

Attachment A – 3 -1 Burns Maintenance

STATEMENT OF WORK

The Statement of Work is hereby amended as follows: new language is indicated by **bold and underline** and deleted language is indicated by ~~[brackets and strike through]~~.

SECTION 1 – GENERAL SITE INFORMATION

1.1 Site Name, Number, and Statement of work Date

Site: Burns Maintenance

Site Number: F71307

Statement of work date: 03/09/14

1.2 General Statement of Work

This State Radio Project (SRP) statement of work (SOW) is for civil infrastructure improvements at an existing radio communications facility at Burns Maintenance located in Harney County, Oregon Site #F71307. Project work identified within the final construction drawings (FCD's) and written in sections 2 – 14 of this SOW includes but is not limited to:

1. Upgrade Grounding System
2. Provide and Install Coax Entry Port
3. Provide and Install Cable Tray

Refer to sections 2-14 for specific scope of work.

Attachments A of this Contract identify the site specific Work directives. Attachment C supports these site specific work directives.

1.3 RESERVED

1.4 Site Directions and Coordinates

Site Directions:

Traveling in the Burns Oregon area from the junction of US-395/US-20/OR-78 head East on Steens Hwy OR-78/E Monroe St for 0.3 miles and turn right on S Elm St. Continue for 171 ft and turn right on Crane Blvd. Drive 108 ft turn left on S Date St. Continue for 0.1 miles turn right into Burns Maintenance yard.

Site Coordinates:

Latitude: 43.58372 North / Longitude: -119.0509 West

1.5 Key SRP Staff

The following personnel will be the primary contacts during construction. Their contact information will be provided at the time of award.

- a) SRP Principal Project Manager (PPM) – ~~[Mike Mullen]~~ **Jack Williams**

- b) SRP Site Project Manager (SPM) - Zachary Krueger
- c) SRP Construction Quality Manager (CQ or CQM) – Bryce Foster
- d) Sr. Contracts Manager – Tim Dodson **and Dennis Wright**
- e) ODOT / SRP Document Control (email all deliverables to) - ODOTMPBDocCntrl@odot.state.or.us

SECTION 2 –MOBILIZATION, SITE USE, PERMITS, OWNER FURNISHED MATERIALS AND INSPECTIONS.

2.1 Permits

The Building Permit application is the responsibility of the Owner. Owner will ensure building permits are available at the time of the issuance of Notice to Proceed. In some case the contractor will be responsible for picking up the permit at the jurisdiction. If there are any fees to be paid at the time of pickup those fees will be reimbursed by the Owner and are not part of the contract price. No mark up is allowed on these fees.

Building and Trade Permit Jurisdiction is:

Harney County Government
450 N Buena Vista
Burns, OR 97720
541-573-8174

2.1.1 Trade Permits

Contractor and their sub-contractors are responsible for obtaining all required trade permits.

2.1.2 Oregon Department of Forestry (ODF) Permits

All ODF property requires a work permit issued from ODF. Contractor shall obtain this permit prior to start of work. The Owner can provide the contact information and forms if needed.

2.1.3 Property and Access Road Owner Permits

The following additional permit and insurance requirements are required by the property and access road owners.

1. [Reserved]

2.2 Materials

2.2.1 Owner Provided Materials

Contractor shall pick up and take possession of Owner-provided materials, shall transport them to the project site, shall secure them until installed, and shall install this equipment in accordance with the project Plans and Specifications.

The following Owner-provided materials will be available for transfer to the Contractor from ODOT (MPB – 3210 Del Webb Avenue NE, Salem Oregon. (Unless otherwise noted)

1. No Owner Provided Materials

Contractor must notify the Owners Site Project Manager one week in advance of the scheduled pickup time for the material listed above.

2.2.2 Contractor Provided Materials

Contractor shall provide all other materials, labor, and equipment necessary to complete the Work according to the contract Plans and Specifications which may include some or all of the following:

- 1) All equipment and labor to construct the site
- 2) Crushed rock aggregate, and structural and non-structural Fill materials
- 3) Erosion control materials/equipment
- 4) Fasteners and hardware
- 5) Cable Management Apparatus (i.e. Ice Bridge, Trapeze, Cable Ladder, and Waveguide Ladder as applicable)
- 6) All paint , weather proofing and galvanizing materials
- 7) Concrete, including reinforcing steel and forms
- 8) All interior and exterior electrical equipment
- 9) All interior and exterior grounding materials
- 10) Safety bollards
- 11) Signage
- 12) Snow entry vestibules, hatches and ladders
- 13) Propane lines, regulators and valves
- 14) Fencing and Gates
- 15) Utility vaults and conduit for underground electrical and telemetry
- 16) All support structures
- 17) Fire extinguishers
- 18) One (1) new 6' fiberglass 1AA ladder extra heavy duty rated for 375lb
- 19) One (1) new three drawer desk (unless specified otherwise)
- 20) One (1) new metal folding chair
- 21) One (1) new college ruled log book
- 22) One (1) new First aid kit
- 23) Any additional material needed to complete the site

Contractor-provided materials require a submittal for review and approval in accordance with the submittal requirements found in Attachment C.

Contractor shall deliver the following salvaged materials and assets to ODOT (MPB – 3210 Del Webb Avenue NE, Salem Oregon. (Unless otherwise noted)

1. [Reserved]

2.3 Seasonal Restrictions and Site Access

Contractor shall work with the Property Owner to determine and establish additional Work requirements and controls that are a result of the fire restrictions in place at the time of construction. Contractor shall comply with all fire restrictions. The Property Owner for this project is:

ODOT District 11
2557 Altamont Drive
Klamath Fall, OR 97603
541-947-2203

During fire season (typically late April through October) in forest areas the following minimum fire protection conditions must be followed.

- i) Each truck must have
 - i. 1 round pointed shovel at least 8 inches wide, with a handle at least 26 inches long
 - ii. 1 axe or Pulaski with 26 inch handle or longer
 - iii. 1 fire extinguisher rated not less than 2 ½ pