the Owner's Authorized Representative and only in accordance with a Change Order. Substitutions shall be subject to the requirements of the bid documents. By making requests for Substitutions, the Contractor represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under this Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

### **B.20 USE OF PLANS AND SPECIFICATIONS**

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under this Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other interest in them beyond the scope of this Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

### **B.21 FUNDS AVAILABLE AND AUTHORIZED**

Owner reasonably believes at the time of entering into this Contract that sufficient funds are available and authorized for expenditure to finance the cost of this Contract within the Owner's appropriation or limitation. Contractor understands and agrees that, to the extent that sufficient funds are not available and authorized for expenditure to finance the cost of this Contract, Owner's payment of amounts under this Contract attributable to Services performed after the last day of the current biennium is contingent on Owner receiving from the Oregon Legislative Assembly appropriations, limitations or other expenditure authority sufficient to allow Owner, in the exercise of its reasonable administrative discretion, to continue to make payments under this Contract.

### **B.22 NO THIRD PARTY BENEFICIARIES**

Owner and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly, or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

## **SECTION C WAGES AND LABOR**

### **C.1 MINIMUM WAGE RATES ON PUBLIC WORKS**

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Documents establishing those conditions, as determined by the Commissioner of the Bureau of Labor and Industries (BOLI), are included as attachments to or are incorporated by reference in the Contract Documents. Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts.

### **C.2 PAYROLL CERTIFICATION; ADDITIONAL RETAINAGE; FEE REQUIREMENTS**

C.2.1 In accordance with ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Owner's Authorized Representative, on the form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed on the project and further certifying that no worker employed on the project has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of the Contractor or the Subcontractor that the Contractor or Subcontractor has read the certified statement, that the Contractor or Subcontractor knows the contents of the certified statement and that to the Contractor's or Subcontractor's best knowledge and belief the certified statement is true. The certified statements shall set out accurately and completely the payroll records for the prior week including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made and actual wages paid. Certified statements for each week during which the Contractor or Subcontractor has employed a worker on the project shall be submitted once a month, by the fifth business day of the following month.

The Contractor and Subcontractors shall preserve the certified statements for a period of ten (10) years from the date of completion of the Contract.

C.2.2 Pursuant to ORS 279C.845(7), the Owner shall retain 25 percent of any amount earned by the Contractor on this public works project until the Contractor has filed the certified statements required by section C.2.1. The Owner shall pay to the Contractor the amount retained under this subsection within 14 days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.

C.2.3 Pursuant to ORS 279C.845(8), the Contractor shall retain 25 percent of any amount earned by a first-tier Subcontractor on this public works project until the first-tier Subcontractor has filed with the Owner the certified statements required by C.2.1. Before paying any amount retained under this subsection, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 days after the first-tier Subcontractor files the required certified statement the Contractor shall pay the first-tier Subcontractor any amount retained under this subsection.

C.2.4 In accordance with statutory requirements, and administrative rules promulgated by the Commissioner of the Bureau of Labor and Industries, the fee required by ORS 279C.825(1) will be paid by Owner to the Commissioner.

### **C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS**

C.3.1 Pursuant to ORS 279C.505 and as a condition to Owner's performance hereunder, the Contractor shall:

C.3.1.1 Make payment promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the Work provided for in this Contract.

C.3.1.2 Pay all contributions or amounts due the State Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the Contract.

C.3.1.3 Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished. Contractor will not assign any claims that Contractor has against Owner, or assign any sums due by Owner, to Subcontractors, suppliers, or manufacturers, and will not make any agreement or act in any way to give Subcontractors a claim or standing to make a claim against the Owner.

C.3.1.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

C.3.1.5 Demonstrate that an employee drug testing program is in place as follows:

(a) Contractor represents and warrants that Contractor has in place at the time of the execution of this Contract, and shall maintain during the term of this Contract, a Qualifying Employee Drug Testing Program for its employees that includes, at a minimum, the following:

- (1) A written employee drug testing policy,
- (2) Required drug testing for all new Subject Employees or, alternatively, required testing of all Subject Employees every 12 months on a random selection basis, and
- (3) Required testing of a Subject Employee when the Contractor has reasonable cause to believe the Subject Employee is under the influence of drugs.

A drug testing program that meets the above requirements will be deemed a "Qualifying Employee Drug Testing Program." For the purposes of this section, an employee is a "Subject Employee" only if that employee will be working on the project job site.

(b) Contractor shall require each Subcontractor providing labor for the project to:

- (1) Demonstrate to the Contractor that it has a Qualifying Employee Drug Testing Program for the Subcontractor's Subject Employees,

and represent and warrant to the Contractor that the Qualifying Employee Drug Testing Program is in place at the time of subcontract execution and will continue in full force and effect for the duration of the subcontract, or

- (2) Require that the Subcontractor's Subject Employees participate in the Contractor's Qualifying Employee Drug Testing Program for the duration of the subcontract.

C.3.2 Pursuant to ORS 279C.515, and as a condition to Owner's performance hereunder, Contractor agrees:

C.3.2.1 If Contractor fails, neglects or refuses to pay promptly a person's claim for labor or services that the person provides to the Contractor or a Subcontractor in connection with the project as such claim becomes due, the proper officer that represents the Owner may pay the amount of the claim and charge the amount of the payment against funds due or to become due Contractor under this Contract. Paying a claim in this manner shall not relieve the Contractor or the Contractor's surety from obligation with respect to an unpaid claim.

C.3.2.2 If the Contractor or a first-tier Subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the public contract for a public improvement within thirty (30) Days after receiving payment from Owner or a contractor, the contractor or first-tier Subcontractor owes the person the amount due plus interest charges that begin at the end of the 10-Day period within which payment is due under ORS 279C.580(3) and that end upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest on the amount due is nine percent per annum. The amount of interest may not be waived.

C.3.2.3 If the Contractor or a Subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the Contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580. Every contract related to this Contract must contain a similar clause.

C.3.3 Pursuant to ORS 279C.580, Contractor shall include in each subcontract for property or services the Contractor enters into with a first-tier Subcontractor, including a material supplier, for the purpose of performing a construction contract:

- (a) A payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under the subcontract within ten (10) Days out of amounts the Owner pays to the Contractor under the Contract;
- (b) A clause that requires the Contractor to provide the first-tier Subcontractor with a standard form that the first-tier Subcontractor may use as an application for payment or as another method by which the Subcontractor may claim a payment due from the Contractor;

- (c) A clause that requires the Contractor, except as otherwise provided in this paragraph, to use the same form and regular administrative procedures for processing payments during the entire term of the subcontract. The Contractor may change the form or the regular administrative procedures the Contractor uses for processing payments if the Contractor:
  - (1) Notifies the Subcontractor in writing at least 45 days before the date on which the Contractor makes the change; and
  - (2) Includes with the written notice a copy of the new or changed form or a description of the new or changed procedure.
- (d) An interest penalty clause that obligates the Contractor, if the Contractor does not pay the first-tier Subcontractor within thirty (30) Days after receiving payment from Owner, to pay the first-tier Subcontractor an interest penalty on amounts due in each payment the Contractor does not make in accordance with the payment clause included in the subcontract under paragraph (a) of this subsection. Contractor or first-tier Subcontractor is not obligated to pay an interest penalty if the only reason that the Contractor or first-tier Subcontractor did not make payment when payment was due is that the Contractor or first-tier Subcontractor did not receive payment from Owner or Contractor when payment was due. The interest penalty applies to the period that begins on the day after the required payment date and that ends on the date on which the amount due is paid; and is computed at the rate specified in ORS 279C.515(2).
- (e) A clause which requires each of Contractor's Subcontractors to include, in each of their contracts with lower-tier Subcontractors or suppliers, provisions to the effect that the first-tier Subcontractor shall pay its lower-tier Subcontractors and suppliers in accordance with the provisions of paragraphs (a) through (d) above and requiring each of their Subcontractors and suppliers to include such clauses in their subcontracts and supply contracts.

C.3.4 All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.

**C.4 PAYMENT FOR MEDICAL CARE**

Pursuant to ORS 279C.530, and as a condition to Owner's performance hereunder, Contractor shall promptly, as due, make payment to any person, partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, all sums of which the Contractor agrees to pay for such services and all moneys and sums which the Contractor has collected or deducted from the wages of personnel pursuant to any law, contract or agreement for the purpose of providing or paying for such services.

**C.5 HOURS OF LABOR**

As a condition to Owner's performance hereunder, Contractor shall comply with ORS 279C.520, as amended from time to time and incorporated herein by this reference:

Pursuant to ORS 279C.520 and as a condition to Owner's performance hereunder, no person shall be employed to perform Work under this Contract for more than ten (10) hours in any one day or forty (40) hours in any one week, except in cases of necessity, emergency or where public policy absolutely requires it. In such instances, Contractor shall pay the employee at least time and a half pay:

- (a) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five consecutive Days, Monday through Friday; or
- (b) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four consecutive Days, Monday through Friday; and
- (c) For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

This section C.5 will not apply to Contractor's Work under this Contract if Contractor is currently a party to a collective bargaining agreement with any labor organization.

This Section C.5 shall not excuse Contractor from completion of the Work within the time required under this Contract.

**SECTION D  
CHANGES IN THE WORK**

**D.1 CHANGES IN WORK**

D.1.1 The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the Owner's Authorized Representative, and then only in a manner consistent with the Change Order provisions of this Section D.1 and after any necessary approvals required by public contracting laws have been obtained. Otherwise, a formal contract amendment is required, which shall not be effective until its execution by the parties to this Contract and all approvals required by public contracting laws have been obtained.

D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction are inherent in the nature of construction and may be necessary or desirable during the course of construction. Within the general scope of this Contract, the Owner's Authorized Representative may at any time, without notice to the sureties and without impairing the Contract, require changes consistent with this Section D.1. All Change Order Work shall be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.



- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the project.
- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible, as determined by Owner. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self perform such Work, for which the provisions of B.13 (Owner's Right to Do Work) shall then apply.

Adjustments in compensation shall be made under the provisions of D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that Change Order Work shall be administered and compensated according to the following:

- (a) *Unit pricing* may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for additional Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the additional Work.
- (b) If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, *fixed pricing* may be used for Change Order Work. In fixed pricing the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. The mark-ups set forth in D.1.3(c) shall be utilized by the parties as a guide in establishing fixed pricing, and will not be exceeded by Owner without adequate justification. Cost and price data relating to Change Orders shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.
- (c) In the event that unit pricing and fixed pricing are not utilized, then Change Order Work shall be performed on a *cost reimbursement* basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. In addition, the following markups shall be added to the Contractor's or Subcontractor's Direct Costs as full compensation for profit, Overhead and other indirect costs for Work directly performed with the Contractor's or Subcontractor's own forces:

On Labor.....	15%
On Equipment.....	10%
On Materials.....	10%

When Change Order Work under D.1.3(c) is invoiced by an authorized Subcontractor at any level, each ascending

tier Subcontractor or Contractor will be allowed a 5% supplemental mark-up on each piece of subcontract Work covered by such Change Order.

Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were incurred by the Contractor or by other forces furnished by the Contractor, including Subcontractors, for Change Order Work. Owner may establish a maximum cost for Change Order Work under this Section D.1.3(c), which shall not be exceeded for reimbursement without additional written authorization from Owner. Contractor shall not be required to complete such Change Order Work without additional authorization.

D.1.4 Any necessary adjustment of Contract Time that may be required as a result of a Change Order must be agreed upon by the parties before the start of the Change Order Work unless Owner's Authorized Representative authorizes Contractor to start the Work before agreement on Contract Time adjustment. Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of the Change Order. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) day time limit, Contractor's requests pertaining to that Change Order are barred. The thirty (30) day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.

D.1.5 If any Change Order Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of, any other part of the Work under this Contract, the Contractor must submit a written request to the Owner's Authorized Representative, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of the Change Order by Contractor.

The thirty (30) day time limit applies to claims of Subcontractors, suppliers, or manufacturers that may be affected by the Change Order and that request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the compensation and additional Contract Time

requested. The Contractor will analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for additional compensation or Contract Time that Contractor submits to the Owner's Authorized Representative. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner's Authorized Representative within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner's Authorized Representative and the Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to this Contract. The consideration of such requests and claims under this section does not give any person, not a party to the Contract the right to bring a claim against the State of Oregon, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner's Authorized Representative denies the Contractor's request for additional compensation or an extension of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

D.1.6 No request or Claim by the Contractor for additional costs or an extension of Contract Time shall be allowed if made after receipt of final payment application under this Contract. Contractor agrees to submit its final payment application within ninety (90) days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to this Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be waived.

D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor is notified that numerous changes may be required and that there will be no compensation made to the Contractor directly related to the number of changes. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

## **D.2 DELAYS**

D.2.1 Delays in construction include "Avoidable Delays", which are defined in Section D.2.1.1, and "Unavoidable Delays", which are defined in Section D.2.1.2. The effect of Avoidable Delays is described in Section D.2.2 and the effect of Unavoidable Delays is described in Section D.2.3.

D.2.1.1 Avoidable Delays include any delays other than Unavoidable Delays, and include delays that

otherwise would be considered Unavoidable Delays but that:

- (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of other parts of the Work nor the completion of the whole Work within the Contract Time.
- (c) Do not impact activities on the accepted critical path schedule.
- (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

D.2.1.2 Unavoidable Delays include delays other than Avoidable Delays that are:

- (a) Caused by any actions of the Owner, Owner's Authorized Representative, or any other employee or agent of the Owner, or by separate contractor employed by the Owner.
- (b) Caused by any site conditions which differ materially from what was represented in the Contract Documents or from conditions that would normally be expected to exist and be inherent to the construction activities defined in the Contract Documents. The Contractor shall notify the Owner's Authorized Representative immediately of differing site conditions before the area has been disturbed. The Owner's Authorized Representative will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner's Authorized Representative agree that a differing site condition exists, any additional compensation or additional Contract Time will be determined based on the process set forth in Section D.1.5 for Change Order Work. If the Owner's Authorized Representative disagrees that a differing site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.
- (c) Caused by Force Majeure acts, events or occurrences that could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors.
- (d) Caused by adverse weather conditions. Any adverse weather conditions must be substantiated by documentary evidence that weather conditions were abnormal for the specific time period claimed, could not have been anticipated by the Contractor, and adversely impacted the project in a manner that could not be avoided by rescheduling the Work or by implementing measures to protect against the weather so that the Work could proceed. A rain, windstorm, high water, or other natural

phenomenon for the specific locality of the Work, which might reasonably have been anticipated from the previous 10-year historical records of the general locality of the Work, shall not be construed as abnormal. The parties agree that rainfall greater than the following levels cannot be reasonably anticipated:

- (i) Daily rainfall equal to, or greater than, 0.50 inch during a month when the monthly rainfall exceeds the normal monthly average by twenty-five percent (25 %) or more.
- (ii) daily rainfall equal to, or greater than, 0.75 inch at any time.

The Office of the Environmental Data Service of the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce nearest the project site shall be considered the official agency of record for weather information.

D.2.2 Except as otherwise provided in ORS 279C.315, Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.

D.2.3 In the event of Unavoidable Delays, based on principles of equitable adjustment, Contractor may be entitled to the following:

- (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
- (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.3 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing site conditions for which a review process is established under Section D.2.1.2 (b), Contractor shall submit a written notification of the delay to the Owner's Authorized Representative within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the cause of the potential delay, the project components impacted by the delay, and the anticipated additional Contract Time or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner's Authorized Representative, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay. If the Owner's Authorized Representative denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2., then unless otherwise prohibited by law, Contractor's Claim shall be barred.

### **D.3 CLAIMS REVIEW PROCESS**

D.3.1 All Contractor Claims shall be referred to the Owner's Authorized Representative for review. Contractor's Claims, including Claims for additional compensation or additional Contract Time, shall be submitted in writing by Contractor to the Owner's Authorized Representative within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits established in these General Conditions. Within thirty (30) Days after the initial Claim, Contractor shall submit to the Owner's Authorized Representative, a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be waived.

D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time extension requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner's Authorized Representative. The Owner's Authorized Representative and the Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to this Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.

D.3.3 The Owner's Authorized Representative will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) based on principles of equitable adjustment, recommend approval of all or part of the Claim; or (5) propose an alternate resolution.

D.3.4 The Owner's Authorized Representative's decision shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.

D.3.5 The decision of the Owner shall be final and binding unless the Contractor delivers to the Owner its requests for mediation, which shall be a non-binding process, within fifteen (15) Days of the date of the Owner's decision. The mediation process will be

considered to have commenced as of the date the Contractor delivers the request. Both parties acknowledge and agree that participation in mediation is a prerequisite to commencement of litigation of any disputes relating to the Contract. Both parties further agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the commencement of the mediation through the mediation process set forth herein.

In the event that a lawsuit must be filed within this sixty (60) day period in order to preserve a cause of action, the parties agree that notwithstanding the filing, they shall proceed diligently with the mediation to its conclusion prior to actively prosecuting the lawsuit, and shall seek from the Court in which the lawsuit is pending such stays or extensions, including the filing of an answer, as may be necessary to facilitate the mediation process. Further, in the event settlements are reached on any issues through mediation, the parties agree to promptly submit the appropriate motions and orders documenting the settlement to the Court for its signature and filing.

- D.3.6 The mediator shall be an individual mutually acceptable to both parties, but in the absence of agreement each party shall select a temporary mediator and the temporary mediators shall jointly select the permanent mediator. Each party shall pay its own costs for the time and effort involved in mediation. The cost of the mediator shall be split equally between the two parties. Both parties agree to exercise their best effort in good faith to resolve all disputes in mediation. Participation in mediation is a mandatory requirement of both the Owner and the Contractor. The schedule, time and place for mediation will be mutually acceptable, or, failing mutual agreement, shall be as established by the mediator. The parties agree to comply with Owner's administrative rules governing the confidentiality of mediation, if any, and shall execute all necessary documents to give effect to such confidentiality rules. In any event, the parties shall not subpoena the mediator or otherwise require the mediator to produce records, notes or work product, or to testify in any future proceedings as to information disclosed or representations made in the course of mediation, except to the extent disclosure is required by law.
- D.3.7 Owner may at any time and at its discretion issue a construction change directive adding to, modifying or reducing the scope of Work. Contractor and Owner shall negotiate the need for any additional compensation or additional Contract Time related to the change, subject to the procedures for submitting requests or Claims for additional compensation or additional Contract Time established in this Section D. Unless otherwise directed by Owner's Authorized Representative, Contractor shall proceed with the Work while any request or Claim is pending, including but not limited to, a request or Claim for additional compensation or additional Contract Time resulting from Work under a Change Order or construction change directive. Regardless of the review period or the final decision of the Owner's Authorized Representative, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease Work without a written stop work order from the Owner or Owner's Authorized Representative.

## **SECTION E PAYMENTS**

### **E.1 SCHEDULE OF VALUES**

The Contractor shall submit, at least ten (10) Days prior to submission of its first application for progress payment, a schedule of values ("Schedule of Values") for the contracted Work. This schedule will provide a breakdown of values for the contracted Work and will be the basis for progress payments. The breakdown will demonstrate reasonable, identifiable, and measurable components of the Work. Unless objected to by the Owner's Authorized Representative, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner's Authorized Representative, Contractor shall revise the schedule of values and resubmit the same for approval of Owner's Authorized Representative.

### **E.2 APPLICATIONS FOR PAYMENT**

- E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses. Payments shall be based upon estimates of Work completed and the Schedule of Values. All payments shall be approved by the Owner's Authorized Representative. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest on the progress payment, not including retainage, due the Contractor. The interest shall commence thirty (30) Days after the receipt of invoice ("application for payment") from the Contractor or fifteen (15) Days after the payment is approved by the Owner's Authorized Representative, whichever is the earlier date. The rate of interest shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is thirty (30) Days after receipt of the application for payment from the Contractor or fifteen (15) Days after the payment is approved by the Owner, whichever is the earlier date, but the rate of interest shall not exceed thirty (30) percent. Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen (15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Accrual of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for payment that is correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers (EFT) through Automated Clearing House (ACH) payments. If

Owner makes this election, the Contractor will be required to arrange to receive EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner's Authorized Representative, an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor, including payments to Subcontractors. Contractor shall include, in its application for payment, a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: \_\_\_\_\_"

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. Under special conditions, applications for payment for stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner's Authorized Representative shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials only. The submitted amount of the application for payment shall be reduced by the cost of transportation and for the cost of an inspector to check the delivery at out of town storage sites. The cost of said inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the material stored.
- (g) Payment for stored materials shall in no way indicate acceptance of the materials or waive any rights under this Contract for the rejection of the Work or materials not in conformance with the Contract Documents.

(h) All required documentation must be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with the Contract Documents,
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Owner and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level under Section C.3.2.1);
- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Owner or another contractor;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- (g) failure to carry out the Work in accordance with the Contract Documents; or
- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, no amounts for changes in the Work can be included in application for payment until the Contract Price has been adjusted by Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the site at a location agreed upon in writing), less retainage as provided in Section E.5;
- (c) Subtract the aggregate of previous payments made by the Owner; and

- (d) Subtract any amounts for which the Owner's Authorized Representative has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner's Authorized Representative with regard to any application for payment, Contractor nevertheless shall continue to prosecute expeditiously the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

### **E.3 PAYROLL CERTIFICATION REQUIREMENT**

Payroll certification is required before payments are made on the Contract. Refer to Section C.2 for this information.

### **E.4 DUAL PAYMENT SOURCES**

Contractor shall not be compensated for Work performed under this Contract from any state agency other than the agency that is a party to this Contract.

### **E.5 RETAINAGE**

E.5.1 Retainage shall be withheld and released in accordance with ORS 279C.550 to 279C.580:

E.5.1.1 Owner may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of the retainage and may eliminate retainage on any remaining monthly Contract payments after 50 percent of the Work under the Contract is completed if, in the Owner's opinion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is 97-1/2 percent completed the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to 100 percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 In accordance with the provisions of ORS 279C.560 and any applicable administrative rules, unless the Owner finds in writing that

accepting a bond, security or other instrument described in options (a) or (c) below poses an extraordinary risk that is not typically associated with the bond, security or instrument, the Owner will approve the Contractor's written request:

- (a) to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds, securities or other instruments of equal value with Owner or in a custodial account or other mutually-agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner. Interest or earnings on the bonds, securities or other instruments shall accrue to the Contractor. The Contractor shall execute and provide such documentation and instructions respecting the bonds, securities and other instruments as the Owner may require to protect its interests. To be permissible the bonds, securities and other instruments must be of a character approved by the Director of the Oregon Department of Administrative Services, including but not limited to:

- (i) Bills, certificates, notes or bonds of the United States.
- (ii) Other obligations of the United States or agencies of the United States.
- (iii) Obligations of a corporation wholly owned by the federal government.
- (iv) Indebtedness of the Federal National Mortgage Association.
- (v) General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon.
- (vi) Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

- (b) that retainage be deposited in an interest bearing account, established through the State Treasurer for state agencies, in a bank, savings bank, trust company or savings association for the benefit of Owner, with interest from such account accruing to the Contractor; or

- (c) that the Contractor be allowed, with the approval of the Owner, to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims and liens in the manner and priority as set forth for retainage under ORS 279C.550 to ORS 279C.625.

Where the Owner has accepted the Contractor's election of any of the options above, Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request to deposit a surety bond under option (c), Contractor shall accept like bonds from Subcontractors and suppliers on the project from which Contractor has required retainage.

E.5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of one and one-half percent per month on the final payment

due Contractor, interest to commence thirty (30) Days after the Work under the Contract has been completed and accepted and to run until the date Contractor shall notify Owner in writing when the Contractor considers the Work complete and Owner shall, within fifteen (15) Days after receiving the written notice, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run thirty (30) Days after the end of the 15-Day period.

E.5.1.4 In accordance with the provisions of ORS 279C.560, if the Owner accepts bonds, securities or other instruments deposited as provided in paragraphs (a) and (c) of subsection E.5.1.2, the Owner shall reduce the moneys held as retainage in an amount equal to the value of the bonds, securities and other instruments and pay the amount of the reduction to the Contractor in accordance with ORS 279C.570.

E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor. Provided, however, if in accordance with the provisions of ORS 279C.560 the Contractor has deposited bonds, securities or other instruments or has elected to have the Owner deposit accumulated retainage in an interest-bearing account, the Contractor shall comply with the provisions of ORS 701.435 respecting the deposit of bonds, securities or other instruments by Subcontractors and suppliers and the sharing of interest earnings with Subcontractors and suppliers.

E.5.2 As provided in subsections C.2.2 and C.2.3, additional retainage in the amount of 25% of amounts earned shall be withheld and released in accordance with ORS 279C.845(7) when the Contractor fails to file certified statements as required by section C.2.1.

## **E.6 FINAL PAYMENT**

E.6.1 Upon completion of all the Work under this Contract, the Contractor shall notify the Owner's Authorized Representative, in writing, that Contractor has completed Contractor's part of the Contract and shall request final payment. Upon receipt of such notice the Owner's Authorized Representative will inspect the Work, and if acceptable, submit to the Owner a recommendation as to acceptance of the completed Work and the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Section K. 3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS, and other provisions as may be applicable,

the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.

E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner's Authorized Representative (1) a notarized affidavit/release of liens and claims in a form satisfactory to Owner that states that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.

## **SECTION F JOB SITE CONDITIONS**

### **F.1 USE OF PREMISES**

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, law, ordinances, permits or directions of the Owner's Authorized Representative. Contractor shall follow the Owner's Authorized Representative's instructions regarding use of premises, if any.

### **F.2 PROTECTION OF WORKERS, PROPERTY, AND THE PUBLIC**

F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage, and shall protect the Owner's Authorized Representative, workers and property from injury or loss arising in connection with this Contract. Contractor shall remedy acceptably to the Owner, any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.

shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the job site, and shall comply with the Contract Documents and all applicable provisions of federal, state and municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Work site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner's Authorized Representative. The Owner's Authorized Representative has no responsibility for Work site safety. Work site safety is the responsibility of the Contractor.

F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall immediately and in writing, report to the Owner's Authorized Representative, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.

F.2.4 Contractor is responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, and materials on the site.

F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials will be conducted so no release will occur that may pollute or become hazardous.

F.2.6 In an emergency affecting the safety of life or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner's Authorized Representative, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner's Authorized Representative. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with Section D.

### **F.3 CUTTING AND PATCHING**

F.3.1 Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.

F.3.2 Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor

### **F.4 CLEANING UP**

From time to time as may be ordered by the Owner the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within twenty-four hours after notification by the Owner the work may be done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

### **F.5 ENVIRONMENTAL CONTAMINATION**

F.5.1 Contractor will be held responsible for and shall indemnify, defend (with counsel of Owner's choice) and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, (including attorney fees), or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of these General Conditions, and Contractor shall take no action that would void or impair such coverages

F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and proper regulatory agencies in a manner that complies with applicable federal, state, and local laws and regulations. Cleanup shall be at no cost to the Owner and be performed by properly qualified personnel.

F.5.1.2 Contractor shall obtain the Owner's written consent prior to bringing onto the Work site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any applicable federal, state, or local statutes, rules or ordinances. Notwithstanding such written consent from the Owner, the Contractor, at all times, shall:

(a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials brought onto the Work site, in accordance with all applicable federal, state, or local statutes, rules, or ordinances;

(b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Work site; and

(c) promptly clean up, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all



applicable federal, state, or local statutes, rules or ordinances.

F.5.2 Contractor shall report all reportable quantity releases to applicable federal, state, and local regulatory and emergency response agencies. Reportable quantities are found in 40 CFR Part 302, Table 302.4 for hazardous substances and in OAR 340-142-0050 for all products addressed therein. Upon discovery, regardless of quantity, Contractor must telephonically report all releases to the Owner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:

- (a) Description of items released (identity, quantity, manifest no., and all other documentation required by law.)
- (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when it was reported.
- (c) Exact time and location of release, including a description of the area involved.
- (d) Containment procedures initiated.
- (e) Summary of communications about the release Contractor has had with members of the press or State officials other than Owner.
- (f) Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.
- (g) Personnel injuries, if any, resulting from, or aggravated by, the release.

#### **F.6 ENVIRONMENTAL CLEAN-UP**

F.6.1 Unless disposition of environmental pollution is specifically a part of this Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by this Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl (PCB), or petroleum, and any substances, materials or wastes regulated in 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or well being of Contractor's or any Subcontractor's work force.

F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the project site, Owner shall arrange for the proper disposition of such hazardous substance(s).

#### **F.7 FORCE MAJEURE**

A party to this Contract shall not be held responsible for delay or default due to Force Majeure acts, events or occurrences unless they could have been avoided by the exercise of reasonable care, prudence, foresight, and diligence by that party. The Owner may terminate this Contract upon written notice after determining that delay or default caused by Force Majeure acts, events or occurrences will reasonably prevent successful performance of the Contract.

### **SECTION G INDEMNITY, BONDING, AND INSURANCE**

#### **G.1 RESPONSIBILITY FOR DAMAGES / INDEMNITY**

G.1.1 Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by, or result from, the carrying out of the Work to be done under this Contract, or from any act, omission or neglect of the Contractor, its Subcontractors, personnel, or agents.

G.1.2 To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel approved by Owner) and hold harmless the Owner, Owner's Authorized Representative, Architect/Engineer, Architect/Engineer's consultants, and their respective officers, directors, agents, employees, partners, members, stockholders and affiliated companies (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses (including reasonable attorney fees), demands and actions of any nature whatsoever which arise out of, result from or are related to, (a) any damage, injury, loss, expense, inconvenience or delay described in this Section G.1.2, (b) any accident or occurrence which happens or is alleged to have happened in or about the project site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects, (c) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract, (d) the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder (except to the extent otherwise void under ORS 30.140), and (e) any lien filed upon the project or bond claim in connection with the Work. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section G.1.2.

G.1.3 In claims against any person or entity indemnified under this Section G.1.2 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section G.1.2 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

**G.2 PERFORMANCE AND PAYMENT SECURITY:  
PUBLIC WORKS BOND**

G.2.1 When the Contract Price is \$100,000 or more (or \$50,000 or more in the case of Contracts for highways, bridges and other transportation projects) the Contractor shall furnish and maintain in effect at all times during the Contract Period, a performance bond in a sum equal to the Contract Price, and a separate payment bond also in a sum equal to the Contract Price. The bonds may be required if the Contract Price is less than the above thresholds, if required by the Contract Documents.

G.2.2 Bond forms furnished by the Owner and notarized by awarded Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.

G.2.3 Before execution of the Contract Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Laws 2005, Chapter 360, and OAR 839-025-0015, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting the Subcontractor to start Work.

**G.3 INSURANCE**

G.3.1 Primary Coverage: Insurance carried by Contractor under this Contract shall be the primary coverage and non-contributory with any other insurance and self-insurance, and the Owner's insurance is excess and solely for damages or losses for which the Owner is responsible. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

G.3.2 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than \$100,000 for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

G.3.3 Builder's Risk Insurance:

G.3.3.1 Builder's Risk: During the term of this Contract, for new construction the Contractor shall obtain and keep in effect Builder's Risk insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or \$50,000, whichever is more. The policy will include as loss payees the

Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.2 Builder's Risk Installation Floater: For other than new construction the Contractor shall obtain and keep in effect during the term of this Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees the State of Oregon, the Owner, the Contractor and its Subcontractors as their interests may appear.

G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

G.3.3.4 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner for the insureds, as their interests may appear. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

G.3.4 Liability Insurance:

G.3.4.1 Commercial General Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Commercial General Liability Insurance covering bodily injury and property damage in a form and with coverages that are satisfactory to the State. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnity provided under this Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis. Contractor shall provide proof of insurance of not less than the amounts listed in the following schedules:

Per Occurrence Limit for any single claimant:  
From commencement of the Contract term to June 30, 2011: \$1,600,000  
July 1, 2011 to June 30, 2012: \$1,700,000  
July 1, 2012 to June 30, 2013: \$1,800,000  
July 1, 2013 to June 30, 2014: \$1,900,000  
July 1, 2014 to June 30, 2015: \$2,000,000  
July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:  
From commencement of the Contract term to June 30, 2011: \$3,200,000  
July 1, 2011 to June 30, 2012: \$3,400,000  
July 1, 2012 to June 30, 2013: \$3,600,000  
July 1, 2013 to June 30, 2014: \$3,800,000  
July 1, 2014 to June 30, 2015: \$4,000,000  
July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:

Per Occurrence Limit for any single claimant:

From commencement of the Contract term to January 1, 2011: \$100,100.

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to January 1, 2011 : \$500,600.

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of this Contract, Automobile Liability Insurance covering owned, non-owned and/or hired vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Contractor shall provide proof of insurance of not less than the amounts listed in the following schedules:

Bodily Injury/Death:

Per Occurrence Limit for any single claimant:

From commencement of the Contract term June 30, 2011: \$1,600,000

July 1, 2011 to June 30, 2012: \$1,700,000

July 1, 2012 to June 30, 2013: \$1,800,000

July 1, 2013 to June 30, 2014: \$1,900,000

July 1, 2014 to June 30, 2015: \$2,000,000

July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to June 30, 2011: \$3,200,000

July 1, 2011 to June 30, 2012: \$3,400,000

July 1, 2012 to June 30, 2013: \$3,600,000

July 1, 2013 to June 30, 2014: \$3,800,000

July 1, 2014 to June 30, 2015: \$4,000,000

July 1, 2015 and thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 3 (Senate Bill 311).

Property Damage:

Per Occurrence Limit for any single claimant:

From commencement of the Contract term to January 1, 2011: \$100,100

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon Laws 2009, chapter 67, section 5 (Senate Bill 311).

Per Occurrence Limit for multiple claimants:

From commencement of the Contract term to January 1, 2011: \$500,600

From January 1, 2010, and every year thereafter the adjusted limitation as determined by the State Court Administrator pursuant to Oregon

G.3.4.3 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of this Contract for a duration of 24 months or the maximum time period available in the marketplace if less than 24 months. Contractor will be responsible for furnishing certification of "tail" coverage as described or continuous "claims made" liability coverage for 24 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of this Contract. This will be a condition of the final acceptance of Work or services and related warranty (if any).

G.3.5 Excess/Umbrella Insurance: A combination of primary and excess/umbrella insurance is acceptable to meet the minimum coverage requirements for Commercial General Liability and Automobile Liability Insurance. In such case, the insurance certificate must include a list of the policies that fall under the excess/umbrella insurance. Sample wording is "The Excess/Umbrella policy is excess over primary Commercial General Liability and primary Automobile Liability Insurance."

G.3.6 Additional Insured: The liability insurance coverage, except Professional Liability if included, required for performance of this Contract shall include the State of Oregon, its departments, divisions, officers, and employees, as Additional Insureds but only with respect to the Contractor's activities to be performed under this Contract.

If Contractor cannot obtain an insurer to name the State of Oregon, its departments, divisions, officers and employees as Additional Insureds, Contractor shall obtain at Contractor's expense, and keep in effect during the term of this Contract, Owners and Contractors Protective Liability Insurance, naming the State of Oregon, its departments, divisions, officers and employees as Named Insureds with not less than a \$1,500,000.00 limit per occurrence. This policy must be kept in effect for 12 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to execution of the Contract.

G.3.7 Certificate(s) of Insurance: As evidence of the insurance coverage required by this Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to execution of the Contract. The certificate(s) will specify all of the parties who are Additional Insureds or Loss Payees. Insurance coverage required under this Contract shall be obtained from insurance companies or entities acceptable to the Owner that are allowed to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to do an insurance business in the state of Oregon, and certain non-admitted surplus lines insurers that satisfy the requirements of applicable Oregon law and are approved by the Owner. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of

\$50,000 shall be approved by the Owner in writing prior execution of the Contract and is subject to Owner's approval. The Contractor shall immediately notify the Owner's Authorized Representative in writing of any change in insurance coverage.

## **SECTION H SCHEDULE OF WORK**

### **H.1 CONTRACT PERIOD**

- H.1.1 **Time is of the essence on this Contract.** The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein. Contractor shall commence Work on the site within fifteen (15) Days of Notice to Proceed, unless directed otherwise.
- H.1.2 Unless specifically extended by Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2 (f) and shall be subject to the Change Order process of Section D.1.
- H.1.3 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete in whole or in part the Work after the date described in Section H.1.2 above.

### **H.2 SCHEDULE**

- H.2.1 Contractor shall provide, by or before the pre-construction conference, a detailed schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by significant project components, significant labor trades, long lead items, broken down by building and/or floor where applicable. Each schedule item shall account for no greater than 5 % of the monetary value of the project or 5 % of the available Contract Time. Schedules with activities of less than one day or valued at less than 1% of the Contract will be considered too detailed and will not be accepted. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. Included within the schedule are the following: Notice to Proceed, Substantial Completion, and Final Completion. Schedules will be updated monthly and submitted with the monthly payment application. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner, as to the Contractor's sequencing, means, methods, or allocated Contract Time. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a request for additional compensation for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

### **H.3 PARTIAL OCCUPANCY OR USE**

- H.3.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work.

Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, insurance or self-insurance, maintenance, heat, utilities, and damage to the Work, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents with respect to such portion of the Work. Approval by the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **SECTION I CORRECTION OF WORK**

### **I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT**

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner's Authorized Representative, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than thirty (30) Days after Substantial Completion for completion of defective (punch list) work, unless otherwise agreed. At the end of that period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the Work not be complete, and all corrections made, the costs for all subsequent re-inspections shall be borne by the Contractor. If Contractor fails to complete the punch list work within the above time period, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) days after demand without affecting Contractor's obligations.

### **I.2 WARRANTY WORK**

- I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent.

The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the

event of warranty work consisting of emergency repairs, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand without affecting Contractor's obligations.

- I.2.2 This provision does not negate guarantees or warranties for periods longer than one year including without limitation such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.
- I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until affected Work has been accepted in writing by the Owner's Authorized Representative.
- I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor pursuant to this Section, as to the Work corrected. The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.
- I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **SECTION J**

### **SUSPENSION AND/OR TERMINATION OF THE WORK**

#### **J.1 OWNER'S RIGHT TO SUSPEND THE WORK**

- J.1.1 The Owner and/or the Owner's Authorized Representative has the authority to suspend portions or all of the Work due to the following causes:
- (a) Failure of the Contractor to correct unsafe conditions;
  - (b) Failure of the Contractor to carry out any provision of the Contract;
  - (c) Failure of the Contractor to carry out orders;

- (d) Conditions, in the opinion of the Owner's Authorized Representative, which are unsuitable for performing the Work;
- (e) Time required to investigate differing site conditions;
- (f) Any reason considered to be in the public interest.

- J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension and Owner shall notify Contractor and Contractor's surety in writing to resume Work.

#### **J.2 CONTRACTOR'S RESPONSIBILITIES**

- J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.
- J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the project in every respect as though its prosecution had been continuous and without suspension.

#### **J.3 COMPENSATION FOR SUSPENSION**

- J.3.1 Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's forces or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension. If the suspension was caused by acts or omissions of the Owner, the Contractor shall be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party owes the other for the impact.

#### **J.4 OWNER'S RIGHT TO TERMINATE CONTRACT**

- J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:
- (a) If Contractor should voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
  - (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
  - (c) If a receiver should be appointed on account of Contractor's insolvency;
  - (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers

or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;

- (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner or its Authorized Representative; or
- (f) If Contractor is otherwise in material breach of any part of the Contract.

J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and in addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

### **J.5 TERMINATION FOR CONVENIENCE**

J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines that termination of the Contract is in the best interest of the public.

J.5.2 The Owner will provide the Contractor with seven (7) Days' prior written notice of a termination for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination.

### **J.6 ACTION UPON TERMINATION**

J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.

J.6.2 As directed by the Owner, Contractor shall upon termination transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.

## **SECTION K CONTRACT CLOSE OUT**

### **K.1 RECORD DOCUMENTS**

As a condition of final payment (refer also to section E.6), Contractor shall comply with the following: Contractor shall provide to Owner's Authorized Representative, Record Documents of the entire project. Record Documents shall

depict the project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed.

### **K.2 OPERATION AND MAINTENANCE MANUALS**

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner's Authorized Representative prior to submission of any pay request for more than 75% of the Work. No payments beyond 75% will be made by the Owner until the O & M Manuals have been received. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, phone list of consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner's Authorized Representative shall review and return one O & M Manual for any modifications or additions required. Prior to submission of its final pay request, Contractor shall deliver three (3) complete and approved sets of O & M Manuals to the Owner's Authorized Representative.

### **K.3 AFFIDAVIT/RELEASE OF LIENS AND CLAIMS**

As a condition of final payment, the Contractor shall submit to the Owner's Authorized Representative a notarized affidavit/release of liens and claims form, in a form satisfactory to Owner, which states that all Subcontractors and suppliers have been paid in full, all disputes with property owners have been resolved, all obligations on the project have been satisfied, all monetary claims and indebtedness have been paid, and that, to the best of the Contractor's knowledge, there are no claims of any kind outstanding against the project. The Contractor shall indemnify, defend (with counsel of Owner's choice) and hold harmless the Owner from all claims for labor and materials finished under this Contract. The Contractor shall furnish complete and valid releases or waivers, satisfactory to the Owner, of all liens arising out of or filed in connection with the Work.

### **K.4 COMPLETION NOTICES**

K.4.1 Contractor shall provide Owner notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and the time within which the Contractor shall finish all items on the punchlist accompanying the Certificate. Both completion notices must be signed by the Contractor and the Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.

K.4.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner's Authorized Representative. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the

manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a punch list be prepared by the Owner's Authorized Representative with submission of the request for the Substantial Completion notice.

#### **K.5 TRAINING**

As part of the Work, and prior to submission of the request for final payment, the Contractor shall schedule with the Owner's Authorized Representative, training sessions for all equipment and systems, as required in the individual specifications sections. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner personnel adequate notice. The O & M Manual shall be used as a basis for training. Training shall be a formal session, held after the equipment and/or system is completely installed and operational in its normal operating environment.

#### **K.6 EXTRA MATERIALS**

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the specifications, prior to final payment. Delivery point for extra materials shall be designated by the Owner's Authorized Representative.

#### **K.7 ENVIRONMENTAL CLEAN-UP**

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental pollution clean-up performed as a part of this Contract has been disposed of in accordance with all applicable rules, regulations, laws, and statutes of all agencies having jurisdiction over such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above.

#### **K.8 CERTIFICATE OF OCCUPANCY**

The Contractor shall not be granted Final Completion or receive final payment if the Owner has not received an unconditioned certificate of occupancy from the appropriate state and/or local building officials, unless failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

#### **K.9 OTHER CONTRACTOR RESPONSIBILITIES**

The Contractor shall be responsible for returning to the Owner all items issued during construction such as keys, security passes, site admittance badges, and all other pertinent items. The Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's forces continue with the Work.

#### **K.10 SURVIVAL**

All warranty and indemnification provisions of this Contract, and all of Contractor's other obligations under this Contract that are not fully performed by the time of Final Completion or termination, shall survive Final Completion or any termination of the Contract

### **LEGAL RELATIONS & RESPONSIBILITIES**

#### **L.1 LAWS TO BE OBSERVED**

In compliance with ORS 279C.525, Sections L.2 through L.4 contain lists of federal, state and local agencies of which the Owner has knowledge that have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract:

#### **L.2 FEDERAL AGENCIES**

Agriculture, Department of  
Forest Service  
Soil Conservation Service  
Coast Guard  
Defense, Department of  
Army Corps of Engineers  
Energy, Department of  
Federal Energy Regulatory Commission  
Environmental Protection Agency  
Health and Human Services, Department of  
Housing and Urban Development, Department of  
Solar Energy and Energy Conservation Bank  
Interior, Department of  
Bureau of Land Management  
Bureau of Indian Affairs  
Bureau of Mines  
Bureau of Reclamation  
Geological Survey  
Minerals Management Service  
U.S. Fish and Wildlife Service  
Labor, Department of  
Mine Safety and Health Administration  
Occupation Safety and Health Administration  
Transportation, Department of  
Federal Highway Administration  
Water Resources Council

#### **L.3 STATE AGENCIES**

Administrative Services, Department of  
Agriculture, Department of  
Soil and Water Conservation Commission

### **SECTION L**

Columbia River Gorge Commission  
Energy, Department of  
Environmental Quality, Department of  
Fish and Wildlife, Department of  
Forestry, Department of  
Geology and Mineral Industries, Department of  
Human Resources, Department of  
Consumer and Business Services, Department of  
Land Conservation and Development Commission  
Parks and Recreation, Department of

State Lands, Division of  
Water Resources Department of

**L.4 LOCAL AGENCIES**

City Councils  
County Courts  
County Commissioner, Board of  
Design Commissions  
Historical Preservation Commission  
Planning Commissions



## Exhibit A

### Public Contracting Code

#### Requirements for Public Improvement Contracts Over \$50,000

1. Contractor shall pay promptly, as due, all persons supplying labor or materials for the prosecution of the work provided for in the contract, and shall be responsible for such payment of all persons supplying such labor or material to any Subcontractor.
  - (a) ORS 279C.580(3)(a) requires the prime contractor to include a clause in each subcontract requiring contractor to pay the first-tier subcontractor for satisfactory performance under its subcontract within 10 days out of such amounts as are paid to the prime contractor by the public contracting agency; and
  - (b) ORS 279C.580(3)(b) requires the prime contractor to include a clause in each subcontract requiring contractor to pay an interest penalty to the first-tier subcontractor if payment is not made within 30 days after receipt of payment from the public contracting agency.
  - (c) ORS 279C.580(4) requires the prime contractor to include in every subcontract a requirement that the payment and interest penalty clauses required by ORS 279C.580(3)(a) and (b) be included in every contract between a subcontractor and a lower-tier subcontractor or supplier.
2. Contractor shall promptly pay all contributions or amounts due the Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the contract, and shall be responsible that all sums due the State Unemployment Compensation Fund from Contractor or any Subcontractor in connection with the performance of the contract shall promptly be paid.
3. Contractor shall not permit any lien or claim to be filed or prosecuted against the City on account of any labor or material furnished and agrees to assume responsibility for satisfaction of any such lien so filed or prosecuted.
4. A notice of claim on contractor's payment bond shall be submitted only in accordance with ORS 279C.600 and 279C.605.
5. Contractor and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
6. Contractor shall demonstrate to the City that an employee drug-testing program is in place within 10 days of receiving a Notice of Award.
7. Pursuant to ORS 279C.515, if Contractor fails, neglects or refuses to make prompt payment of any claim for labor or materials furnished to the Contractor or a Subcontractor by any person in connection with the contract as such claim becomes due, the City may pay such claim to the persons furnishing the labor or material and charge the amount of payment against funds due or to become due Contractor by reason of the contract. The payment of a claim in the manner authorized hereby shall

- not relieve the Contractor or his surety from his or its obligation with respect to any unpaid claim. If the City is unable to determine the validity of any claim for labor or material furnished, the City may withhold from any current payment due Contractor an amount equal to said claim until its validity is determined and the claim, if valid, is paid.
8. Pursuant to ORS 279C.515, if the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract for a public improvement within 30 days after receipt of payment from the City or contractor, the contractor or first-tier subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10 day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest charged to Contractor or first-tier Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve District that includes Oregon on the date that is 30 days after the date when payment was received from the public contracting agency or from the Contractor, but the rate of interest shall not exceed 30%. The amount of interest may not be waived.
  9. As provided in ORS 279C.515, if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or materials in connection with the public contract, the person may file a complaint with the Construction Contractor's Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.
  10. Pursuant to ORS 279C.530, Contractor shall promptly, as due, make payment to any person, co-partnership, association, or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all monies and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.
  11. Contractor shall employ no person for more than 10 hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it, and in such cases, except in cases of contracts for personal services designated under ORS 279A.055, Contractor shall pay the employee at least time and one-half pay for all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work is five (5) consecutive days, Monday through Friday; or for all overtime in excess of 10 hours a day or 40 hours in any one week when the work week is 4 consecutive days, Monday through Friday; and for all work performed on Saturday and on any legal holidays as specified in ORS 279C.540.
  12. Pursuant to ORS 279C.540(2), the Contractor must give notice to employees who work on this contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and the days per week that the employees may be required to work.
  13. The provisions of ORS 279C.800 to ORS 279C.870 relating to the prevailing wage rates will be complied with.

14. Unless exempt under ORS 279C.836(4), (7), (8) or (9), before starting work on this contract, or any subcontract hereunder, contractor and all subcontractors must have on file with the Construction Contractors Board a public works bond with a corporate surety authorized to do business in the state of Oregon in the amount of \$30,000. The bond must provide that the contractor or subcontractor will pay claims ordered by the Bureau of Labor and Industries to workers performing labor upon public works projects. The bond must be a continuing obligation, and the surety's liability for the aggregate of claims that may be payable from the bond may not exceed the penal sum of the bond. The bond must remain in effect continuously until depleted by claims paid under ORS 279C.836(2), unless the surety sooner cancels the bond. The surety may cancel the bond by giving 30 days' written notice to the contractor or subcontractor, to the board and to the Bureau of Labor and Industries. When the bond is canceled, the surety is relieved of further liability for work performed on contracts entered into after the cancellation. The cancellation does not limit the surety's liability for work performed on contracts entered into before the cancellation. Contractor further certifies that contractor will include in every subcontract or provision requiring a subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on the project, unless exempt under ORS 279C.836(4), (7), (8), or (9).
  - (a) Unless exempt under ORS 279C.836(4), (7), (8), or (9), before permitting a subcontractor to start work on this public works project, the contractor shall verify that the subcontractor has filed a public works bond as required under this section or has elected not to file a public works bond under ORS 279C.836(7).
  - (b) Unless public contracting agency has been notified of any applicable exemptions under ORS 279C.836(4), (7), (8), or (9), the public works bond requirement above is in addition to any other bond contractors or subcontractors may be required to obtain under this contract.
  
15. As may be required by ORS 279C.845, Contractor or contractor's surety and every subcontractor or subcontractor's surety shall file certified payroll statements with the City in writing.
  - (a) If a contractor is required to file certified statements under ORS 279C.845, the City shall retain 25% of any amount earned by the contractor on the public works project until the contractor has filed with the City statement as required by ORS 279C.845. The City shall pay the contractor the amount retained within 14 days after the contractor files the required certified statements, regardless of whether a subcontractor has failed to file certified statements required by statute. The City is not required to verify the truth of the contents of certified statements filed by the contractor under this section and ORS 279C.845.
  - (b) The contractor shall retain 25% of any amount earned by a first-tier subcontractor on this public works contract until the subcontractor has filed with the City certified statements as required by ORS 279C.845. The contractor shall verify that the first-tier subcontractor has filed the certified statements before the contractor may pay the subcontractor any amount retained. The contractor shall pay the first-tier subcontractor the amount retained within 14 days after the subcontractor files the certified statements as required by ORS 279C.845. Neither the City nor the contractor is required to verify the truth of the contents of certified statements filed by a first-tier subcontractor.

16. All employers, including Contractor, that employ subject workers who work under this contract shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its subcontractors complies with these requirements.
17. All sums due the State Unemployment Compensation Fund from the Contractor or any Subcontractor in connection with the performance of the contract shall be promptly so paid.
18. The contract may be canceled at the election of City for any willful failure on the part of Contractor to faithfully perform the contract according to its terms.
19. Contractor certifies that it has not discriminated against minorities, women or emerging small business enterprises in obtaining any required subcontractors.
20. Contractor certifies its compliance with the Oregon tax laws, in accordance with ORS 305.385.
21. In the performance of this contract, the Contractor shall use, to the maximum extent economically feasible, recycled paper, materials, and supplies, and shall compost or mulch yard waste material at an approved site, if feasible and cost effective.
22. As may be applicable, Contractor certifies that all subcontractors performing construction work under this contract will be registered with the Construction Contractors Board or licensed by the state Landscaping Contractors Board in accordance with ORS 701.035 to ORS 701.055 before the subcontractors commence work under this contract.
23. Pursuant to City Public Contracting Rule 137-049-0880, the City may, at reasonable times and places, have access to and an opportunity to inspect, examine, copy, and audit the records relating to the Contract.
24. In compliance with the provisions of ORS 279C.525, the following is a list of federal, state and local agencies, of which the City has knowledge, that have enacted ordinances or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that may affect the performance of the contract:

FEDERAL AGENCIES:

- Agriculture, Department of
  - Forest Service
  - Soil Conservation Service
- Defense, Department of
  - Army Corps of Engineers
- Environmental Protection Agency
- Interior, Department of
  - Bureau of Sport Fisheries and Wildlife
  - Bureau of Outdoor Recreation
  - Bureau of Land Management

- Bureau of Indian Affairs
- Bureau of Reclamation
- Labor, Department of
  - Occupational Safety and Health Administration
- Transportation, Department of
  - Coast Guard
  - Federal Highway Administration

STATE AGENCIES:

- Agriculture, Department of
- Environmental Quality, Department of
- Fish and Wildlife, Department of
- Forestry, Department of
- Geology and Mineral Industries, Department of
- Human Resources, Department of
- Land Conservation and Development Commission
- Soil and Water Conservation Commission
- State Engineer
- State Land Board
- Water Resources Board

LOCAL AGENCIES:

- City Council
- County Court
- County Commissioners, Board of
- Port Districts
- Metropolitan Service Districts
- County Service Districts
- Sanitary Districts
- Water Districts
- Fire Protection Districts



---

# CITY OF LA PINE, OREGON

## 2016 STANDARDS AND SPECIFICATIONS

### DEVELOPMENT PROVISIONS

---

01	INTRODUCTION .....	1
01.1.00	General.....	1
01.2.00	Public Work Improvements .....	1
02	RULES.....	1
03	PUBLIC FACILITY REQUIREMENT .....	2
04	PLANS & SPECIFICATIONS .....	2
04.1.00	General.....	2
04.2.00	Review Plan .....	2
04.3.00	Final Plan .....	3
04.4.00	Engineering Fees.....	4
04.5.00	Pre-Construction Meeting .....	4
04.6.00	Plan Revisions.....	4
04.7.00	Final Plat .....	5
05	AGREEMENTS.....	5
06	INSURANCE.....	5
07	EASEMENTS AND PERMITS .....	6
08	PERFORMANCE AND PAYMENT BOND.....	6
09	WARRANTY .....	7

10	PUBLIC NOTIFICATION .....	7
11	INTERGOVERNMENTAL JURISDICTION .....	7
12	PRE-CONSTRUCTION MEETING .....	8
13	UTILITIES.....	9
14	INSPECTIONS .....	9
14.1.00	ADVANCED NOTIFICATION FOR INSPECTION.....	9
14.2.00	STREET INSPECTION.....	9
14.2.01	Traffic Control.....	9
14.2.02	Excavation.....	9
14.2.03	Subgrade.....	10
14.2.04	Curb.....	10
14.2.05	Curb Backfill.....	10
14.2.06	Sidewalks .....	10
14.2.07	Drainage Structures .....	10
14.2.08	Base .....	10
14.2.09	Paving and AC Patching Preparation .....	10
14.2.10	Paving Operation.....	11
14.2.11	Striping Layout.....	11
14.3.00	SANITARY & STORM SEWER INSPECTION.....	11
14.3.01	Before Construction .....	11
14.3.02	Subgrade.....	11
14.3.03	Pipe Trench and Bedding .....	11
14.3.04	Pipe Installation.....	11
14.3.05	Pipe Backfill.....	11
14.3.06	Manhole and Cleanout Invert.....	12
14.3.07	Completed Manholes and Cleanouts.....	12
14.3.08	Sewer Testing.....	12
14.3.09	Connection to Live Facilities .....	12
14.4.00	WATER INSPECTION .....	12
14.4.01	Before Construction .....	12
14.4.02	Subgrade.....	13

14.4.03	Pipe Trench and Bedding .....	13
14.4.04	Pipe Installation.....	13
14.4.05	Service Installation.....	13
14.4.06	Fitting Location and Installation .....	13
14.4.07	Preparation and Pouring of Thrust Blocks .....	13
14.4.08	Pipe Backfill.....	13
14.4.09	Connection to Live Facilities .....	13
14.4.10	Setting of Valve Boxes.....	13
14.4.11	Pressure Testing .....	13
14.4.12	Chlorination Testing and Flushing.....	14
14.4.13	Flow Testing.....	14
14.5.00	STRUCTURES .....	14
14.5.01	Before Construction .....	14
14.5.02	Excavation.....	14
14.5.03	Foundation.....	14
14.5.04	Form Work & Reinforcement .....	14
14.5.05	Concrete Placement.....	14
14.5.06	Form Removal & Concrete Finish .....	14
14.5.07	Backfill.....	15
14.6.00	SUBDIVISION SITE GRADING .....	15
14.6.01	Grading.....	15
14.6.02	Drainage Facilities.....	15
15	SURVEYING AND CONSTRUCTION STAKING .....	15
16	MATERIALS.....	15
17	WATERING .....	16
17.1.00	DESCRIPTION.....	16
17.2.00	MATERIAL.....	16
17.2.01	WATER.....	16
17.2.02	CONSTRUCTION.....	16
17.3.00	TEMPORARY WATER.....	16
18	WORKMANSHIP .....	16



18.1.00	GENERAL .....	16
18.2.00	CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES .....	17
18.3.00	FIELD RELOCATIONS .....	18
18.4.00	BARRICADES, GUARDS, AND SAFETY PROVISIONS .....	18
18.5.00	PAVEMENT REMOVAL AND REPLACEMENT .....	18
18.6.00	OBSTRUCTIONS .....	19
18.7.00	INTERFERING STRUCTURES, ROADWAYS OR DRIVEWAYS .....	19
18.8.00	BLASTING .....	19
18.9.00	SHORING AND SHEATHING .....	20
18.10.00	LOCATION OF EXCAVATED MATERIALS .....	20
18.11.00	SITE RESTORATION AND CLEANUP .....	21
18.12.00	STREET CLEANING .....	21
18.13.00	EROSION and SEDIMENT CONTROL .....	21
19	TESTING .....	21
20	SANITARY and STORM SEWER CLEAN-UP .....	22
21	AS BUILT DRAWINGS .....	22
22	FINAL ACCEPTANCE .....	22
23	SITE GRADING and DRAINAGE .....	23
23.1.00	General .....	23
23.2.00	Plans and Specifications .....	23
23.3.00	Subdivision Site Grading .....	24
23.4.00	Grading Fees .....	24
23.5.00	Grading Inspection .....	24
23.5.01	Grading .....	24
23.5.02	Drainage Facilities .....	24
23.6.00	Final Grading Acceptance .....	25

## **01 INTRODUCTION**

### **01.1.00 General**

The following provisions are minimum development and construction standards for the City of La Pine and are intended as a supplement to the Oregon Standard Specifications for Construction. Where the term Design Engineer occurs in this document, it shall mean a professional engineering firm retained by the City or Developer/Owner to provide design, construction management, or some other service necessary for the construction of the proposed public facility or site drainage facility. This document shall apply to both private development and publicly bid contracts where applicable.

### **01.2.00 Public Work Improvements**

This document is intended to set minimum standards for public work improvements within the Urban Growth Boundary of the City of La Pine.

The City of La Pine Public Works Standards and Specifications will be incorporated in and made a part of any contract for the design and construction of a municipal project. The portions of this specification relating to design, easements, materials, and workmanship shall be adhered to for private developments where improvements will become part of municipally owned and operated systems. These Standards and Specifications will be updated periodically and, as such, all persons should assure they are working with the most current set of Standards and Specifications.

Minimum general standards shall be as set forth in the current *City of La Pine Public Works Standards and Specifications for Construction*. The Public Works Manager shall have authority over design elements for all City of La Pine public works infrastructure.

## **02 RULES**

No project or construction work that requires City Engineering or Public Works inspection shall commence until the appropriate agreements have been signed and performance bonds submitted, final construction plans approved, preconstruction meeting held, all associated fees and deposits have been paid and 'Notice to Proceed' issued.

The Owner/Developer, or agent, will be responsible for any faulty material and workmanship for one year from the date of the formal acceptance of the sewer, street, water, storm drainage or other public facility installation. Final Acceptance of a project, or any portion of a project, shall be in writing from the City Engineer, and shall state any special conditions required for acceptance by the City.

The Owner/Developer, or agent, shall comply with all terms and conditions of applicable governmental rules and regulations pertaining to the work.

The design and construction of all proposed facilities shall be in conformance with the City of La Pine Public Works Standards and Specifications, and all standards and specifications referenced therein.

Workmanship and materials not conforming to these Standards and Specifications will be

deemed a violation of City code and any associated agreement, and may result in an immediate suspension of the Contractor's activities. When an authorized representative of the City Engineer suspends the Contractor's activities, all work shall cease on the subject project until the violation is corrected to the satisfaction of the City Engineer.

### **03 PUBLIC FACILITY REQUIREMENT**

To provide for orderly and efficient urban development and extension of public facilities, public streets, alleys and public utilities shall be extended along public right-of-way or City easements for the full length of all portions of property frontage being developed or as otherwise determined through the land use approval process. Public facilities shall be extended from the point of connection "to and through" to the far boundary of subject property. All public facility extensions and/or improvements shall conform to the City of La Pine Public Works Standards and Specifications, and all applicable Master Plans, Public Facility Plans, and System Plans. All new service or fire hydrant connections to City water and/or sewer systems shall require a public water and/or sewer main line to be located or extended in public right-of-way or City easements along property frontage where applicable. This "to and through" public facility requirement shall be fulfilled except where it is not practical to extend a street or utility because of topography or by boundary and/or land use restrictions prohibiting development (e.g. UGB, public lands, etc.) as determined by the City.

### **04 PLANS & SPECIFICATIONS**

#### **04.1.00 General**

Plans and specifications for public streets, alleys, storm drainage, sewer, or water facilities must be submitted by the person or firm proposing the work to the City Engineer for approval before construction is started. The Contractor shall not start work until he/she has plans signed and approved by the City Engineer and Public Works Manager, and the project security/performance bond is submitted. A copy of any construction requirements or development conditions levied by any public agency, such as City of La Pine Community Development Department Staff Reports, shall be attached to plans submitted for review. Support documentation such as fire flow analysis and storm drainage calculations/reports shall be submitted as well. Without the above document submittal, the City Engineer will be unable to adequately review the plans, and will return the plans without review.

Final plans addressing review comments are to be submitted by the Owner, or the Design Engineer, to the City Engineer for approval. The final design shall be prepared, sealed, and signed by a Registered Professional Engineer licensed in the State of Oregon, in accordance with state law.

#### **04.2.00 Review Plan**

Two copies of the design plans showing the proposed facilities shall be submitted to the City Engineer for review. One 'redline' copy of the preliminary plan will be returned indicating any modifications required.

Any final design plans for facilities requiring postal delivery service shall have on the cover sheet the signature of an appropriate official of the United States Postal Service indicating that

the design is approved by the United States Postal Service. A copy of the negotiated and signed Mode of Postal Delivery form shall be attached to the final plan.

Any final design plans having fire hydrants or facilities for the suppression of fires, shall have on the cover sheet the signature of an authorized official of the La Pine Rural Fire Protection District indicating that the design is approved by La Pine Rural Fire Protection District. Plans requiring approved fire flows as determined by La Pine Rural Fire Protection District action will not be accepted for review unless documentation in the form of a fire flow analysis verifying compliance is attached to the submittal. The fire flow analysis shall be stamped and signed by a Registered Professional Engineer, licensed in the State of Oregon.

Any final design plans having storm drainage facilities will not be accepted for review unless a storm drainage report stamped and signed by a Registered Professional Engineer, licensed in the State of Oregon is attached to the submittal.

The final design plans shall have on the cover sheet the signature of an authorized representative of all affected agencies, utilities, fiber optic and/or service providers including but not limited to; Midstate Electric Cooperative, CenturyLink, Crestview Cable, Bend Broadband, Cascade Natural Gas, and Lightspeed Networks indicating design review and approval. When required, the developer will be responsible to submit drawings and required fees to the Oregon Department of Environmental Quality (for UIC storm drainage facilities) for review and approval.

Upon request of the Design Engineer, a meeting to review City 'redline' comments will be scheduled. Re-submitted plans shall be accompanied by any and all Department comments including the 'redline' copy to facilitate further review.

#### **04.3.00 Final Plan**

After all revisions have been made to the reviewed plans, and the corrected plans have been approved by the City Engineer, then two sets of the final plan set shall be submitted on reproducible media for signatures. The final plan sets shall be stamped and signed by a registered professional engineer employed or retained by the Design Engineer. Documentation of any required State Health Department or Department of Environmental Quality agency submittal and approval must accompany final plan submittal. No changes will be made by the City to the reproducible copies sealed and signed by the Design Engineer. The City Engineer's signature will indicate that the design is approved. Other affected agencies/persons, such as the United States Postal Service, La Pine Rural Fire Protection District, ODOT, etc., will indicate their approval by signature. The final signatory is the Public Works Manager, which will indicate that all Engineering fees have been paid. The Owner or the Design Engineer shall provide the City with four complete signed sets of printed or photocopied drawings. Cloudy, dark, or otherwise illegible drawings are not acceptable. The information shall also be submitted to the City in AutoCAD format (compatible with version 2004 or later) on a CD, DVD or transmitted by email as appropriate. All fonts, shape files, external references, images and other items necessary for a complete drawing shall be packaged with the electronic file.

Final plan approval is effective for the duration of the associated land use approval period

and/or improvement agreement schedule of work. Extension of final plan approval may be granted at the discretion of the City Engineer and will be subject to fee retainage and adherence to the most current City of La Pine Standards and Specifications and Fee Schedule. However, unless an extension is granted the final plan approval shall be declared void, and the final plans must be resubmitted to the City for review and approval if either of the following occur:

- 1) Construction has not been initiated within eighteen (18) months of the final plan approval date.
- 2) The inspection portion of the Engineering fee is refunded back to the Owner/Developer prior to project acceptance.
- 3) Land use approval and/or improvement agreement expire prior to construction completion or City acceptance.

#### **04.4.00 Engineering Fees**

Engineering fees for City inspection and plan review of public improvements are required as established by the City of La Pine Fee Schedule and must be paid before the construction plans can be approved and signed by the Public Works Manager. The plan review portion of this fee is for services already provided and is non-refundable. The inspection portion of this fee is based on project valuation and is non-refundable. A cost estimate shall be submitted by the Design Engineer for review by the City Engineer to determine project valuation.

#### **04.5.00 Pre-Construction Meeting**

A pre-construction meeting will be held after Engineering fees are paid, the plans have been approved and signed, and before construction can begin. The pre-construction meeting shall be held at the City of La Pine public works office or at City Hall. Items to be covered are outlined in Section 12 of these Development Provisions. Following the pre-construction meeting, the City Engineer will issue a 'Notice to Proceed'. The 'Notice to Proceed' is the document which authorizes construction to begin, and inspection services to commence.

#### **04.6.00 Plan Revisions**

No design changes or revisions to final plans signed by the City Engineer and Public Works Manager will be considered effective without the following:

- 1) The City Engineer shall verify and approve any changes, modifications, or revisions. For design changes affecting the scope of work, additional Engineering 'Change Order' review fees established by the City of La Pine Fee Schedule must be paid before the approved revised plans can be signed by the City Engineer. Each revised plan sheet shall have a 'Change Order' approval signature block added and shall be approved and signed by the City Engineer. For minor revisions that do not affect the design content, such as changing the location of water or sewer services revisions can be approved by the Inspector in the field and noted on the As-Built drawings. Revising the location of a fire hydrant, line valve, vault, manhole, catch basin, or similar structure changes the design content, and such change must be submitted for review and approval to the City Engineer.

- 2) Within two working days after City Engineer approval, four copies of the revised plans sheets and two copies of the new original Mylar drawings sheets sealed by the Design Engineer with the revisions noted in the Revision Box shall be submitted to the City Engineer for distribution.
- 3) Upon completion of the project, the Design Engineer shall submit AutoCAD change order drawings with design changes that required new or substantially altered drawings for approved design changes, with the revisions noted in the Revision Box. These AutoCAD change order drawings shall reflect as-built conditions known to the Design Engineer.

#### **04.7.00 Final Plat**

A final subdivision or partition plat showing complete information shall be submitted to the City Planner for routing. Prior to plat signature by the Public Works Manager, the following conditions must be met: the County Surveyor has signed the plat; required improvements to public facilities have been constructed, accepted, bonded, or guaranteed per the Development Code and any associated land use approval; cash contributions for public improvements in lieu of construction have been paid; warranty agreement and warranty bond provided for completed public improvements; documentation submitted to verify the abandonment of any private water and sewer systems per County and/or State requirements; certification of all earth fill areas located outside of public right-of-way/easement by a license professional engineer; public or City easements dedicated on the plat are consistent with current City easement agreement template provisions; all related public or City easements conveyed separate from the plat have been signed and recorded; All other conditions of land use approval that relate to Public Works or City Engineers have been met; and any fees or assessments associated with the plat and required by the land-use process, reimbursement/improvement districts, or cost sharing agreements have been paid. The final plat (or easements and/or right-of-way dedication in lieu of) shall be recorded upon completion and City acceptance of any associated required public improvements where in the determination of the City Engineer said final plat left unrecorded may adversely impact existing and/or active public infrastructure or traveled way or constructed City master plan public facility.

#### **05 AGREEMENTS**

Improvement agreements are required by the City for public improvements not completed but bonded/secured for plat approval or for public improvements to be constructed within existing public right-of-way or upon existing public facilities. All agreements shall be signed and related performance bond/surety received by the City, prior to commencing construction on the associated facility. These agreements are generally prepared by the City Planner and will specify improvement cost and construction completion date. It is the responsibility of the Owner, or her/his agent, to coordinate with the City offices to assure all agreements and bonds/sureties have been completed and executed prior to start of construction.

#### **06 INSURANCE**

The person or firm doing the work (Contractor) shall maintain Construction Public Liability Insurance during the life of the Project. The coverage shall be maintained in the amount of the City's tort liability limits set by the Oregon Legislature (ORS 30.270) for bodily injury liability

and property damage applying to her/his own work and that of any subcontractor performing work under the Agreement.

All contractors performing work on public improvements must be registered with the Construction Contractors Board or licensed with the State Landscape Contractor Board.

All contractors and subcontractors working on a public works project with a value over \$100,000 must file a \$30,000 "public works bond" with the Construction Contractor's Board. General Contractors must verify that subcontractors have filed a public works bond before permitting a subcontractor to start work on a project.

The City of La Pine shall be indemnified and held harmless from any liability of any kind resulting from or in connection with activities associated with the project. The City of La Pine shall be named as an additional insured, and a certificate of insurance with ten day cancellation notice shall be filed with the City of La Pine Recorder's office prior to start of construction.

## **07 EASEMENTS AND PERMITS**

When portions of a public facility, utility or structure will be located on private property, permanent easements for location, maintenance, and operation shall be provided. Easements shall provide for the use of property for construction purposes to the extent indicated on the easements. Current City easement agreement templates shall be used unless otherwise authorized by the City Attorney, Public Works Manager and City Engineer.

All City Easements conveyed separately from the final plat shall require the following to be submitted to the City Engineer:

- 1) Exhibit 'A' - property/parcel legal description.
- 2) Exhibit 'B' - easement map.
- 3) Exhibit 'C' - easement legal description.
- 4) Current property title report or equivalent ownership verification.
- 5) City recording fee as required by the City of La Pine Planning Fee Schedule.

All exhibits shall be letter size (8.5x11) and stamped by a registered professional engineer (PE) or land surveyor (PLS) if prepared by the PE or PLS. Copies of these easements (including a copy of the easement in relation to the site plan) will be made available to the City for review prior to construction. Easements shall be recorded prior to City Engineer's acceptance of the public facility. Easements that impact property located beyond an established or approved development boundary, plat or site plan shall be recorded prior to construction. Easements for public facilities identified in City Transportation, Water or Wastewater System Plans shall be recorded prior to construction unless otherwise approved by the City Engineer. The City accepts no liability for actions of the Contractor not in conformance with written easements.

## **08 PERFORMANCE AND PAYMENT BOND**

**Public Contracts:** ORS 279C.380 If the contract is for a publicly bid improvement, the successful bidder shall execute and deliver to the City of La Pine a good and sufficient bond, to

be approved by the City, in a sum equal to the contract amount for the faithful performance of the contract. In lieu of a surety bond, the City may permit the Contractor to submit a cashier's check or certified check payable to the City of La Pine in an amount equal to one hundred (100) percent of the contract amount.

**Private Contracts:** A performance bond or surety, cash deposit or other approved security shall be provided by the Developer as project security for all work proposed in existing public right-of-way, or upon existing City facilities. The approved project security shall be in the amount of one hundred twenty (120) percent of the estimated public improvement cost. The performance bond/surety shall be submitted with the current City approved performance bond form. A City approved improvement agreement that specifies construction schedule and completion date shall accompany said performance bond.

## **09 WARRANTY**

Upon acceptance of the construction by the City Engineer, a minimum one (1) year warranty agreement on materials and workmanship shall be initiated between the City of La Pine and the Owner/Developer within thirty (30) days from date of acceptance. The warranty agreement shall include a bond, cash deposit or other approved security, with a minimum value of ten (10) percent of the Developer's final public improvement construction costs. The warranty agreement and security shall guarantee replacement and repair of any defective materials or workmanship which become apparent during the warranty period. The warranty agreement will be held by the City for the duration of the warranty period or until all warranty issues have been resolved. A final warranty inspection of the project will be conducted by the City during the last month of the warranty period. Upon expiration of the warranty period and resolution of all warranty issues, the warranty agreement and security will be released and returned to the Owner/Developer. Facilities which have been required to be repaired or replaced during the warranty period shall be guaranteed or warrantied for an additional year beginning from the date of inspection.

## **10 PUBLIC NOTIFICATION**

Any construction activity that impedes or interrupts any existing public service shall require that the public be notified of that interruption at least 24 hours prior to such impediment or interruption. Public notification shall be made by direct contact with owners/residents or door hangers/flyers distributed to properties adjacent to impact. Notice to City to be posted on City website, newspaper, radio public service messages and/or variable message sign placement. Notification shall also include, but not be limited to, emergency services, local school district, post office, garbage collection, and any other affected public agency. Each notification shall be the responsibility of the Contractor performing the work and shall be coordinated with the City Engineer to assure adequate notification. Failure to adequately notify the public will result in an immediate suspension of the Contractor's construction activities.

## **11 INTERGOVERNMENTAL JURISDICTION**

Public improvements often times fall within the jurisdiction of several governmental agencies, i.e., Deschutes County, Oregon Department of Transportation, Oregon Department of Environmental Quality, etc. When multiple jurisdictions are involved, it is the responsibility of the Owner, Developer, or agent, to coordinate with and gain the appropriate approval from



the governmental agency having jurisdiction over that portion of the work.

It shall be the responsibility of the construction Contractor to verify approvals and/or permits with agencies prior to commencing work. Failure to verify approval will result in project work being suspended until approval and/or permit is obtained.

## **12 PRE-CONSTRUCTION MEETING**

A pre-construction meeting shall be held following approval of final plans and prior to issuance of the 'Notice to Proceed' for construction. Before the meeting can be held, agreements must be signed, project security/performance bonds submitted and the City Engineer must have one original Mylar reproducible drawings set and four complete photocopied drawing sets of the signed construction plans. Items to be discussed at the meeting include, but are not limited to:

- 1) Initiating construction
- 2) Contractor's work schedule in writing
- 3) Inspector assignment
- 4) Traffic Control/Public Notification
- 5) Subcontractors and suppliers
- 6) Materials furnished (i.e. type, brand, submittal requirements, etc.)
- 7) Safety requirements
- 8) Sampling and testing program
- 9) Regulatory agency requirements and approvals
- 10) Easement and right-of-way requirements.
- 11) Project Closeout and City acceptance
- 12) Warranty requirements and inspection

All contractors working within the City of La Pine shall have a valid City Business License prior to beginning work.

For projects including work that will impede or affect vehicular traffic on established streets, the Contractor shall submit a construction schedule and Traffic Control Plan (TCP) specifically for that work for review by the City Engineer. Work which impedes traffic flow shall not proceed until the schedule and TCP is approved by the City.

No inspections shall be performed until a pre-construction meeting has been held with the City Engineer. At the meeting, the Inspector will be designated to the project and **all** communications, changes, and field decisions will be coordinated through the Inspector. If the Inspector is not informed of a change or field decision, and the change has not been approved by the appropriate authority, then the change is not allowed and the facility must be constructed as shown on the approved plans.

### **13 UTILITIES**

The construction drawings shall show the location of all existing and proposed utilities (i.e. electric, phone, cable, fiber optic, gas, etc.). The Owner/Developer shall provide and have constructed all City maintained facilities associated with the proposed development, including but not limited to, sewer and water systems, storm drainage, streets, street and traffic control signs, street lights, bikeways, pathways and appurtenant facilities. The Owner is responsible for the coordination of this work with any other agencies, individuals, and utility companies including, but limited to, Midstate Electric Cooperative, CenturyLink, Crestview Cable, Cascade Natural Gas, Lightspeed Networks or other utility providers or agencies that may be affected by the construction.

### **14 INSPECTIONS**

Authorized Representatives of the City Engineer will be appointed as inspectors for all phases of the work. Inspections will be performed at the expense of the Owner or Developer for whom the work is being constructed, to assure that the public facilities installation or street construction conform to City Standards and Specifications. Engineering services shall be provided by the Owner/Developer. Contractors may call for the Inspector, or Engineering Representative, to inspect the work when deemed necessary.

The inspections listed below in 14.2.00 through 14.5.00 will be established at the Pre-Construction Conference based on the project requirements. Inspections requiring 24 or 72 hour advanced notice and approvals to be obtained before proceeding with dependent work will be outlined. Listed below the numbered inspections are general performance standards that the Inspector will observe.

#### **14.1.00 ADVANCED NOTIFICATION FOR INSPECTION**

The City will provide periodic, ongoing inspections on an as-needed basis. The Contractor shall be responsible for notifying the City Engineer's office at least 24 hours in advance of required inspections. The City will not be responsible for performing inspections without sufficient notice, nor will the City be responsible for any cost incurred for delay caused by insufficient notification.

No inspections will be performed without the associated 24 or 72 hour notification. Any work performed without a required inspection will be subject to removal and inspection, or acceptance, at the Inspector's discretion.

#### **14.2.00 STREET INSPECTION**

##### **14.2.01 Traffic Control**

- a. Temporary signs, barricades, delineators, and cones are in accordance with the approved Traffic Control Plan and MUTCD.

##### **14.2.02 Excavation**

- a. Construction staking meets requirements.
- b. Construction area cleared and grubbed to mineral soil.
- c. Fill construction and material meets standards and specifications.
- d. Erosion control in place, stormwater facilities protected.

#### **14.2.03 Subgrade**

- a. All underground utility work is complete, inspected, and approved.
- b. All fill and backfill compacted to 95% of maximum density, and tested.
- c. Subgrade is graded uniform and free of irregularities and within tolerances.

#### **14.2.04 Curb**

- a. Construction staking meets requirements.
- b. Subgrade has been approved.
- c. Drop curb areas have been located.
- d. Driveways, alleyways, access approaches, ADA ramps are staked and graded.

#### **14.2.05 Curb Backfill**

- a. Construction staking is in place.
- b. Finished curb matches staking.
- c. Curb backfill material meets specification.
- d. Finished surface is level, uniform, and free from irregularities.

#### **14.2.06 Sidewalks**

- a. Curb backfill is in place and compacted.
- b. Water meter & meter boxes set to grade per City Specifications.
- c. Fire hydrants set to grade.

#### **14.2.07 Drainage Structures**

- a. Inlets are set as designated on the plans or at low point staked in field.
- b. Inlet grate frame is set to appropriate street grade and slope.
- c. In addition to mechanical compaction, pipe and catch basins backfill shall be proved by water jetting.
- d. Drain cross pipes are inspected per pipe construction and grouting requirements.
- e. Storm drainage facilities constructed per approved design (location, geometry, slope, soil depth, filtering, surfacing, etc.).
- f. Storm drainage facility performance tests in accordance with City Standards and Specifications.
- g. Storm sewer systems inspected according to City specifications.
- h. Sedimentation manholes are installed with correct fittings in accordance with City standards and specifications.

#### **14.2.08 Base**

- a. Base material meets specifications prior to placement (submit gradation, proctors)
- b. Subgrade is fine bladed to meet specified crown and curb exposure.
- c. Water valve boxes have been set to subgrade and can be raised to grade.
- d. All water compaction has been completed at least 48 hours previously.

#### **14.2.09 Paving and AC Patching Preparation**

- a. Base rock is tight, not segregated and free from raveling or areas prone to raveling.
- b. Base rock is watered, uniform to grade and slope, and free of irregularities.
- c. Water valves boxes are set to the top of the base.
- d. All manholes have been set and grouted to grade for at least 24 hours.
- e. Base has not been contaminated by dirt or other substances.
- f. Asphalt areas to be matched are cut square, straight, and uniform for AC patching.
- g. Tack coat applied to concrete and asphalt surfaces to be matched or overlaid.

#### **14.2.10 Paving Operation**

- a. Paving operation to be closely monitored by City Representatives.
- b. Water valve boxes are set to finish grade.
- c. All joints are raked and coarse stone removed from the pavement surface.
- d. The uncompacted A.C. shall be set 1/2" - 3/4" above drainage and manhole structures so that the roller will bridge such structure and no dimpling of the finished mat adjacent to the structure will occur.
- e. A roll pattern shall be established in coordination with the Inspector based on testing results. Every roll pattern shall include a minimum of at least four (4) passes of the breakdown roller to achieve proper compaction of the mat.
- f. Finish rolling shall continue until no roller marks remain.

#### **14.2.11 Striping Layout**

- a. The Inspector to review and approve layout of striping prior to authorization to stripe.
- b. Pavement is clean, dry and air/surface temperatures are appropriate for striping

### **14.3.00 SANITARY & STORM SEWER INSPECTION**

#### **14.3.01 Before Construction**

- a. Inspection of materials and storage area.
- b. Protection of existing systems.
- c. Assurance of proper traffic control.
- d. Utilities located and marked.
- e. Construction staking meets requirements.
- f. Bypass pumping equipment in place and installed according to approved plan.

#### **14.3.02 Subgrade**

- a. Subgrade of proposed road established.

#### **14.3.03 Pipe Trench and Bedding**

- a. Inspection immediately prior to pipe installation.
- b. No rock points in pipe zone.
- c. Bedding material is in conformance with specification.

#### **14.3.04 Pipe Installation**

- a. Services provided to each lot as shown on plans and cleanout or sampling manhole along with locate wire provided at property line.
- b. Pipe alignment is true.
- c. Compaction under pipe haunches.
- d. Compaction of materials around clean-outs and water valves.
- e. Fittings tight.
- f. Water grade pipe and couplers installed where required.

#### **14.3.05 Pipe Backfill**

- a. Compaction inspection and soil testing will be required during backfill operation. Backfill material shall be Class B placed in accordance with APWA Section 00405.46 except for the following options:
  - 1) For trenches deeper than 6 feet from top of pipe to subgrade (except for water lines), the backfill material may be Class A backfill 24 inches above the pipe zone to subgrade.

- 2) For trenches deeper than 9 feet from top of pipe to subgrade (except for water lines) and outside of the street right of way, the backfill material may be Class D backfill 36 inches above the pipe zone to subgrade.

The material shall be carefully and thoroughly tamped in layers to achieve 95% of maximum density as determined by AASHTO T-99. Methods of testing materials in the field may include nuclear densometer, sandcone, WA densometer, or other methods approved by the Engineer.

#### **14.3.06 Manhole and Cleanout Invert**

- a. Distance between manholes matches distance on construction plans.
- b. Inspection during base construction to assure compact subbase.
- c. Required fall between incoming and outflow pipe inverts.
- d. Rough channel has appropriate shape. Sidewalls come to top of uppermost pipe.

#### **14.3.07 Completed Manholes and Cleanouts**

- a. Contractor shall demonstrate designed fall between manholes or clean-outs before proceeding with subsequent construction.
- b. In addition to standard compaction methods, backfill around manhole shall be proved by water jetting.
- c. Barrel not cracked or spalled.
- d. Barrel joint and pipe connections grouted.
- e. Concrete encasement of external drop manhole.
- f. Invert channel grouted to smooth finish.
- g. Frame in place set to finish grade and grouted.
- h. Pipe zone surrounding clean-outs shall be compacted using means necessary to match typical pipe zone requirements.
- i. Turning plug at top of cleanout pipe shall be set so that it does not conflict with the cleanout cover. Contractor shall ensure that distance is sufficient to eliminate conflicts.

#### **14.3.08 Sewer Testing**

- a. Sewer is clear of all debris.
- b. All backfill is completed.
- c. Observation during air test.
- d. Observation during deflection test at 92% of i.d. required for both rigid and flexible pipe.
- e. Maximum allowable sag causing ponding of water is specified State regulations OAR 340-52 or ½ inch, whichever is more stringent.
- f. Tracing wire to be tested after other required testing is completed.

#### **14.3.09 Connection to Live Facilities**

- a. Inspection during connection.
- b. No obstructions in line.
- c. Fittings tight.

### **14.4.00 WATER INSPECTION**

#### **14.4.01 Before Construction**

- a. Inspection of material and storage area. Unless otherwise specified, all pipe shall be PVC pipe, Class 150, DR 18, conforming to all requirements of AWWA C900,

- polyvinyl chloride pressure pipe, and conforming to cast iron pipe outside diameters.
- b. Protection of existing systems.
  - c. Proper traffic control in place.
  - d. Utilities located and marked out and potholed as necessary to determine conflicts.
  - e. Construction staking meets requirements.

#### **14.4.02 Subgrade**

- a. Subgrade of proposed road established with adequate control.

#### **14.4.03 Pipe Trench and Bedding**

- a. Inspection immediately prior to pipe installation.
- b. No rock points in pipe zone.
- c. Bedding material is in conformance with specifications.

#### **14.4.04 Pipe Installation**

- a. Pipe alignment is true.
- b. Fittings tight.
- c. Ductile iron Class 52 Tyton joints, mechanical joints, or approved equal.
- d. Fittings tight.
- e. Water grade pipe and couplers installed where required.

#### **14.4.05 Service Installation**

- a. Services complete, continuous copper pipe, proper size, and provided to each lot.
- b. Services set to finish grade per City Water Service and Installation Manual specifications.
- c. Power, telephone, gas, and cable lines require a minimum five (5) foot separation from water and sewer services.

#### **14.4.06 Fitting Location and Installation**

- a. Fittings installed and torqued to specification.
- b. Fittings witnessed for As-Builts before being covered
- c. Joint restraints in place where required

#### **14.4.07 Preparation and Pouring of Thrust Blocks**

- a. Inspection of excavation and forms before pouring.
- b. Forms placed at appropriate positions so blocks will be against undisturbed earth.
- c. Reinforcement in place and secured when needed (deadmen)
- d. Pipe and fittings wrapped with plastic as required.

#### **14.4.08 Pipe Backfill**

- a. Compaction inspection and testing will be required during backfill operation.
- b. Backfill placed in maximum 8" (loose) lifts

#### **14.4.09 Connection to Live Facilities**

- a. Inspection and Water Division staff present during hot tap.
- b. No obstructions in line.
- c. Fittings and taps are tight and set plumb.

#### **14.4.10 Setting of Valve Boxes**

- a. Plumb, centered over nut, and bottom flange not resting on pipe.

#### **14.4.11 Pressure Testing**

- a. Testing completed according to Division IV Water Facilities, Leakage/Hydrostatic Testing & Disinfection Procedures
- b. Thrust blocks have cured for five days minimum

#### **14.4.12 Chlorination Testing and Flushing**

- a. Completed according to Division IV, Water Facilities Disinfection Procedures
- b. All services flushed to angle stop at meter connection
- c. Tracing wire to be tested after pressure testing and chlorination flushing completed.

#### **14.4.13 Flow Testing**

- a. Services checked, flow measured and noted.
- b. Hydrants checked, flow measured and static and residual pressures noted.

### **14.5.00 STRUCTURES**

#### **14.5.01 Before Construction**

- a. Inspection of material and storage area.
- b. Protection of existing systems.
- c. Proper traffic control in place.
- d. Utilities located and marked.
- e. Construction staking meets requirements.

#### **14.5.02 Excavation**

- a. Excavation sufficient for structure.
- b. Bedding as specified for thickness, material, and compacted.

#### **14.5.03 Foundation**

- a. Reinforcing steel placed in accordance with approved shop drawings, plans and specifications.
- b. Form work in accordance with approved details, plans and specifications.

#### **14.5.04 Form Work & Reinforcement**

- a. Reinforcing steel placed in accordance with approved shop drawings, plans and specifications. Reinforcing steel supported as necessary to stay in position during pouring and finishing.
- b. Form work in accordance with approved details, plans and specifications.

#### **14.5.05 Concrete Placement**

- a. Air and soil temperature requirements within specified range.
- b. Concrete placed within 90 minutes of mixing.
- c. Interval between batches not to exceed 20 minutes.
- d. Concrete testing and sample cylinders prepared as required.
- e. Continuous placement, or cold joints, as shown on plans or as specified.
- f. Mechanical vibration of concrete.
- g. Laitance removed.
- h. Cure applied to exposed surfaces.
- i. Work protected from elements.

#### **14.5.06 Form Removal & Concrete Finish**

- a. Forms remain in place for required time.
- b. Wire and snap ties removed as per specifications.
- c. Open or honeycombed areas cut out and grouted.

- d. Surface finished per specifications.

#### **14.5.07 Backfill**

- a. Compaction inspection and testing will be required during backfill operation.

### **14.6.00 SUBDIVISION SITE GRADING**

#### **14.6.01 Grading**

- a. Site graded to maintain or contain run off within development boundary and per approved plan.
- b. Subgrade staked and constructed per approved design.
- c. All earth fill areas located outside of public right-of-way require certification by a licensed Registered Professional Engineer.
- d. Measures in place to prevent soil from washing off site, into storm facilities

#### **14.6.02 Drainage Facilities**

- a. Inlets, grates, and drain pipes are set to appropriate grade and slope as designated on the plans or at low points staked in field.
- b. Sedimentation manholes are installed with correct fittings in accordance with City and DEQ standards and specifications.
- c. Storm drainage facilities constructed per approved design (location, geometry, slope, soil depth, filtering, surfacing, etc.).
- d. Storm drainage facility performance tests in accordance with City Standards and Specifications.
- e. Drain pipes crossing public right-of-way are inspected per City Standards and Specifications for material, construction and grouting.

## **15 SURVEYING AND CONSTRUCTION STAKING**

The purpose of this section is to define the responsibilities for surveying and construction staking. All survey work shall be conducted under the supervision of a Registered Professional Land Surveyor, licensed in the State of Oregon. The Contractor will be responsible for providing all construction staking as required to complete the work. On Public Works Projects the City will provide bench marks, control points, and reference points as shown on the plans or as required by the Contractor to establish control for construction staking. The Contractor will be responsible for establishing centerline location and elevations. For private development projects the contractor shall establish appropriate bench marks, control points, and reference points to complete the work.

Construction stakes and stakes which are reference points for construction work will be conspicuously marked. It shall be the responsibility of the Contractor to inform his/her employees and her/his subcontractors of their importance and the necessity for their preservation.

The Contractor will provide vertical and horizontal construction staking in the proximity of the work. Construction staking will be provided at 50' intervals on tangent and 25' intervals on curve. The grade stakes at a minimum should contain the following information: Engineer's station, Offset from line, and Cut or fill to grade.

## **16 MATERIALS**



Materials shall conform to the City of La Pine Standards and Specifications, or other specifications as set forth in the Contract Documents.

## **17 WATERING**

Watering shall be performed at any hour of the day and on any day of the week that the City Engineer may determine necessary for proper performance or protection of the work, and for adequate alleviation of dust nuisance. The Contractor is responsible for the cost of watering. If the Contractor is unable or unwilling to water as directed, the City will water and charge the Owner or Developer.

### **17.1.00 DESCRIPTION**

This work consists of furnishing and applying water, or combinations of water and additives for compacting and preparing excavations, embankments, backfills, subgrades, subbases, surfacings or for dust control, clean-up, or other purposes as determined by the Engineer. Excluded from this section is water used in Portland cement concrete construction and water used for testing purposes.

### **17.2.00 MATERIAL**

#### **17.2.01 WATER**

Water used in the work shall be free of silts and hazardous or deleterious substances. The Contractor shall maintain an adequate supply of water at the job to conduct operations in a timely manner. The City may provide water for a fee to the Contractor from a fire hydrant or similar source. The Contractor must make application to the City Public Works Department for such service. Only City furnished and approved metering and backflow prevention devices connected to designated fire hydrants may be used to obtain water from the City water distribution system.

#### **17.2.02 CONSTRUCTION**

The Contractor shall apply water by means which result in uniform and controlled application.

If the Contractor has not provided water as ordered by the Engineer, the Owner may provide water and charge any applicable costs to the Contractor.

### **17.3.00 TEMPORARY WATER**

Water is available from hydrants via combination meter and backflow devices rented from City of La Pine Public Works. Contractor shall make arrangements and pay all costs for obtaining and transporting the water from the hydrants to the area of usage for the construction and testing of the facilities.

## **18 WORKMANSHIP**

### **18.1.00 GENERAL**

The work shall be done by responsible and qualified workers. Should the Inspector find any worker to be unqualified or unfit to perform assigned work on the project, or if the worker is repeatedly performing work not in conformance with the specifications, the Contractor will be notified and directed to reassign the worker to tasks for which he is qualified or dismiss him for cause as determined by the Inspector.

#### **18.2.00 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES**

The Contractor shall notify the public and local service organizations, i.e. Police, Fire District, hospital emergency services, school bus dispatchers, 24 hours in advance of any construction activity that may impede their daily activities and functions. For work in areas that will impede or obstruct traffic flow on established streets, the Contractor shall adhere to the construction schedule submitted at the Pre-Construction Meeting, or as subsequently revised. Paved surfaces of streets removed or damaged by trenching or other activities to an extent affecting the driving surface shall be restored with a hard, smooth surface within 48 hours of pavement removal or damage. Should the Contractor neglect to prosecute the work properly or in accordance with the approved schedule, in the opinion of the City Engineer, then the City of La Pine will notify the Contractor's Surety of the conditions, and after ten (10) days written notice, or without notice in the case of an emergency or imminent danger to the public, and without prejudice to any other right which the City of La Pine may have, take over that portion of the work which has been improperly executed and make good the deficiencies and assess the costs of such work to the Contractor.

Temporary pavement surfacing and patching due to adverse weather must be approved by the City and then must be maintained at the cost of the owner/developer until permanent pavement surfacing can be constructed.

At locations where the Contractor's operations could potentially cause damage resulting in considerable expense, loss, and inconvenience to the City or public utility, and when adjacent to or near railway, telegraph, telephone, television, power, oil, gas, water irrigation systems, or other private or municipal systems, the Contractor's working operations shall be suspended until all arrangements necessary for the protection thereof have been made by the Contractor.

The Contractor shall notify by the one call number **1-800-332-2344**, at least 48 hours in advance, all utility offices affected by the construction operations. The Contractor shall not expose any marked out underground utility without first notifying the affected agency and being granted permission to do so. The Contractor is responsible for locating and exposing, if necessary, all existing underground utilities in advance of the trenching operation.

The Contractor is responsible for protecting all power and telephone poles and overhead cables from damage. If interfering power poles, telephone poles, guy wires, or anchors are encountered, the Contractor shall notify the utility owner at least 48 hours in advance of construction operations to permit the necessary arrangements with the affected utility company for protection or relocation of the interfering structure. The Contractor shall be solely and directly responsible to the owner and operators of such utilities/properties for any damage, injury, expense, loss or inconvenience, delay, suits, actions, or claims of any kind brought because of injuries or damage which result from performing the contract work. The Contractor

shall immediately notify the proper authority in the event of interruption to domestic water, sanitary sewer, storm sewer or other utility service resulting from accidental breakage, or as a result of being exposed or unsupported. All repair or replacement of existing water or sewer pipe must conform to City's Standards and Specifications. If an existing water or sewer pipe is damaged to any extent, the City's Water and/or Wastewater Divisions must be immediately notified. The damaged pipe must remain exposed until inspected by a City representative. Repairs will be made upon approval by the Inspector. All repairs or replacements will be inspected by an Inspector prior to backfill. The Contractor shall cooperate with the affected agency to restore services as promptly as possible, and shall bear all costs of repair for the utility. In no case shall interruption of any water, sanitary sewer or utility service be allowed outside normal working hours unless prior approval is granted by the City Engineer or City Public Works Manager.

Neither the City, the utility owner, nor its officers or agents, shall be responsible to the Contractor for damages resulting from the location of any underground utilities being other than that shown on the plans, or for the existence of underground utilities not shown on the plans or properly marked out on the site.

Should the Contractor encounter any utility service lines that interfere with trenching or conflict with the proposed work, the Contractor may obtain prior approval of the utility owner and governing authority to cut the service, dig through, and cause the service to be restored or relocated with similar and equal materials at the Contractor's expense.

### **18.3.00 FIELD RELOCATIONS**

During the progress of construction, it is expected that minor relocations of the proposed work may be necessary. Such relocations shall be made only by direction of the Design Engineer, or representative, with the approval of the City Engineer. Unforeseen obstructions encountered as a result of such relocations will not be cause for claiming additional compensation by the Contractor to any greater extent than would have been the case had the obstructions been encountered at the original location.

### **18.4.00 BARRICADES, GUARDS, AND SAFETY PROVISIONS**

Adequate barricades, construction signs, warning lights, and guards, as required, shall be placed and maintained during the progress of the work to protect persons and vehicles from injury and to avoid property damage until the area is determined safe for normal public use.

Rules and regulations of the local, State, and Federal authorities regarding safety provisions shall be adhered to. The Contractor shall be solely responsible for directing and implementing all safety provisions on the Project site, and for all accidents caused by inadequate or insufficient safety provisions. The City of La Pine, City Engineer, Inspectors, or other agents of the City, shall not be held responsible for directing, implementing, or enforcing any safety regulations.

### **18.5.00 PAVEMENT REMOVAL AND REPLACEMENT**

All bituminous and concrete pavements shall be cut with a saw or other approved device prior to asphalt patching or concrete replacement, such that the patching material abuts a smooth,

uniform, vertical face of at least twice the depth of the maximum particle size in the patching medium. Uneven pavement edges shall be trimmed smooth before patching the pavement.

The width of the pavement cut for trenching shall be at least 12" wider on either side than the width of the finished backfilled trench at the ground surface. Pavement materials removed during excavation shall be kept separate from native backfill material and removed from the site. Pavement shall not be used for backfill or embankment material.

Where existing paved roadways are cut, trench backfill shall be as defined in the City of La Pine Standards and Specifications, and shall be placed as specified. The pavement section will be replaced to a standard equal to or better than the existing street section, except that in no case shall it be less than the current standard for that classification of street. Base material must meet current City of La Pine Standard and Specifications.

Temporary pavement surfacing and patching due to adverse weather must be approved by the City and then must be maintained at the cost of the owner/developer until permanent pavement surfacing can be constructed.

#### **18.6.00 OBSTRUCTIONS**

Obstructions to the construction such as tree roots, stumps, abandoned pilings and concrete structures, logs, rubbish, and debris of all types are to be removed from the project site as part of clearing and grubbing operations, or as incidental work, and no additional compensation will be made for the amount or type of clearing required.

The City Engineer may, if requested, approve minor changes in the alignment or location of facilities to avoid major obstructions if such alignment changes can be made within the permanent easement or right-of-way, and without adversely affecting the intended function of the facility.

#### **18.7.00 INTERFERING STRUCTURES, ROADWAYS OR DRIVEWAYS**

The Contractor shall replace and/or repair any damage done by the Contractor's forces during construction to landscaping, fences, buildings, billboards, irrigation lines, roadways, cultivated fields, drainage crossings, driveways and any other private or public properties at Contractor's own expense and without additional compensation from the Owner. The Contractor shall replace or repair these structures to a condition as good as or better than their pre-construction condition. Pre-construction videotapes or photographs taken by the City will be used to determine the pre-construction conditions of properties adjacent to the work. In the absence of pre-construction photographs, the property shall be restored to original, like new conditions.

#### **18.8.00 BLASTING**

Where rock material is encountered which requires systematic drilling and blasting for removal, the Contractor shall furnish all necessary approved blasting certifications and licenses, tools, equipment, and materials required to perform the work. The Contractor shall comply with all Federal, State, and local laws that apply to the storage, handling, placement, and firing of all explosives.

The Contractor shall furnish additional insurance coverage as required by the City or any agency in addition to the basic coverage required by these specifications.

No blasting shall be permitted adjacent to any portion of exposed work or structures unless proper precautions are taken to assure that damage to adjacent property will not occur. All blasting shall be covered with blasting mats or other approved type of protective cover to prevent the scattering of rock fragments or other material to outside the excavation area and limits of the construction. The Contractor shall be responsible for any and all damage or injury resulting from the use or handling of explosives, and accidental or premature explosion that may occur in connection with Contractors' use of explosives.

Proper notification and ample warning shall be provided to all persons within the danger zone. Contractor's personnel shall be stationed at strategic locations a safe distance from the blasting zone to prevent persons and vehicles from entering the blasting area. Electrical blasting caps shall not be connected to the electrical source until the area is cleared of all personnel and the proper warning signals have been sounded.

Where blasting is proposed in the proximity of private property or residences that may be affected by vibrations, shaking, or seismic shocks, the Contractor shall be responsible to perform pre-blast surveys of all structures to determine the condition of walls, ceilings, floor slabs, or other surfaces in which cracking or movement may be induced by the blasting operations. All existing conditions shall be thoroughly documented and recorded by means of photographs and/or video recordings to establish pre-blast conditions and existing damage. Following the blasting operations, the Contractor shall perform a follow up survey of those affected properties to determine if any shifting, cracking, settlement, or other damage was induced by the blasting. Contractor shall promptly repair or replace any damaged structures to a condition equal to or better than that found in the pre-blast survey. The City will be indemnified and held harmless from any liability for damage or injury caused by the Contractor's blasting operations.

Public utilities (utilities) located within the blast area must be identified and notified 72 hours prior to blasting. Contractor shall perform pre-blast survey and inspections of identified utilities. Utilities damaged from blasting activities shall be repaired and/or restored at the expense of the Contractor.

#### **18.9.00 SHORING AND SHEATHING**

The Contractor shall be solely responsible to determine the means necessary to maintain safe working conditions and protect adjacent property and structure from damages during excavation operations. The Contractor shall comply with all Federal, State, and local laws, rules, and regulations governing shoring, sheathing, structure support, and support of excavations.

#### **18.10.00 LOCATION OF EXCAVATED MATERIALS**

The Contractor shall stockpile excavated material so as not to block any public streets, traveled roadways or paths, public or private. Roadways shall be kept open to two way traffic unless otherwise approved by the City Engineer and the City of La Pine Public Works Department.

The Contractor shall store or dispose of excavated materials only in designated areas as approved by the Engineer. Utmost care shall be taken to prevent erosion, spillage or damage to property adjacent to the project. Contractor shall implement erosion control measures and shall immediately clean up any spilled or spoiled material on streets or paved roadways, and contain storm water runoff from stockpiles to prevent silt and dirt from entering catch basins, storm drains, drywells, or other drainage structures. Refer to Central Oregon Stormwater Manual, Chapter 9, for erosion control measures.

#### **18.11.00 SITE RESTORATION AND CLEANUP**

At all times during the work, the premises of the site shall be kept clean and orderly, and upon completion of the work the project shall be free of debris, rubbish or excess materials of any kind.

#### **18.12.00 STREET CLEANING**

Clean all dirt, gravel, debris, or other material generated by the construction operations from all streets, alleys and roads at the conclusion of each day's operation. Contractor shall not stockpile construction materials in streets, sidewalks, alleyways, nor on other paved areas, except during working hours when operations are being conducted in the immediate area. If Contractor fails to provide cleanup within 24 hours of being so directed by the Inspector, the City, or an agent retained by the City, may complete the cleanup and the cost plus 10% shall be billed to the Contractor to be paid prior to project acceptance by the City.

#### **18.13.00 EROSION and SEDIMENT CONTROL**

Contractor shall take measures to prevent erosion or sediment run off from work site as required by the Central Oregon Stormwater Manual.

### **19 TESTING**

Testing shall conform to the City of La Pine Standards and Specifications, and shall be performed by a certified/independent testing laboratory approved by the City Engineer.

Testing criteria shall meet the requirements as established in each Division of these Standards. Gravity sanitary or storm sewer mains shall be air tested or hydrostatically tested pursuant to A.P.W.A Standards by the Contractor and in accordance with City of La Pine Standards and Specifications. Pressure sewer lines shall be hydrostatically tested pursuant to A.P.W.A Standards by the Contractor and in accordance with City of La Pine Standards and Specifications. Storm drainage facility tests shall be performed in accordance with City Standards as set forth in the Central Oregon Stormwater Manual. Waterlines shall be hydrostatically tested pursuant to A.W.W.A. Standards and in accordance with City of La Pine Standards and Specifications. Street compaction and asphalt testing shall be in accordance with these Standards and current Oregon Department of Transportation Standard Specifications.

The City Engineer may require additional testing of any portion of the work performed. When additional testing is required by City Engineer, the City shall pay all costs for initial tests demonstrating satisfactory performance. Non-passing tests and subsequent re- testing shall be paid for by the Contractor.

Prior to final acceptance for maintenance, the Owner/Developer may be required to provide verification testing of any facility that shows evidence of being stressed beyond design limits or capacity.

## **20 SANITARY and STORM SEWER CLEAN-UP**

Final Sewer Cleaning: During construction, take all measures to prevent debris from entering sewer system. Prior to final acceptance of the sanitary and storm sewer system by the Engineer, pressure and gravity sewers must be clean. Remove all accumulated construction debris, rocks, gravel, sand, silt, and other foreign material from the sewer system at or near the closest downstream manhole or port.

Upon the Engineer's final manhole-to-manhole or cleanout-to-cleanout inspection of the sewer system, if any foreign matter is still present in the system, the pipe must be re-cleaned at the expense of the Contractor.

## **21 AS BUILT DRAWINGS**

All final record 'As Built' drawings shall be prepared by the Design Engineer. Any change which would appear on 'As Built' drawings should be immediately brought to the attention of the Inspector at the time the Contractor or Design Engineer discovers such discrepancy. The Contractor shall provide the City with a detailed set of 'As Built' drawings upon completion of construction to include, but not limited to, the following;

All street improvements shall require detailed witnesses of all property corners and 'As- Built' conditions of all underground utilities.

All sewer facilities shall require detailed 'As-Built' of all sewer mains, manholes, service laterals, cleanouts and pressure system.

All water facilities shall require detailed witnesses of all valves, tees, crosses, bends, couplings, fittings, hydrants, and 'As-Built' of waterline alignment and profile.

All storm drainage facilities shall require detailed 'As Built' of all storm sewer pipes, fittings, structures, manholes, drywells, swales, etc.

The Owner/Developer shall prepare final as built drawings which are stamped as-built. The owner/developer shall deliver 2 hardcopy full size plans, 1 PDF, and 1 AutoCAD file (version 2004 or later).

## **22 FINAL ACCEPTANCE**

Final acceptance shall be determined as the date on which the City Engineer formally accepts, in writing, the constructed public improvements for ownership and maintenance by the City of La Pine.

Final acceptance will follow the City Engineer's final inspection and approval of construction and will involve the completion of the following items (as applicable):

1. Release of Liens or claims.

2. Easement Dedication.
3. Right-of-way Dedication.
4. Recorded Plat or Partition.
5. Warranty agreement for materials and workmanship, including warranty bond.
6. Verification Performance Tests (if required).
7. Resolution of material and workmanship issues, i.e. final punch list.
8. Contractor's As-Built plans.
9. Electronic copies of approved design changes from Design Engineer.
10. Street light and postal box installed or provider contract paid.
11. Curb ramp and hydrant pads installed.
12. Sidewalks adjacent to existing developed lots (existing residence, etc.).
13. Private water, sewer and storm drainage system abandonment documentation (water wells, underground injection facilities, drill holes, septic tanks, etc.).
14. Certification of all fill areas located outside of public right-of-way/easement by a license professional engineer.
15. Survey monument and/or property corner restoration and documentation as required by ORS 209.

## **23 SITE GRADING and DRAINAGE**

### **23.1.00 General**

This document is intended to set minimum standards for site grading and drainage on private property within the Urban Growth Boundary of the City of La Pine.

All storm drainage from private property (site) shall be maintained and/or contained on site and shall not drain onto public streets, alleys, or neighboring properties. Storm water runoff from private property shall not impact public right-of-way or public drainage systems unless otherwise approved by the Public Works Manager, City Engineer or as determined through the land use approval process. All earth fill areas located outside of public right-of-way require certification by a licensed Registered Professional Engineer.

### **23.2.00 Plans and Specifications**

A comprehensive site grading and drainage plan prepared by a licensed Registered Professional Engineer shall be required for development of private property that proposes five thousand (5,000) or more square feet of new roof, pavement, compacted gravel, concrete or other impervious surface improvements, disturbs more than one acre in total, or proposes an underground injection control (UIC) facility. For flow control design parameters and drawing requirements, see the Central Oregon Stormwater Manual, Chapters 5 and 7. The following minimum information shall be required on the plans:

- 1) Existing and total impervious area on the site.



- 2) Parking and driveway approach finish grades and slopes.
- 3) Roof drain conveyance.
- 4) Sizing and testing data for underground injection or infiltration systems.
- 5) Swale cross sections with 3:1 max. slope, topsoil/sand layer, geotextile filtering layer and surface treatment.
- 6) 100 year/24 hour storm event containment and outfall.

Where less than 5,000 s.f. of new impervious surface areas are proposed, a site plan shall be required that demonstrates on-site drainage will be maintained on site, any proposed retention area or storm drainage facility has design capacity for the required 25 year/24 hour storm event runoff volume (2.6 inch rainfall), and any necessary erosion control measures which will be taken.

Underground Injection Control Devices (drywells, etc.) shall be Rule Authorized or permitted by Oregon Dept. of Environmental Quality (DEQ) and a copy of DEQ approval shall be submitted to the City prior to construction.

Review plan sets shall be submitted to the City of La Pine Community Development Department as part of a building permit application for review.

The City Engineer will indicate plan approval with 'City of La Pine Engineering Approval' stamp on the appropriate site grading and drainage plan sheets.

### **23.3.00 Subdivision Site Grading**

Mass site grading and drainage plans required as part of subdivision land use approval shall be reviewed, approved, constructed, inspected and accepted through the public improvement construction process. Design parameters and drawings requirements are as described in Section 23.2.00 above.

### **23.4.00 Grading Fees**

Engineering fees for City inspection and plan review of site grading and drainage improvements are required as established by the City of La Pine Fee Schedule and must be paid before the City can issue the associated building permit and before grading construction can begin.

### **23.5.00 Grading Inspection**

The City Engineering Inspector shall be notified twenty four (24) hours prior to start of grading construction. Any work performed without a required inspection will be subject to removal and inspection at the Inspector's discretion.

#### **23.5.01 Grading**

- a. Site graded to maintain or contain run off on site or as approved.
- b. Subgrade and curb staked and constructed per approved design.
- c. Driveway approach constructed per approved plans and City standards.

#### **23.5.02 Drainage Facilities**

- a. Inlets, grates, and drain pipes are set to appropriate grade and slope as designated on

- the plans or at low points staked in field.
- b. Sedimentation manholes are installed with correct fittings in accordance with City and DEQ standards and specifications.
  - c. Storm drainage facilities constructed per approved design (location, geometry, slope, soil depth, filtering, surfacing, etc.).
  - d. Storm drainage facility performance tests in accordance with Central Oregon Stormwater Manual requirements.

### **23.6.00 Final Grading Acceptance**

The City Engineer will indicate acceptance of site grading and drainage improvements with engineering approval of the associated final building occupancy permit. All necessary private drainage easements shall be recorded prior to acceptance.

## **SECTION 32 93 45 – 90- DAY ESTABLISHMENT PERIOD**

### **PART 1 General**

#### 1.01 Related Documents

- A. The General Conditions of the contract apply to the work of this section the same as though written herein.

#### 1.02 Scope of Work

- A. Furnish labor, materials, and equipment to provide care and maintenance of the landscape and irrigation as described herein.

#### 1.03 Related Sections

- A. Section 328400 – Planting Irrigation
- B. Section 329300 – Plants

#### 1.04 References

- A. American Nursery and Landscape Association (ANLA)
- B. American National Standards Institute (ANSI)

#### 1.05 Submittals

- A. Partial or incomplete submittals are considered unacceptable and will be returned without a review.
- B. Submit descriptive literature and specifications for the following:
  - 1. Fertilizers and chemicals
  - 2. Organic and inorganic mulch materials
- C. Submit photocopies of current CLT registration for foremen performing work on this project.
- D. Substitutions:
  - 1. For materials that differ from a specified brand or product, submit samples, product specifications, and product literature. Follow procedures under section 01610 – substitutions.
- E. Sampling, testing, or inspection costs of material are to be borne by the Contractor, and copies of inspection certificates, required by law, shall be furnished without additional charge.

#### 1.06 Responsibility

- A. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for damage, injury, and loss due to his acts or neglect. Contractor shall continuously protect and maintain areas included in the contract during throughout the establishment period, and until final acceptance of the work. Contractor is responsible for repairs or replacements caused by acts of vandalism, including theft.
- B. The Contractor shall employ only Certified Landscape Technicians (CLT) with the California Landscape Contractors Association (CLCA), as foremen for landscape drainage installation work.

## **PART 2 Products**

### 2.01 Soil Amendments

- A. The Contractor is responsible for correction of soil pH, nutrient levels, and chemical balance until final acceptance by the Owner. The Contractor shall take soil samples from three separate locations as directed by the Landscape Architect, and prepare soils reports by a testing service approved by the Landscape Architect. Prepare soils reports before preparing soil, at the start of the establishment period, on the 45th day of establishment period, and on the 80th day of establishment period. Correct deficiencies identified at testing intervals by amending or top dressing as required, at no additional cost to the Owner.
- B. Amendments and Top Dressings added during the maintenance period shall conform to specifications described per section 329113.

## **PART 3 Execution**

- 3.01 Contractor shall continuously protect and maintain areas included in the contract during the progress of the work, through the establishment period, and until final acceptance of the work.
- 3.02 The entire project shall be continuously and satisfactorily maintained for a period of 90 calendar days. Establishment period shall commence upon the date of completion of the work, as authorized in a written notice from the Architect after the start of establishment period inspection has been completed and punch list items have been corrected by the Contractor.
- 3.03 Continuous maintenance and establishment work includes mowing, watering, weeding, replacing sod, mulching, cultivating, spraying and trimming necessary to bring the planted areas to a healthy growing condition, and additional work needed to keep the areas neat, edged, and attractive.
- 3.04 Watering:
  - A. Monitor watering use on a daily basis, and make adjustments to controller watering schedule as necessary to apply only the proper amount of water. Adjust watering schedule to compensate for changes in ETo, rainfall, and temperature.
  - B. Contractor shall only apply sufficient water to promote healthy growth of the plant material. At no time shall the contractor apply water at a rate or frequency which causes runoff or soil saturation.
  - C. Contractor shall maintain a daily log of watering times on the jobsite, and make it available for inspection by the Architect.
- 3.05 During the plant establishment period, plants and planted areas shall be kept weed free. Weeds, Nut grass, Dallas grass, Johnson grass, Bermuda grass, and other noxious grass species shall be removed and disposed of as they appear.
- 3.06 Any day the Contractor fails to adequately water, replace unsuitable plants, weed, and other work determined to be necessary by the Architect, will not be credited as part of the establishment period.
- 3.07 During the establishment period, any plant indicating weakness or probability of dying, shall be replaced by the Contractor at his own expense.
- 3.08 Tree stakes which are damaged or rendered inadequate for support shall be repaired and restored to their original condition.
- 3.09 Constant diligence shall be maintained to detect the presence of disease, insects, and/or rodent infestations and proper preventative or control measures taken. This will be done at no additional cost to the Owner.

- 3.10 Shrubs and trees shall be maintained in their natural shapes. Tall or scraggly branches shall be thinned out where necessary. In no case shall trees or shrubs be trimmed by heading or shearing. Plants severely pruned in this manner shall be removed and replaced at Contractor's expense.
- 3.11 On the 80th day of the establishment period ground cover areas shall receive top dressing of 5 pounds of 16-8-8 commercial fertilizer per 1,000 square feet.
- 3.12 On the 80th Day of the Establishment Period, contractor shall replenish the mulch to achieve a 2" thick layer in areas receiving mulch cover.
- 3.13 At completion of establishment period, areas included in the contract shall be substantially clean and free of debris and weeds. Plant materials shall be live, healthy, and free of infestations.
- 3.14 Erosion or slippage of soil caused by watering shall be repaired by the Contractor at his expense.
- 3.15 Walks, curbs, and gutters shall be kept clear of debris, mud, dust, and standing water by sweeping, mopping or hosing down as required to maintain cleanliness throughout.
- 3.16 Contractor is responsible for protecting the work covered by this section from vandalism and accidental damage. Damage shall be promptly repaired by the Contractor at no additional cost to the Owner. Contractor is responsible for repairs or replacements caused by acts of vandalism, including removal of graffiti, and/or refinishing, as required.
- 3.17 Contractor is responsible for protecting the work covered by this section from damage caused by frost and/or torrential rains. Damage shall be promptly repaired by the Contractor at no additional cost to the Owner. Plant materials damaged by frost and/or torrential rains shall be replaced by the Contractor at no additional cost to the Owner.
- 3.18 Final acceptance will occur only after a final inspection of the entire project attended by the owner, Landscape Architect, the Owner's maintenance contractor, and the project contractor, and upon written notification by the Landscape Architect.
- 3.19 Guarantee
  - A. Shrubs, ground covers, lawn areas, and 15 gallon size trees or less shall be guaranteed as to growth and health for a period of 90 days after final acceptance by the Owner or his representative; box sized trees shall be guaranteed for a period of 1 year after date of substantial completion.
  - B. Plants which die or lose more than 30 percent of their original leaves shall be replaced under this section.
  - C. The Contractor, within 14 days of written notification by the Owner, shall remove and replace guaranteed plant materials which for reason fail to meet the requirements of the guarantee. Plants material replaced shall be guaranteed for the original period, starting from the date of replacement.

#### **PART 4 Payment**

- 4.01 Payment for the work of this section shall be included in the price bid for "90-Day Establishment Period - Complete" and no additional compensation will be considered.

**END OF SECTION 32 93 45**

## **SECTION 32 93 00 - PLANTS**

### **PART 1 General**

#### 1.1 Related Documents

- A. The General Conditions of the contract apply to the work of this section the same as though written herein.

#### 1.2 Scope of Work

- A. Furnish labor, materials, and equipment to provide, and install and maintain trees, shrubs and groundcovers as described herein and upon the drawings.

#### 1.3 Related Sections

- A. Section 328400 – Planting Irrigation
- B. Section 329113 – Soil Preparation

#### 1.4 Reference and Standards

- A. American Standard for Nursery Stock – ANSI Z60.1 – 2004
- B. Sunset Western Garden Book – latest edition

#### 1.5 Submittals

- A. Submittals shall conform to provisions per the contract documents and city of La Pine standards. Submittal package shall include all products and materials related to the work of this Section. Partial or incomplete submittals will not be accepted and will be returned without a review.
- B. Submit descriptive literature and specifications for the following:
  - 1. Plant material list of trees, shrubs, and groundcovers to be furnished; include name of supplier or nursery source.
  - 2. Weed abatement herbicides, product literature and specifications
  - 3. Staking, tying, guying, and erosion control products
  - 4. Fertilizers, conditioners, and backfill products
  - 5. Organic and inorganic mulch
- C. Contractor shall submit to the Architect within 30 days from notice to proceed photocopies of current CLT registration for foremen performing work on this project.

- D. Submit photographs for each species of tree and for shrubs 15 gallon or larger. Photographs shall be of an individual plant with the size, shape and structure clearly defined. The plant material in the photo shall be a representative example of the entire quantity being supplied.
- E. Trees shall be approved and tagged by the landscape architect at the nursery prior to delivery. Contractor shall source all trees and notify landscape architect for tagging of individual specimens. Contractor shall provide a minimum of 72 hours' notice for landscape architect to visit the nursery/nurseries.

#### 1.6 Substitutions

- A. Products: When a brand name is called for on the Drawings or in these specifications, submit a letter describing the purpose for the substitution and include the product literature and specifications of the substitution.
- B. Plant Material: When a plant species is shown to be unavailable in the size or quantity specified, a substitution will be considered provided the substitute materials are reviewed and accepted through the submittal process. Except for the variations so authorized, substitute plant materials shall conform to the requirements of these specifications. If the accepted substitute materials are of less value than those indicated or specified, the contract price will be adjusted in accordance with the provisions of the contract.

#### 1.7 Qualifications and Experience

- A. The Contractor shall employ only Landscape Industry Certified technicians registered with the Oregon Landscape Contractors Association (OLCA), as foremen for planting installation work.
- B. Sampling, testing, or inspection costs of material required by local or state agencies are to be borne by the Contractor, and copies of inspection certificates shall be furnished without additional charge.

#### 1.8 Responsibility

- A. The Contractor shall be responsible for the protection of the work and the public and private property adjacent to the work and shall exercise due caution to avoid damage to such property. The work shall be protected and maintained throughout the contract period, including during suspension of work, and until final acceptance of the work. Contractor shall repair or replace damaged improvements including damages from acts of vandalism, theft, and graffiti removal. Repairs or replacements shall be at least equal to original condition of the existing improvement and shall match in finish and dimension.
- B. Prior to work of this Section, verify that previously installed work is complete to the point where this installation may properly commence. Verify that work of this Section may be installed in strict accordance with the original design, pertinent codes, regulations, and portions of the referenced standards.
- C. In the event of discrepancy, immediately notify the Architect.
- D. Do not proceed with installation in areas of discrepancy until such discrepancies have been fully resolved.

## PART 2 PRODUCTS

### 2.1 Plant Material

- A. Nomenclature: Plant species' names shall be per the latest edition of Sunset Western Garden Book. Botanical names shall take precedence over common names.
- B. Plant material size and quality shall conform to standards established by American Standard For Nursery Stock, ANSI 260.1-2004, May 12, 2004 Edition.
- C. Conditions: Plants shall be symmetrical, typical for variety and species, sound, healthy, vigorous, free from plant disease, insect pests or their eggs, excessive abrasions or other objectionable disfigurements, and shall have healthy, normal root systems, well-filling their containers, but not to the point of being root bound. Tree trunks shall be sturdy and well hardened-off. Plants shall not be pruned prior to delivery except as authorized by the Architect.
- D. Ground cover plants shall have been grown in flats and shall remain in those flats until time for transplanting. At time of transplanting, the flat soil shall contain sufficient moisture so that the soil does not fall apart when lifting plants from flat. Each plant shall be planted with its proportionate amount of the flat soil in a manner that will ensure a minimum of disturbance to the root system. Plants shall be fully developed and shall be filling the flat.
- E. In no case shall trees or shrubs be topped or pruned within 6 months prior to delivery. Plants shall be grown by nurseries that have been inspected by the State Department of Agriculture and have complied with its regulations.
- F. Identification: Plants shall be of the variety and size shown on the drawings and shall conform to the requirements herein. One of each bundle or lot shall be tagged with plant name in accordance with recommendations of the American Association of Nurserymen.
- G. Container plant inspection and rejection: root condition of container plants will be determined by the Architect through the removal of plant from the container of at least two plants but not more than 2 percent of the total number each species from each source.
- H. Architect will inspect trees and shrubs upon delivery. Trees and shrubs will be rejected for the following characteristics:
  - 1. Enlarged cankers or galls at the base of the trunk, just above the soil level.
  - 2. Crooked trunks
  - 3. Scars or trunk damage, broken branches, etc.
  - 4. Asymmetrical branching
  - 5. Rootbound condition
  - 6. Trees that have been recently pruned
  - 7. Trees not matching in size and shape of the representative photograph sample



- I. Quantities: Quantities of plant material shall be furnished as needed to complete work as indicated on the drawings, including reseeded, replanting, and maintenance (replacements) during the contract period.
- J. Sizes and Caliper: Minimum height (above soil level), width (average diameter of dripline), and caliper (trees only, measured at 30 inches above the soil level) of plant materials shall be as shown in expanded plant materials legend on planting detail sheet.

2.2 Tree Stakes

- A. Tree stakes shall be a minimum 2 inches in diameter by 10 feet long new treated lodge pole pine.

2.3 Tree and Vine Ties

- A. Tree ties shall be "Cinch-Tie" as manufactured by V.I.T. Products, Escondido, CA (619) 480-6702, or approved equal.
- B. 1 1/2 inch galvanized roofing nails to secure ties.

2.4 Backfill Amendments

- A. Refer to Section 32 91 13 for specification of soil amendments and conditions.

2.5 Import Soil Or Topsoil

- A. Refer to Section 32 91 13 for specification.

2.6 Plant Pit Backfill Material

- A. Backfill material for plant pits shall be a mixture as noted below or as indicated on drawings. The materials shall be thoroughly batch-mixed prior to placement so that they are evenly distributed and without clods or lumps. Backfill shall be so placed in the pits that the plant will be at its natural growing height after settlement. The following amendments and quantities shall be used as the basis for bids and may be adjusted by the landscape architect upon review of the soil test analysis results:

80 percent by volume    Amended soil per soil test analysis recommendations

20 percent by volume    Organic soil Amendment

2.7 Organic Mulch Material

- A. Pre-approved mulch: Dark Hemlock Bark, available from High Desert Mulching, Bend, OR (541) 330-5558; or approved equal meeting the following requirements:
- B. Wood chip mulch shall consist of 100 percent recycled above ground tree products. Mulch shall be nitrogen stabilized and shall contain no trash, hazardous waste, or toxic materials.
- C. Mulch shall be ground and screened to 2 inch minus particle size.

2.8 Pre-Emergent Herbicide

- A. Pre-emergent herbicides shall be wettable powder or granular type.
- B. Select pre-emergent herbicide appropriate to site area, soil type, indigenous weeds to be controlled, and type of ground cover to be planted.
- C. Follow manufacturer's precautions and label instructions. Comply with local jurisdictional restrictions and ordinances.

2.9 Fertilizer Tablets

- A. Tablets shall be "Agriform" as manufactured by Sierra Industries.
- B. Agriform 21 gram tablets.
- C. Agriform 5 gram tablets.

2.10 Mycorrhizal Inoculum

- A. Shall be "Mycoapply" All Purpose Granular by Mycoorrhizal Applications Inc., Grants Pass, OR p541.476.3985

**PART 3 EXECUTION**

3.1 General

- A. Planting operations shall not commence until completion of construction work, grading, soil preparation, weed control, and sprinkler installation.
- B. Irrigation system shall be fully operational including automatic controller, before commencing planting operations.

3.2 Spacing of Plant Material

- A. When plant materials are shown in rows, the total length of the area shall be verified and the plants equally spaced within the area. When plant materials are shown in a random pattern, the material shall be equally spaced and placed to fill the area. Ground cover material shall be

- triangular or square spacing as indicated on the Drawings. When spacing is not shown, use triangular spacing.
- B. Trees and specimen shrubs shall be located with a wood stake or flag. The locations shall be reviewed and accepted by the Architect prior to planting.
  - C. The work shown on the Drawings is schematic with trees, shrubs and groundcovers shown in their approximate locations. Contractor shall not locate any items where it is obvious that they are in direct permanent improvements, or pedestrian and vehicular safety considerations. Contractor shall not install plant materials in locations where the ultimate growth of the plant materials will damage or affect structures or impede pedestrian or vehicular circulation. Do not locate trees or taller shrubs in locations where they will block irrigation heads and prevent adequate coverage. Where called for, obtain approval of the landscape architect for placement of trees, shrubs, and other items of work.
  - D. Locate trees and taller shrubs 10 feet minimum away from rotor irrigation heads, 5 feet minimum from spray heads.

### 3.3 Plant Pits and Planting

- A. Plant pits shall be dug with level bottoms to widths and depths as shown on the Drawings. Pits for trees shall be dug round. Fill pits with water and allow to drain. All tree pits must meet the drainage requirement set forth in Section 32 91 13, Part 3.03, whether the area of the tree planting was tested for percolation or not. Notify Architect of any tree pit that does not meet the percolation test standard.
- B. Plant holes dug by auger method will be acceptable, but shall have side walls roughened or squared with a shovel. Slick pit walls caused by auguring in too wet soil will not be accepted for planting.
- C. Handling: no canned plant material shall be planted if the ball is broken or cracked either before or during the process of planting.
- D. The outer surfaces of all plants in containers and boxes, including the top, sides and bottom of the root ball shall be shaved to remove all circling, descending, and matted roots. Shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.
- E. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.
- F. Pit Backfilling
  1. Build mound of compacted backfill wide enough in bottom of hole to support root ball.
  2. Backfill pit with backfill mix half-way to finish grade and water thoroughly.
  3. Place 21 gram plant tablets in plant pits, adhering to the following plant size schedule:

- 1 Gallon: 1 tablet
  - 5 gallon: 2 tablets
  - 15 gallon: 3 tablets
  - 1-1/2" Cal.: 4 tablets
  - 2-1/2" Cal.: 6 tablets
  - 3-1/2" Cal.: 8 tablets
4. Backfill to finish grade. Backfill mix shall be tamped lightly, and a shallow basin formed at perimeter of root ball to hold enough water to saturate the root ball and backfill mix.
  5. Water immediately to saturate entire root ball and backfill.
  6. Remove watering basin prior to hydroseeding (in turf areas only).
  7. Apply Granular Mycorrhizal Inoculum per manufacturers instruction, at the following schedule:
    - Liner / 4" pot: 1-2ml
    - 1 gallon: 1tsp
    - 5 gallon: 1tbs
    - 15 gallon: 3tbs.
    - 1-1/2" Cal.: ½ cup
    - 2-1/2" Cal.: 1 cup
    - 3-1/2" Cal.: 1 1/2 cups

#### 3.4 Tree Staking

- A. Stake trees as shown in details.
- B. Tree and stakes shall be vertical and plumb in cases.
- C. One gallon trees shall be planted with nursery stakes removed.

#### 3.5 Flatted Ground Cover

- A. Rooted cuttings shall be planted sufficiently deep to cover roots and spaced as specified in ground cover list on landscape plan.

- B. Rooted cuttings shall not be allowed to dry out before or while being planted. Wilted plants shall not be accepted.
- C. At time of planting ground cover plants, the earth around each plant shall be firmed sufficiently to force out air pockets.
- D. Each ground cover plant shall be planted with a minimum of one (1) 5 gram 20-15-5 plant tablet adjacent to root zone.

### 3.6 Application Of Pre-Emergent Herbicide

- A. Apply pre-emergent herbicide to shrub and planted groundcover areas only. Do not apply to hydroseeded areas. Strictly adhere to manufacturer's specifications for application rates and methods.
- B. Apply pre-emergent only after planting operations have been completed so as to minimize disturbance of the chemical "barrier." Reapply where necessary to areas disturbed by planting or repair operations after initial application.
- C. Pay careful attention to activation requirements, "watering-in", etc., per manufacturer's specifications and label instructions. Avoid excessive irrigation run-off that would move or wash away the pre-emergent "barrier" -- use repeat watering cycles and split watering times.

### 3.7 Mulching

- A. After, planting operations are complete and shrubs areas have been raked and dressed, mulch shrubs and ground cover areas with a 2 inch layer of organic mulch material.
- B. Mulch layer should taper to zero at plant stem or tree trunk. Do not place mulch materials up against plant crown or trunk.
- C. Mulch flatted ground cover areas prior to planting ground cover, if called for on the drawings.

### 3.8 Protection

- A. The Contractor shall carefully and continuously protect areas included in the contract, including lawn areas, plant material, supports, etc. until final acceptance of the work by the Owner or his representative.

### 3.9 Clean-Up

- A. After planting operations are completed, Contractor shall remove trash, excess soil, empty plant containers, or other accumulated debris from the site at no extra cost to Owner. Contractor shall repair scars, ruts, or mars in area caused by work operations. Areas shall be left in a neat and orderly condition.

3.10 Observations

- A. Contractor shall give forty-eight (48) hours notice and set appointment for reviews by the Architect.
- B. Review by Architect shall be scheduled for the following operations:
  - 1. Review of plant material after delivery to the site.
  - 2. Tree and shrubs placement prior to digging holes.
  - 3. Review of ground cover lines and header board prior to planting.
  - 4. Start of establishment period/acceptance of installation.
- C. Reviews shall be called for at the end of planting operations for the purpose of determining compliance with drawings and specifications, intent, workmanship, and clean-up. Contractor shall secure written verification of review data, any corrections required to work, and limits of reviewed area before beginning the described establishment work.
- D. In the event the Contractor requests inspection of work, and said work is substantially incomplete, the Contractor shall be responsible for Architect's hourly charges and per diem costs.

3.11 Guarantee

- A. Shrubs and ground covers shall be guaranteed as to growth and health for a period of 90 days after final acceptance by the Owner or his representative; 15 gallon and box sized trees shall be guaranteed for a period of 1 year after date of substantial completion.
- B. Plants which die or lose more than 30 percent of their original leaves shall be replaced under this section.
- C. The Contractor, within 14 days of written notification by the Owner, shall remove and replace guaranteed plant materials which for any reason fail to meet the requirements of the guarantee. Plants material replaced shall be guaranteed for the original period, starting from the date of replacement.

**END OF SECTION 32 93 00**

## **SECTION 32 91 13 - SOIL PREPARATION**

### **PART 1 General**

#### 1.01 Related Documents

- A. The General Conditions of the contract apply to the work of this section the same as though written herein.

#### 1.02 Scope of Work

- A. Furnish labor, materials, and equipment to place imported topsoil prepare soil for planting, and to finish grade as described herein and upon the drawings.
- B. Work not included: Rough grading and storm drainage

#### 1.03 Related Sections

- A. Section 32 84 00 – Planting Irrigation
- B. Section 32 93 00 – Plants

#### 1.04 References

- A. American Society for Testing and Materials (ASTM)
- B. American Association of State Highway and Transportation Officials (AASHTO)
- C. Standard Specifications for Public Works Construction, latest edition (Greenbook)

#### 1.05 Submittals

- A. Product Submittals – Submit the items identified below following the procedures prescribed under Section 01 33 00 Submittals. Partial or incomplete submittals are not acceptable and will be returned without a review.
  - 1. Soil amendments – Submit samples and product specifications not more than 30 days old. Specification shall include particle size evaluation, total nitrogen (N), ammonia (NH<sub>4</sub>-N, nitrate (NO<sub>3</sub>-N), ECe, pH, micro nutrients, and metals.
  - 2. Inorganic conditioners, fertilizers, and chemicals – Submit product literature and specifications.
  - 3. Topsoil – Submit sample and product analysis report.
  - 4. Agricultural Soil Tests – Submit analysis report and recommendations for soil samples.
- B. Certifications – Submit copies of Landscape Industry Certified Technician registration for foremen performing work on this project.
- C. Costs for sampling, testing or inspection of materials are included in bid, and copies of inspections, certificates, and tests results shall be furnished without additional cost to the Owner.
- D. Substitutions – For materials that differ from a specified brand or product, submit samples, product specifications, and product literature. Follow procedures as prescribed under Section 01 25 00 Substitutions.

1.06 Experience and Qualifications

- A. The Contractor shall employ Landscape Industry Certified Technicians registered with the Oregon Landscape Contractors Association (OLCA), as foremen for landscape installation work.

1.07 Responsibility

- A. The Contractor shall be responsible for the protection of public and private property adjacent to the work, and shall exercise due caution to avoid damage to such property. The work shall be protected and maintained throughout the contract period, including during suspension of work, and until final acceptance of the work. Contractor shall repair or replace damaged improvements including acts of vandalism, theft, and graffiti removal. Repairs or replacements shall be at least equal to original condition of the existing improvement, and shall match in finish and dimension.
- B. Prior to starting the work of this Section, verify that previously installed work is complete to the point where this installation may properly commence. Verify that work of this Section may be installed in accordance with the design, pertinent codes, regulations, and portions of the referenced standards.
- C. In the event of discrepancy, immediately notify the Landscape Architect.
- D. Do not proceed with installation in areas of discrepancy until such discrepancies have been fully resolved.

**PART 2 Products**

2.01 Soil Amendments

- A. Organic Soil Conditioner- Humic Compost
  - 1. Product shall be fully composted 100 percent recycled organic product, consisting of composted bio-solids and aged wood fiber with particles passing a ½ inch screen. Product shall be non-hazardous, and conform to U.S. EPA 40 CFR 503 criteria for class “A” product.
- B. Humate Plus
  - 1. A commercially mined and packaged soil conditioner containing 40 percent organic matter, 40 percent Carbon, and 40 percent humic acids. Manufactured by Tri- C Enterprises, Chino, CA, (800) 927-3311.
- C. Agricultural Gypsum
  - 1. A commercially processed and packaged product with a minimum 90 percent Calcium Sulfate dihydrate (CaSO<sub>4</sub>2H<sub>2</sub>O) and minimum 14 percent Sulfur (S). Gypsum shall be free flowing, fine granular form with 100 percent passing a 10 mesh screen. Product shall be environmentally safe and produced specifically for agricultural or landscape use.
- D. Granular Fertilizer
  - 1. Fertilizer shall be a commercial grade product, uniform and homogenous in composition, dust free, dry, and free flowing granular or pelletized form suitable for application with approved equipment, and shall contain the following minimum available percentages by weight of plant food:

Nitrogen      6.00%



Phosphorus 20.00%

Potassium 20.00%

2. Fertilizer shall be delivered to the site in original unopened containers bearing the manufacturer's guaranteed analysis. Wet or caked fertilizer is not acceptable.

E. Refer to section 32 93 00 Plants for additional soil amendments used at planting pits including fertilizer tablets and mycorrhizal inoculum.

#### 2.02 Pre-Emergent Herbicides

- A. Pre-emergent herbicides shall be a wettable powder or granule type product, suitable for use with the groundcovers specified on the plans and suitable for use with the on-site soil.
- B. Herbicides shall be selected for controlling the weeds indigenous to the site.
- C. Herbicides shall comply with requirements of local and state agencies having jurisdiction over the project.

#### 2.03 Amendments for Bid

A. Amendments are for bidding purposes only. Quantity and procedure adjustments will be made per the Agricultural Soil Analysis report and recommendations. Contractor shall send the report to the Landscape Architect for review. Adjustments by the Landscape Architect will be issued in writing. The following amendments and quantities are to be used as the basis for bids:

1. Soil amendments for planting areas with gradient less than 2:1 in slope. Quantity per 1,000 square feet:

4 cu. yds. Organic soil conditioner

10 lbs. Humate Plus

5 lbs. Granular fertilizer

25 lbs. Agricultural gypsum

2. Refer to Section 32 93 00 Plants for bid amendments for plant pit backfill mix.

#### 2.04 Imported Topsoil

- A. Imported soil shall be Class A topsoil as defined under Section 212-1.1.2 of the Standard Specifications. Provide soil free of subsoil, brush, objectionable weeds, seeds, rocks, organic or inorganic debris, silt, and clay, toxic substance, organic or inorganic; soil sterilants; salts; and soil removed from road bed excavations.
- B. The Contractor shall furnish upon the request of the Landscape Architect a soils report made from the intended import by an approved agricultural lab. The report shall include pH, N-P-K, SAR, minerals, micro-nutrients, ECe, boron levels, soil particle size, and textural elevation. Soil imported to site and found to be unsuitable by the Landscape Architect shall be removed from the site and replaced with an approved soil at the Contractor's expense. The Contractor shall pay expenses for soil testing of import materials.

#### 2.05 Raised Planter Soil

- A. Raised Planter Soil for planters shall be Raised Garden Bed soil available from Instant Landscaping, or approved equal.

### **PART 3 Execution**

#### 3.01 General

- A. Planting operations shall not commence until completion of construction work, grading, soil preparation, weed control, and sprinkler installation.
- B. Irrigation system shall be fully operational including automatic controller, before commencing planting operations.

#### 3.02 Agricultural Soil Testing

- A. The Contractor is responsible for correction of soil pH, nutrient levels, and chemical balance until final acceptance by the Owner.
- B. Soil samples shall be taken from three separate locations and submitted to a soil analysis laboratory. Separate results shall be provided for each of the 3 samples, with each having its own individual letter or number to identify it. If topsoil is being used to bring up grade, a sample of the top soil will be required to be identified separately and submitted for testing as well. Include with the samples, a description of the proposed planting, a reduced scale site plan showing where each sample was taken with its letter or number shown, and the type of organic amendment to be used.
- C. The analysis report shall include pH, N-P-K, SAR, ECe, boron levels, percolation rates, and soil particle size and textural evaluation. The report shall include recommendations for amendments, fertilizers, application rates, and procedures for conditioning the soil.
- D. The Landscape Architect shall review the analysis reports prior to ordering amendments.
- E. A pre-approved laboratory offering soil testing services is: Waypoint Analytical, 1101 S. Winchester Blvd. Suite G-173, San Jose, CA 95128, p. (408) 727-0330.
- F. Soil test shall be #A05-2 complete evaluation for new planting. The report shall address turf, groundcover, tree and shrub backfill conditions.
- G. Report substitutions are not permitted unless pre-approved by the landscape architect. Contractor will be required to submit a sample soil test results and recommendations for a substitution request.

#### 3.03 Percolation Tests

- A. Test for percolation prior to sending soil sample to analysis laboratory.
- B. Auger four (4) holes four (4) feet deep at locations determined by the Landscape Architect. Fill holes with water to one half the depth of each hole. Let drain.
- C. Once holes have drained, fill holes again to one half the depth of each hole.
- D. Record drop in water level at thirty (30) minute intervals for maximum of six hours (6) or until the water has percolated.
- E. When the percolation rate is one half (½) inch per hour or less, notify the Landscape Architect. Alternative will be requested with cost for improving percolation and drainage of the planting area.

### 3.04 Topsoil Placement

- A. Refer to the Drawings for areas to receive, if any, and the depth of topsoil.
- B. The topsoil shall be placed in maximum 6 inch lifts with the first lift placed and tilled into the top 6 inches of the existing soil. Prior to placing each lift, the area shall be thoroughly moistened but not saturated. Each succeeding lift shall be placed and compacted to until the finished grades indicated on the drawings are achieved.
- C. The finished grades shall be free of depressions, humps, rocks, debris, air pockets, and ready to receive soil amendments.

### 3.05 Initial Weed Abatement

- A. In areas designated to receive amendments, irrigate normally for two weeks to germinate weed seeds. Apply broad spectrum non-selective herbicide per manufacturer's instructions.
- B. Repeat the application of herbicide when weeds remain or new weeds appear one (1) week after initial application.
- C. Clear and grub dead weeds and organic debris prior to commencing topsoil placement or soil preparation

### 3.06 Soil Preparation

- A. Manually remove weeds as described above in Initial Weed Abatement.
- B. In planting areas with a gradient less than 2:1, mechanically rip or hand till the area in two directions to a minimum depth of 6 inches.
- C. Remove rock and hard clods 3 inches in diameter and larger, remove construction debris, roots, stumps, trash and other deleterious materials from the top 6 inches of soil.
- D. Apply soil amendments, fertilizers, and conditioners evenly and at the specified application rates.
- E. Rototill top 6 inches of soil to a loose and friable consistency.
- F. Fine grade to contours and spot elevations shown on Drawings.

### 3.07 Landscape Finish Grading

- A. Finish grading shall establish flow lines and gradients for uniform water drainage. Flow lines and gradients shall be established from the high point to the drainage structure or outfall area. Finished grades shall be of uniform slope and grade between points of fixed elevations or elevation controls. Flow lines shall have a minimum 2 percent gradient from highpoint to inlet or outfall area. Contractor shall notify the Landscape Architect when grades or flow lines conflict with other construction or when positive drainage is not achievable and request a resolution. Failure to report the conflicts prior to planting shall result in removing the plant material, re-grading to correct the discrepancy and replacement of the plant material at no cost to the Owner.
- B. Unless noted otherwise, finished grades along walkways and curbs shall maintain a constant relationship between the finished paving and finished grade. Finished grade for lawn areas shall be 1 inch below sidewalks and curbs. Finished grades for mulch or ground cover areas shall be 2 inches below sidewalks and curbs.
- C. Finished grades shall be floated to a uniform surface free of irregular dips, humps, valleys or ridges.

- D. The finished grades shall maintain drainage away from buildings, structures, walls, paving, and towards drain inlets or outfall areas. Flow lines shall be established to drain water from behind walls and towards drain structures.
- E. When no compaction rate for planting areas is specified geotechnical report or when no report is available, compact turf and groundcover areas a minimum 85 percent to a maximum 90 percent relative density or as shown on drawings or specified elsewhere.

3.08 Second Weed Control

- A. After completion of Soil Preparation and finish grading commence irrigation of all plant beds. Inspect planting areas, if weeds are present apply broad spectrum herbicide.
- B. Wait ten days minimum and inspect all plant beds and lawn areas for the presence of any additional weeds. If weeds are present, apply a second application of broad spectrum herbicide to affected areas and delay planting until all weeds are dead.

3.09 Raised Planter Soil Installation

- A. Refer to Drawings and details for depth and planters to receive potting soil.
- B. In areas designated to receive potting soil, install in 6 inch lifts, wetting and gently compacting between lifts.

**PART 4 Payment**

Payment for the work of this section shall be included in the price bid for "Soil Preparation - Complete" and no additional compensation will be considered.

**END OF SECTION 32 91 13**

## **SECTION 32 84 00 - PLANTING IRRIGATION**

### **PART 1 General**

#### 1.01 Related Documents

- A. The General Conditions of the contract apply to the work of this section the same as though written herein.
- B. Comply with local and State codes, ordinances, safety orders, and regulations of legally constituted authorities having jurisdiction over this work.

#### 1.02 Scope of Work

- A. Furnish labor, materials, and equipment to provide, install, and maintain the irrigation system described herein and shown on the Drawings.

#### 1.03 Related Sections

- A. Section 32 91 13 - Soil Preparation
- B. Section 32 93 00 - Plants

#### 1.04 References

- A. ASTM D 1785 Requirements for Schedule 40 Plastic Pipe
- B. ASTM D 22466 Requirements for Schedule 40 Plastic Fittings
- C. ASTM D 2467 Requirements for Schedule 80 Plastic Fittings
- D. ASTM D 2464 Requirements for Schedule 80 Plastic Threaded Fittings
- E. ASTM D 2241 Requirements for Class 200 and Class 315 Bell and Gasket Plastic Pipe
- F. ASTM D 1869 Requirements for Rubber Ring Gasket
- G. ASTM A 120 Steel Pipe and Fittings
- H. ASTM D 2855 Installation of Plastic Pipe

#### 1.05 Submittals

- A. Submittals shall conform to provisions of Section 01 33 00. Partial or incomplete submittals are not acceptable and will be returned without a review.
- B. Submit descriptive literature and specifications for the following:
  - 1. Catalog data for products, equipment, and materials specified herein and as shown on the Drawings.
  - 2. Substitutions: shall conform to provisions per the contract documents and city of La Pine standards.
- C. Submit photocopies of current Landscape Industry Certified Technican (LICT) certification for foremen performing work on this project.

- D. Equipment or materials installed or furnished without the prior approval of the Architect may be rejected and the Contractor required to remove such materials from the site at his own expense.
- E. Acceptance of item alternate or substitutes indicates only that the products apparently meet the requirements of the drawings and specifications on the basis of the information or samples submitted.
- F. Manufacturer's warranties shall not relieve the Contractor of his liability under the guarantee. Such warranty shall only supplement the guarantee.
- G. The Architect can at his option require a manufacturer's warranty on product offered for use.

1.06 Qualifications and Experience

- A. The Contractor shall employ only Landscape Industry Certified Technician registered with the Oregon Landscape Contractors Association (OLCA), as foremen for irrigation installation work.

1.07 Responsibility

- A. Obtain and pay for plumbing permits and inspections required by local jurisdictions.
- B. The work performed under this Section is the responsibility of the Contractor. No subcontractor shall relieve the Contractor of his liability to complete the work shown on the Drawings and indicated in the specifications.
- C. Protection of public and private property adjacent to the work, and exercising due caution to avoid damage to such property. The work shall be protected and maintained throughout the contract period, including during suspension of work, and until final acceptance of the work. Repair or replace damaged improvements including acts of vandalism, theft, and graffiti removal. Repairs or replacements shall be at least equal to original condition of the existing improvement, and shall match in finish and dimension.
- D. Prior to starting the work of this Section, verify that previously installed work is complete to the point where this installation may properly commence. Verify that work of this Section may be installed in accordance with the design, pertinent codes, regulations, and portions of the referenced standards. In the event of discrepancy, immediately notify the Architect.
- E. Locate and mark new and existing underground utilities and equipment shown on as-built drawings and field record drawings of other trades. Review the layout work of this Section with the Architect a minimum of 24 hours prior to commencing with trenching and excavating in these areas. Notify the Architect when utilities not located or marked are found during excavation.
- F. Do not proceed with installation in areas of discrepancy until such discrepancies have been fully resolved. Failure to notify the Architect of discovery or damage to unmarked utilities shall result in repair or replacement by the Contractor at no additional cost to the Owner.

1.08 Record Documents

- A. Comply with Section 01 78 39 and General Conditions

1.09 Delivery, Storage, and Handling

- A. Store PVC pipe in a neat and orderly manner, fully supported, and protected from sunlight.

**PART 2 Products**

2.01 Brass Pipe

- A. Brass pipe shall be heavy wall type with threads complying to ANSI Specifications.
- B. Fitting shall be case brass or case bronze threaded joint and shall comply with ANSI Specifications. Thread on pipe and fittings shall be tapered type, NPT standard.

#### 2.02 Plastic Pipe And Fittings

- A. Plastic pipe shall be extruded from 100% virgin polyvinyl chloride (PVC) Type 1, Grade 1 as manufactured by Lasco Industries, Pacific Plastics, John-Manville, or acceptable equal. Pipe shall be new and unused.
- B. Plastic pipe shall be continuously and permanently marked with the manufacturer's name, nominal pipe size, PVC 1120, the pressure rating in PSI, and NSF (National Sanitation Foundation)
- C. Plastic pipe for non-pressure lateral lines shall be PVC 1120, Schedule 40 unless noted otherwise on the Drawing.
- D. Plastic pipe for pressure mainline shall be PVC 1220, Schedule 40 for sizes up to and including 1-1/2 inch, and Class 315 for sizes 2 inch and larger.
- E. Plastic fittings for pressure side of valves shall be PVC 1220, IPS Schedule 80. Plastic fittings for non-pressure pipe shall be PVC 1220, IPS Schedule 40, NSF slip fittings and Schedule 40 threaded fittings, as manufactured by Lasco, Pacific, Western, or acceptable equal.
- F. Solvent-weld glue shall be Lasco #711 Grey Heavy Body, or acceptable equal. Pressure-side pipe shall be primed with Lasco "Purple Primer" solvent before gluing.
- G. Threaded nipples shall be standard weight Schedule 80 molded threads. Threaded nipples exposed above grade shall be gray in color.
- H. Pipe for sleeves shall be PVC 1120, Schedule 40, sized as indicated on the Drawings. Provide pull rope 10 feet longer than sleeve.
- I. Conduit for flow sensor wires shall be PVC 1120, Schedule 40, grey, sized as indicated on the Drawings.
- J. Drip tubing shall be as indicated on the drawings.

#### 2.03 Thrust Blocks

- A. Thrust Blocks shall be minimum 2000 psi concrete, properly sized and formed to fit the fitting or equipment configuration as shown on the Drawings.

#### 2.04 Automatic Controller and Related Equipment

- A. Controller shall be as indicated on the Drawings.
- B. Controller enclosure shall be stainless steel, heavy duty as indicated on the Drawings.

#### 2.05 Spray and Bubbler Heads

- A. Sprinkler heads shall be as indicated on the Drawings.
- B. Pop-up sprinkler body shall be as indicated on the Drawings. Where not specifically called-out, pop-up heights shall be 6 inch body type.

#### 2.06 Rotor Heads

- A. Rotor heads shall be as indicated on the Drawings.
- B. Pop-up rotor body shall be as indicated on the Drawings. Where not specifically called-out, pop-up height shall be 6 inch body type.

2.07 Control Wire and Connectors

- A. Control Wire: shall be PVC insulated, solid copper conductor AWG 14 ga., of type acceptable for direct burial. Pilot wire shall be a single color and the common wire shall be white with a stripe the same color as the pilot wires. Each controller shall be a different color wire. Spare wires shall be black.
- B. Master Valve Wire: shall be PVC insulated, solid copper conductor AWG 14 ga. direct burial wire, color different from pilot and spare wires.
- C. Flow Sensor Wire: shall be a PVC jacketed two conductor cable. The conductors shall be 16 AWG 7 strand annealed copper, conforming to ASTM B-3 and B-8 with heat and moisture resistant PVC, covered with a .004 wall of stabilizing nylon conforming to UL83 heated at 90 degrees C. The conductor shall be twisted and encased in a single outer jacket of .050 inch minimal wall of sunlight and moisture resistant PVC conforming to UL, ICEA and NEMA standards. The tow conductors shall be color coded with one conductor yellow and the other gray as manufactured by Arizona Electrical Fabricators model #9516-2SP.
- D. Control Wire Connectors: shall be Dri-Splice DS-400 as manufactured by the Spears, or acceptable equal.
- E. Line Voltage Connections: shall be made by clamp and waterproofed with 3M Company Scotchcast splicing kits or acceptable equal.

2.08 Remote Control Valves

- A. Remote control valves shall be as indicated on the Drawings.

2.09 Quick Coupling Valves

- A. Quick coupling valves shall be two-piece body designed for working pressure of 125 PSI as indicated in the legend and installed in accordance with detail thereof. Quick coupling valves shall be installed with locking yellow vinyl covers.

2.10 Ball Valves

- A. Ball valves shall be of size, type, and manufacturer as indicated on the Drawings, or acceptable equal.

2.11 Gate Valves

- A. Gate valves shall be of size, type and manufacturer as indicated on the Drawings, or acceptable equal.

2.12 Master Valve

- A. Master valve shall be of size, type and manufacturer as indicated on the Drawings. Unless noted otherwise on the Drawings, master valve shall be a normally closed valve.

2.13 Flow Sensor

- A. Flow sensor shall be of the size, type and manufacturer as indicated on the Drawings.



2.14 Valve Boxes and Related Materials

- A. Valve box lids shall be green when located in lawn areas; black when located in shrub areas.
- B. 12 Inch Rectangular Box and Lid: shall be HDPE plastic type, model #1419-12. Lids shall be model #1419-4B T-Cover Bolt Down, non-hinged, with stainless steel locking bolt, as manufactured by Carson Industries, (800) 735-5566, or acceptable equal.
- C. 10 Inch Round Box and Lid: Shall be HDPE plastic type, model #910-10. Lids shall be model #910-4B T-Cover Bolt Down, green color, with stainless steel locking bolt, as manufactured by Carson Industries (800) 735-5566, or acceptable equal.
- D. Box lids shall be neatly and permanently heat branded as indicated on the Drawings with pre-formed steel letters/numerals and branding tool into the center of the lid.
- E. Base materials for setting valve boxes shall be 1/2" - 3/4" clean crushed aggregate and 2 x 4 x 8 red brick or concrete brick.
- F. Top dressing gravel inside valve boxes shall be 1/2" - 3/4" clean crushed aggregate

2.15 Backflow Prevention Device

- A. Backflow prevention devices shall be of the size and type as noted on the Drawings.
- B. Valve and wye strainer shall be cast bronze construction, and valve shall have resilient wedge gates.

2.16 Markers, Tags, and Signage

- A. Warning Tape: a detectable 3 inch wide, minimum 5.0 mil, 5 ply composition of ultra high modular weight 100 percent virgin polyethylene, acid, alkaline and corrosion resistant, elongation properties in accordance with ASTM D882-80A and shall be 80 percent MD and 135 percent TD. Tape shall have a minimum 20 gauge solid aluminum foil core, adhered to a 2.55 mil polyethylene backing.
  - 1. Control Wire Tape - Tape color to be red with black lettering, and shall read "Caution: Electrical Line Buried Below". Christy's™ Detectable Marking Tape #TA-DT-3-R-E, T. Christy Enterprises, Inc., (714) 507-3300, or acceptable equal.
  - 2. Mainline Marking Tape - Tape shall be blue with black lettering and shall read "Caution: Irrigation Line Buried Below". Provide 3 inch tape for mainline up to 4 inch, provide 6 inch tape for mainline larger than 4 inches. Christy's™ Detectable Marking Tape #TA-DT-3-B-I, for 3" tape, #TA-DT-6-B-I for 6 inch tape, T. Christy Enterprises, Inc., (714) 507-3300, or acceptable equal.
- B. Valve Identification Tags: shall be polyurethane plastic with and integral attachment neck and reinforced attachment hole. Tags shall be hot stamped with the controller designation letter and valve station number indicated on the Drawings. Tag color shall be yellow with black lettering, Christy's™ Standard Tags, T. Christy Enterprises, Inc., (714) 507-3300, or acceptable equal.

2.17 Dripperline Assembly

- A. Dripperline shall be as indicated on drawings.
- B. Staples shall be 9" galvanized steel wire staples spaced at 5' o.c.
- C. Flush Valves shall be as indicated on the Drawings.

- D. Air/ Vacuum Relief Valves shall be as indicated on the Drawings.
- E. Valve Boxes for flush valves and air release valves shall be round type #708-9-4, black with black lid, as manufactured by Carson Industries (800) 735-5566, or acceptable equal.

### **PART 3 Execution**

#### **3.01 General**

- A. The Drawings are diagrammatic, products and equipment are shown at their approximate location and at an appropriate scale for clarity. Detail drawings provide clarification of installation and relationships of the product and equipment to existing conditions and new construction.
- B. The installation of irrigation materials shall be coordinated with the landscape planting plans to avoid interfering with the trees, shrubs, or other plantings. Layout sprinkler heads and dripperline and make minor adjustments as needed to conform to differences between the site conditions and the Drawings. Minor adjustments shall be within the intent of the Drawings, and implemented without additional costs to the Owner.
- C. Spacing of sprinkler heads are not to be scaled off of the Drawings, but located to prevent overspray onto buildings, walks, and structures. Do not willfully install the sprinkler system when it is obvious in the field that obstructions or grade differences exist. Notify the Architect immediately of discrepancies between plans and actual field conditions.

#### **3.02 Water Supply and Static Pressure Tests**

- A. Connection to the water supply shall be at the location shown on the Drawings. Installation shall be in accordance with local codes and regulations, and the requirement of the governing water district.
- B. Prior to commencing with the work, a static pressure test shall be submitted to the Architect for each point of connection. The test shall be a continuous reading of the static pressure recorded over a 24 hour period. The recorded print out shall be documented with the date and time period the reading was taken. Submit the recorded data to the Architect.
- C. When static pressure at a point of connection is below that called out by more than 5 percent, notify the Architect before proceeding with work.

#### **3.03 Installation**

##### **A. Assemblies**

- 1. Threaded pipe and fittings shall be assembled using Teflon tape or equivalent, applied to the male threads only.
- 2. Assemblies specified herein shall be installed in accordance with their respective detail. In the absence of detail drawings or specifications pertaining to the specific items required to complete the work, the Contractor shall perform such work in accordance with the best standard practice and to the satisfaction of the Owner.

##### **B. Pipe And Pipe Clearances**

- 1. Pressure lines and lateral lines shall have a minimum clearance as indicated on the Drawings. Parallel lines shall not be installed directly over one another. If clearances are not indicated on the Drawings, all clearances shall be per City of Bend Standard Details and Specifications.

C. Trenching, and Backfilling

1. Trenches: Pipe shall have the continuous support of the trench bottom and shall be laid to an even grade. Trenching excavation shall follow the layout indicated on the drawings and shall be of sufficient width to allow "snaking" of pipe in trench.
2. Backfill for trenching shall be compacted to a dry density equal to the adjacent undisturbed soil in planting areas and 95% under paved areas and shall conform to the adjacent grades without dips, sunken areas, humps, or other irregularities. Initial backfill on lines shall be of a fine granular material with no foreign matter larger than one-half inch in size.
3. If, in the opinion of the Architect, the excavated material is not satisfactory for use as backfill, the Contractor shall dispose of this unsatisfactory material and provide a clean granular fill or sand bedding material. Backfill material shall be placed as indicated on the Drawings.
4. Provide concrete thrust blocks at angles, and bends in mainline runs per Drawings.
5. Pressure-side pipe shall be laid with a detectable warning tape 9 inches above the pipe as indicated on the Drawings.
6. Trenches shall be backfilled promptly after the open trench inspection.

D. Pipe Sleeves

1. Sleeves shall of the size and material noted on the Drawings.
2. Sleeves shall extend two (2) feet minimum beyond the edge of paving.
3. Provide permanent pavement marking pin at both ends of sleeve, standard brass survey pin in lead, set 1 inch from edge of paving or walkway.

E. Control Wires

1. Between controllers and remote control valves, use a continuous wire. Under no circumstance shall splicing exist.
2. Where more than one wire is placed in a trench, the wiring shall be taped together at intervals of ten feet.
3. Wiring shall occupy the same trench and shall be installed along the same route as the pressure supply line wherever possible. Wire bundle shall be placed along the side of mainline pipe. Wire bundles shall not cross over top of mainline.
4. A loop of 12 inches shall be provided at each directional turn in the wire run.
5. Wire shall be laid loosely in trench, not pulled tight. Lay wire so that there is 12 inches of slack for every 100 feet of length.
6. Provide at least 1 extra spare wire for every 3 valves being served by the wire run. Extra wires shall be continuous from controller to end of wire run.
7. Provide sufficient extra wire under valve boxes so that valve can be completely removed from ground and box for servicing without disconnecting wires.

F. Valve Boxes

1. Install valve boxes in accordance with the details thereof.
2. Seal below-grade openings in valve boxes and around piping to prevent soil from entering the valve box. Suitable materials include geotextile fabric, heavy gauge shrink-wrap plastic, or other flexible material accepted by the Architect. Do not use cardboard, duct tape, or other materials that will deteriorate in wet conditions.
3. Keep valve box lids in place during soil preparation to keep soil out. Remove soil materials, which enter the valve box during construction.
4. Where valve boxes occur adjacent to walks, curbs, or headerboard, locate them 6 inches clear from edge of improvement. Where two or more valve boxes occur together, locate them with 6 inches clear between and in a straight row.
5. Install valve boxes so rim is 2 inches above finish grade in shrub areas, 1 inch in turf areas.
6. Due to the schematic nature of plans, if questions arise, confirm actual valve manifold locations with Architect before proceeding with work.

G. Sprinkler Heads

1. Install each type of sprinkler head in accordance with the Drawings.
2. Install sprinkler heads 6 inches away from walkway or paving edge; 12 inches away from buildings, above ground utility structures, transformers, and other items.
3. Install sprinkler heads 12 inches away from walls and wood fences.
4. Install sprinkler heads 6 inches away from chainlink fences.
5. Do not locate sprinkler heads where it is obvious they will spray onto or into utility structures, buildings, signs, controller equipment, or other structures.
6. Install pressure compensating screens as necessary to prevent overspraying onto buildings, walks or utility structures. Choose screens per manufacturer's selection chart.
7. Provide adjustable, part-circle rotor heads when 360° full-circle type is not appropriate for the area being irrigated, whether indicated or not on the drawings.
8. Sprinkler heads on slopes shall be set so that they are angled downhill, halfway between plumb and perpendicular to slope angle.

H. Dripperline Tubing and Assemblies

1. Trenches shall be made wide enough to allow minimum of two (2") inches between parallel pipe lines. Trenches for pipelines shall be made of sufficient depth to provide minimum cover from finish grade as follows:
  - a. 15" minimum cover over main lines.
  - b. 12" minimum cover over control lines from controller to valves.
  - c. 2" cover over dripperline.
2. Dripperline Installation

- a. Install all dripperline as indicated on drawings. Use only Teflon tape on all threaded connections.
  - b. Clamp dripperline fittings with Oetiker clamps when operating pressure exceeds specific dripperline fitting requirements.
3. Cap or plug all openings as soon as lines have been installed to prevent the entrance of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.
  4. Thoroughly flush all water lines before installing valves and other equipment.
- I. Pressure Test
1. Pressure lines shall be tested under hydrostatic pressure of 150 PSI, and non-pressure lines shall be tested under the existing static pressure and both be proven watertight. (Contractor to supply equipment needed for testing.)
  2. Pressure shall be sustained in the lines for not less than two hours. If leaks develop, the joints shall be replaced and the test repeated until the entire system is proven watertight.
  3. Tests shall be observed and accepted by the Architect prior to backfill.
  4. Upon completion of each phase of the work, the entire system shall be tested and adjusted to meet site requirements.
- J. Flushing the System
1. After valves, lateral lines, and risers are in place and connected, flush entire system, one valve at a time, to clear lines of dirt and debris.
  2. Install sprinkler heads, filter screens, and nozzles immediately after flushing operation is completed.
- K. Adjusting Of System
1. The Contractor shall flush and adjust sprinkler heads for best possible performance and to prevent overspray onto walks, roadways, fences, and buildings.
  2. If it is determined that adjustments in the irrigation equipment or nozzle changes will provide proper and more adequate coverage, Contractor shall make all necessary changes, including installation of additional sprinkler heads, or moving sprinkler heads, without additional cost to the Owner, prior to planting.
  3. The entire system shall be operating properly before planting operations commence.
  4. Lower raised sprinkler heads in lawn areas within ten days after notification by the Architect.
- L. Electrical
1. Contractor shall verify power sources shall be as indicated on the drawings.
  2. The Contractor shall be responsible for making electrical connections to the automatic controller and wire circuits from remote control valves to controllers. electrical work shall be in accordance with local and /or county ordinances. Wire sizes to be as per manufacturer's specifications.

3.04 Turnover Equipment

- A. The Contractor shall provide 2 sets of sprinkler wrenches for adjusting, cleaning, or disassembling each type of sprinkler.
- B. Provide two each of special tools required for other equipment.
- C. Provide two keys for each automatic controller enclosure.
- D. Provide two quick coupler keys for each type of quick-coupler valve used.
- E. Two service manuals and information pages for equipment used shall be furnished to the Owner. Manuals shall be loose leaf in 3-ring binders and should show drawings or exploded views of equipment and catalog number. Operating instructions for equipment shall be furnished.

3.05 Review Of Work

- A. Installations and operations are to be reviewed and accepted by the Architect.
- B. In no event shall the Contractor cover-up or otherwise remove from view work under this contract without prior acceptance of the Architect. Work covered prior to review shall be uncovered by the Contractor at no additional cost to the Owner. The Contractor shall request a review by the Architect at least two days in advance. Reviews will be required for the following:
  - 1. Mainline pressure test and installation prior to backfilling
  - 2. Coverage test upon sprinkler system completion
- C. Materials and equipment required for testing of the system shall be provided by the Contractor at no additional cost to the Owner.

3.06 Record Drawings

- A. The Contractor shall maintain a complete and accurate set of project record Drawings. The Drawings shall be kept up to date with the progress of the work in accordance with Section 017839.
- B. Contractor shall provide adequate measurements and field notes for preparation of accurate "project record" drawings. Show either actual locations or dimensions from two permanent points of reference such as building corners, curbs, sidewalk, intersections, etc. (but not from irrigation equipment) locations of the following:
  - 1. Connections to water sources
  - 2. Water meters
  - 3. Routing of main lines
  - 4. Location of both ends of sleeves
  - 5. Remote control valves
  - 6. Quick coupler valves
  - 7. Backflow prevention devices
  - 8. Gate valves

9. Routing of control wiring

10. Controllers

- C. Record Documents, accurately record locations of new piping and equipment horizontally to within one (1) foot and vertically to within 0.5 feet.
- D. The completed and accepted reproducible record drawings and record job set blueprints shall be delivered to the Owner on or prior to the final inspection.

### 3.07 Controller Charts

- A. Project record drawings shall be prepared by the Contractor before charts are prepared.
- B. Provide one controller chart for each controller supplied.
- C. The chart shall show the area controlled by automatic controller and shall be the maximum size controller door will allow.
- D. The chart is to be reduced drawing of the installed system. However, in the event the controller sequencing is not legible when the drawings is reduced, it shall be enlarged to a size that will be readable when reduced. If controller sequencing has been changed from the original drawings, the new sequencing shall be indicated on the controller chart.
- E. Chart shall be non-fading blackline print and a different color shall be used to show area of coverage for each valve station.
- F. The chart shall be mounted using Velcro, or an approved equal type of comparable quality.
- G. When completed and accepted, the chart shall be laminated between two pieces of clear plastic, each piece being a minimum of 20 mils thick.
- H. Charts shall be completed and accepted prior to final acceptance of the irrigation system.
- I. Controller chart shall include the following information:
  - 1. Color-coded area of coverage for each valve.
  - 2. Valve size, station number, and controller designation.

### 3.08 Clean-Up And Repair

- A. Upon completion of the work, make the ground surface level, remove excess materials, rubbish, debris, etc., and remove construction and installation equipment from the premises.
- B. Replace and/or repair to the satisfaction of the Architect existing paving disturbed during the course of this work. New paving shall be the same type, strength, texture, finish, and be equal in every way to the material removed.
- C. Contractor will be responsible for all maintenance and repair of entire irrigation system, including vandalism and theft, until final acceptance.

### 3.09 Final Inspection

- A. The Contractor shall show evidence to the Owner's Representative that the Owner has received required accessories, charts, record drawings, etc., before final inspection can occur.

- B. Notification by the Contractor shall be made in writing to the Owner seven days prior to final inspection. The final inspection of the work shall be made in the presence of the Owner's Representative at the time the work is completed.

3.10 Guarantee

- A. The entire sprinkler system shall be guaranteed by the Contractor as to material and workmanship, including settling of backfilled areas and trenches for a period of one year following the date of final acceptance of the work.
- B. Should operational difficulties in connection with the sprinkler system develop within the specified guarantee period, which in the opinion of the Owner may be due to inferior material and/or workmanship, said difficulties shall be immediately corrected by the Contractor to the satisfaction of the Owner, at no additional cost.

3.11 Temporary Repairs

- A. The Owner reserves the right to make temporary repairs as necessary to keep the sprinkler system equipment in operating condition. The exercise of this right by the Owner shall not relieve the Contractor of his responsibilities under the term of the guarantee as herein specified.

**PART 4 Payment**

- 4.01 Payment for the work of this section shall be included in the price bid for "Planting Irrigation - Complete" and no additional compensation will be considered.

**END OF SECTION 32 84 00**



## **SECTION 06 10 63 - EXTERIOR ROUGH CARPENTRY**

### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Wood fences.
  - 2. Wood Sign Framing.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For preservative-treated wood products.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Material Certificates:
  - 1. For preservative-treated wood products. Indicate type of preservative used and net amount of preservative retained.

#### 1.4 QUALITY ASSURANCE

- A. Lumber Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.
- B. Lumber Vendor Qualifications: A vendor that is certified for chain of custody by an FSC-accredited certification body.

### **PART 2 - PRODUCTS**

#### 2.1 LUMBER, GENERAL

- A. Comply with DOC PS 20 and with grading rules of lumber grading agencies certified by ALSC's Board of Review as applicable. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by ALSC's Board of Review.
  - 1. Factory mark each item with grade stamp of grading agency.
  - 2. For items that are exposed to view in the completed Work omit grade stamp and provide certificates of grade compliance issued by grading agency.
- B. Regional Materials: Wood products shall be milled within 500 miles of Project site from wood that has been harvested within 500 miles of Project site.

C. Maximum Moisture Content:

1. Boards: 19 percent.
2. Dimension Lumber: 19 percent.
3. Timber. 19 percent.

2.2 LUMBER

A. Dimension Lumber: Select Structural No. 1 grade, or as per structural recommendations, and any of the following species:

1. Hem-fir or hem-fir (North); NLGA, WCLIB, or WWPA.
2. Douglas fir-larch, Douglas fir-larch (North), or Douglas fir-south; NLGA, WCLIB, or WWPA.
3. Redwood; RIS.

2.3 POSTS

A. Dimension Lumber Posts: No. 2 grade, or as per structural recommendations, and any of the following species:

1. Douglas fir-larch, Douglas fir-larch (North), or Douglas fir-south; NLGA, WCLIB, or WWPA.
2. Northern species; NLGA.
3. Western woods; WCLIB or WWPA.

B. Timber Posts: Douglas fir-larch, Douglas fir-larch (North), hem-fir, western hemlock, or western hemlock (North); No. 1, NeLMA, NLGA, SPIB, WCLIB, or WWPA.

2.4 PRESERVATIVE TREATMENT

A. Pressure treat boards and dimension lumber with waterborne preservative according to AWPAs U1; Use Category UC3b for exterior construction not in contact with the ground, and Use Category UC4a for items in contact with the ground.

B. Pressure treat timber with waterborne preservative according to AWPAs U1; Use Category UC4a.

1. Treatment with CCA shall include post-treatment fixation process.

C. After treatment, redry to 19 percent maximum moisture content.

D. Application: Treat all wood unless otherwise indicated.

2.5 FASTENERS

A. General: Provide fasteners of size and type indicated, acceptable to authorities having jurisdiction, and that comply with requirements specified in this article for material and

manufacture. Provide nails or screws, in sufficient length, to penetrate per requirements of structural engineer's recommendations or not less than 1-1/2 inches into wood substrate.

1. Use fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M or ASTM F 2329 unless otherwise indicated.
  2. For pressure-preservative-treated wood, use stainless-steel fasteners.
- B. Postinstalled Anchors: Stainless-steel, torque-controlled expansion anchors with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing according to ASTM E 488, conducted by a qualified independent testing and inspecting agency, or as per structural engineer's recommendations.

### **PART 3 - EXECUTION**

#### **3.1 INSTALLATION, GENERAL**

- A. Set work to required levels and lines, with members plumb, true to line, cut, and fitted. Fit work to other construction; scribe and cope as needed for accurate fit.
- B. Framing Standard: Comply with AF&PA WCD1 unless otherwise indicated.
- C. Install metal framing anchors to comply with manufacturer's written instructions.
- D. Do not splice structural members between supports unless otherwise indicated.
- E. Securely attach exterior rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  1. ICC-ES AC70 for power-driven fasteners.
  2. "Fastening Schedule" in ICC's International Building Code.
  3. "Fastener Schedule for Structural Members" and "Alternate Attachments" in ICC's International Residential Code for One- and Two-Family Dwellings.
  4. Per structural engineer's recommendations.

**END OF SECTION 06 10 63**

## **SECTION 05 50 00 - METAL FABRICATIONS**

### **PART 1 - GENERAL**

#### 1.1 SUMMARY

A. Section Includes:

1. Miscellaneous steel framing and supports.
2. Skateboard deterrents

B. Products furnished, but not installed, under this Section include the following:

1. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.
2. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.

#### 1.2 ACTION SUBMITTALS

- A. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.
- B. Samples for Verification: For each type and finish.

### **PART 2 - PRODUCTS**

#### 2.1 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.

#### 2.2 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- C. Stainless-Steel Bars and Shapes: ASTM A 276, Type 304
- D. Steel Tubing: ASTM A 500/A 500M, cold-formed steel tubing.

- E. Steel Pipe: ASTM A 53/A 53M, Standard Weight (Schedule 40) unless otherwise indicated.
- F. Zinc-Coated Steel Wire Rope: ASTM A 741.
  - 1. Wire-Rope Fittings: Hot-dip galvanized-steel connectors with capability to sustain, without failure, a load equal to minimum breaking strength of wire rope with which they are used.
- G. Slotted Channel Framing: Cold-formed metal box channels (struts) complying with MFMA-4.
  - 1. Size of Channels: As indicated
  - 2. Material: Galvanized steel, ASTM A 653/A 653M

## 2.3 FASTENERS

- A. General: Unless otherwise indicated, provide Type 304 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941 Class Fe/Zn 5, at exterior walls. Select fasteners for type, grade, and class required.
  - 1. Provide stainless-steel fasteners for fastening aluminum.
  - 2. Provide stainless-steel fasteners for fastening stainless steel.
  - 3. Provide stainless-steel fasteners for fastening nickel silver.
  - 4. Provide bronze fasteners for fastening bronze.
- B. Cast-in-Place Anchors in Concrete: Either threaded type or wedge type unless otherwise indicated; galvanized ferrous castings, either ASTM A 47/A 47M malleable iron or ASTM A 27/A 27M cast steel. Provide bolts, washers, and shims as needed, all hot-dip galvanized per ASTM F 2329.
- C. Post-Installed Anchors:
  - 1. Material for Exterior Locations and Where Stainless Steel Is Indicated: Alloy stainless-steel bolts, ASTM F 593 and nuts, ASTM F 594

## 2.4 MISCELLANEOUS MATERIALS

- A. Non-shrink, Nonmetallic Grout: Factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- B. Concrete: Comply with requirements in Section 033000 "Cast-in-Place Concrete" for normal-weight, air-entrained, concrete with a minimum 28-day compressive strength of 3000 psi.

## 2.5 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Use connections that maintain structural value of joined pieces.

- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
- C. Weld corners and seams continuously to comply with the following:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended.
- D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Locate joints where least conspicuous.
- E. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- F. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors not less than 8 inches from ends and corners of units and 24 inches o.c.

## 2.6 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.

## 2.7 MISCELLANEOUS STEEL TRIM

- A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.
- B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.

## 2.8 LOOSE BEARING AND LEVELING PLATES

- A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts and for grouting.

## 2.9 FINISHES, GENERAL

- A. Finish metal fabrications after assembly.

## 2.10 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
  - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  - 2. Obtain fusion without undercut or overlap.
  - 3. Remove welding flux immediately.
  - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

### 3.2 INSTALLING BEARING AND LEVELING PLATES

- A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.
- B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with nonshrink grout. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

### 3.3 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780/A 780M.

**END OF SECTION 05 50 00**



## **SECTION 04 43 13 - STONE MASONRY VENEER**

### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Stone masonry adhered to concrete backup.
  - 2. Stone masonry adhered to unit masonry backup.

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each variety of stone, stone accessory, and manufactured product.
- B. Samples:
  - 1. For each stone type indicated.
  - 2. For each color of mortar required.

#### 1.3 FIELD CONDITIONS

- A. Protection of Stone Masonry: During construction, cover tops of walls and projections with waterproof sheeting at end of each day's work.
- B. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
  - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and above and will remain so until masonry has dried.
- C. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.

### **PART 2 - PRODUCTS**

#### 2.1 STONE

- A. Regional Materials: Stone shall be fabricated within 1000 miles of Project site from stone that has been extracted within 1000 miles of Project site.
- B. Material Standard: Stone material shall be as indicated on drawings to match existing stone walls, or approved equal.

## 2.2 MORTAR MATERIALS

- A. Regional Materials: Aggregate for mortar and grout shall be extracted, harvested, or recovered, as well as manufactured, within 500 miles of Project site.
- B. Portland Cement: ASTM C 150, Type I or Type II, except Type III may be used for cold-weather construction; natural color or white cement may be used as required to produce mortar color indicated.
  - 1. Low-Alkali Cement: Not more than 0.60 percent total alkali when tested according to ASTM C 114.
- C. Hydrated Lime: ASTM C 207, Type S.
- D. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes and complying with ASTM C 979. Use only pigments with a record of satisfactory performance in stone masonry mortar.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Davis Colors; True Tone Mortar Colors.
    - b. Lanxess Corporation; Bayferrox Iron Oxide Pigments.
    - c. Solomon Colors; SGS Mortar Colors.
- E. Colored Portland Cement-Lime Mix: Packaged blend of portland cement, hydrated lime, and mortar pigments. Mix shall produce color indicated or, if not indicated, as selected from manufacturer's standard colors. Pigments shall not exceed 10 percent of portland cement by weight.
- F. Colored Masonry Cement Mix: Packaged blend of masonry cement and mortar pigments. Mix shall produce color indicated or, if not indicated, as selected from manufacturer's standard colors. Pigments shall not exceed 5 percent of masonry cement by weight.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following]:
    - a. Cemex S.A.B. de C.V.; Richcolor Masonry Cement.
    - b. Essroc, Italcementi Group; Flamingo-Brixment.
    - c. Holcim (US) Inc.; Rainbow Mortamix Custom Color Masonry Cement.
    - d. Lafarge North America Inc.; U.S. Cement Custom Color Masonry Cement.
    - e. Lehigh Cement Company; Lehigh Custom Color Masonry Cement.
- G. Aggregate: ASTM C 144 and as follows:
  - 1. For pointing mortar, use aggregate graded with 100 percent passing No. 16 sieve.
  - 2. Colored Aggregates: Natural-colored sand or ground marble, granite, or other sound stone; of color necessary to produce required mortar color.
- H. Water: Potable.

## 2.3 EMBEDDED FLASHING MATERIALS

A. Metal Flashing: Provide metal flashing as indicated on drawings, and as follows:

1. Stainless Steel: ASTM A 240/A 240M, Type 304, 0.016 inch thick.

## 2.4 MISCELLANEOUS MASONRY ACCESSORIES

A. Weep Products: Use one of the following unless otherwise indicated:

1. Mesh Weep Holes: Free-draining mesh; made from polyethylene strands, full width of head joint and 2 inches (50 mm) high by thickness of stone masonry; in color selected from manufacturer's standard.

B. Corrugated-Metal Veneer Anchors: Not less than 0.030-inch- thick by 1-inch- wide hot-dip galvanized or stainless-steel sheet with corrugations having a wavelength of 0.3 to 0.5 inch and an amplitude of 0.06 to 0.10 inch.

## 2.5 FABRICATION

A. Split and or Select stone to produce pieces of thickness, size, and shape indicated, including details on Drawings.

B. Gage backs of stones for adhered veneer if more than 81 sq. in. in area.

C. Thickness of Stone: Provide thickness indicated, but not less than the following:

1. Thickness: 1 inch plus or minus 1/4 inch.

D. Shape stone for type of masonry (pattern) as follows:

1. Split-bed, random-range ashlar with random course heights and random lengths (interrupted coursed), with jumpers to resemble pattern of existing Centennial Park masonry walls.

E. Finish exposed stone faces and edges to comply with requirements indicated for finish and to match approved samples.

1. Finish: Split face unless otherwise indicated on drawings.

## 2.6 MORTAR MIXES

A. General: Do not use admixtures unless otherwise indicated.

1. Do not use calcium chloride.
2. Use masonry cement or mortar cement unless otherwise indicated.
3. Mixing Pointing Mortar: Thoroughly mix cementitious and aggregate materials together before adding water. Then mix again, adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for one to two hours. Add remaining water in small portions until

mortar reaches required consistency. Use mortar within 30 minutes of final mixing; do not retemper or use partially hardened material.

- B. Mortar for Stone Masonry: Comply with ASTM C 270, Proportion Specification.
  - 1. Mortar for Setting Stone: Type S.
  - 2. Mortar for Pointing Stone: Type N.
- C. Mortar for Scratch Coat over Unit Masonry: 1 part portland cement, 1 part lime, 7 parts loose damp sand, and enough water to produce a workable consistency.

### **PART 3 - EXECUTION**

#### **3.1 SETTING OF STONE MASONRY, GENERAL**

- A. Perform necessary field cutting and trimming as stone is set.
  - 1. Use power saws to cut stone that is fabricated with saw-cut surfaces.
  - 2. Use hammer and chisel to split stone that is fabricated with split surfaces.
  - 3. Pitch face at field-split edges as needed to match stones that are not field split.
- B. Sort stone before it is placed in wall to remove stone that does not comply with requirements relating to aesthetic effects, physical properties, or fabrication, or that is otherwise unsuitable for intended use.
- C. Arrange stones in range ashlar pattern with course heights as indicated, random lengths, and uniform joint widths, with offset between vertical joints as indicated.
- D. Arrange stones in broken-range ashlar pattern with uniform course heights, random lengths, and uniform joint widths.
- E. Arrange stones in three-course, random-range ashlar pattern with random course heights, random lengths (interrupted coursed), and uniform joint widths.
- F. Arrange stones in polygonal (mosaic) pattern with uniform joint widths.
- G. Arrange stones with color and size variations uniformly dispersed for an evenly blended appearance.
- H. Maintain uniform joint widths except for variations due to different stone sizes and where minor variations are required to maintain bond alignment if any. Lay walls with joints not less than 1/4 inch at narrowest points or more than 5/8 inch at widest points.
- I. Provide sealant joints of widths and at locations indicated.
  - 1. Keep sealant joints free of mortar and other rigid materials.
  - 2. Sealing joints is specified in Section 079200 "Joint Sealants."
- J. Install embedded flashing and weep holes and where indicated.
  - 1. set.

### 3.2 CONSTRUCTION TOLERANCES

- A. Variation from Plumb: For vertical lines and surfaces, do not exceed 3/8 inch in 20 feet, or 1/2 inch in 40 feet or more.
- B. Variation from Level: For bed joints, and other conspicuous lines, do not exceed or 1/2 inch in 40 feet or more.

### 3.3 INSTALLATION OF ADHERED STONE MASONRY VENEER

- A. Rake out joints for pointing with mortar to depth of not less than 3/4 inch] before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides.

### 3.4 POINTING

- A. Prepare stone-joint surfaces for pointing with mortar by removing dust and mortar particles. Where setting mortar was removed to depths greater than surrounding areas, apply pointing mortar in layers not more than 3/8 inch deep until a uniform depth is formed.
- B. Point stone joints by placing and compacting pointing mortar in layers of not more than 3/8 inch deep. Compact each layer thoroughly and allow to it become thumbprint hard before applying next layer.
- C. Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce the joint profile as indicated on drawings.

### 3.5 ADJUSTING AND CLEANING

- A. In-Progress Cleaning: Clean stone masonry as work progresses. Remove mortar fins and smears before tooling joints.
- B. Final Cleaning: After mortar is thoroughly set and cured, clean stone masonry as follows:
  - 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
  - 2. Test cleaning methods on mockup; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before cleaning stone masonry.
  - 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent, polyethylene film, or waterproof masking tape.
  - 4. Wet wall surfaces with water before applying cleaner; remove cleaner promptly by rinsing thoroughly with clear water.
  - 5. Clean stone masonry by bucket and brush hand-cleaning method described in BIA Technical Note No. 20, Revised II, using job-mixed detergent solution.
  - 6. Clean stone masonry with proprietary acidic cleaner applied according to manufacturer's written instructions.
  - 7. Clean limestone masonry to comply with recommendations in ILI's "Indiana Limestone Handbook."

3.6 EXCESS MATERIALS AND WASTE

- A. Excess Stone: Stack excess stone where directed by Owner for Owner's use.
- B. Disposal as Fill Material: Dispose of clean masonry waste, including mortar and excess or soil-contaminated sand, by crushing and mixing with fill material as fill is placed.
  - 1. Do not dispose of masonry waste as fill within 24 inches of finished grade.

**END OF SECTION 04 43 13**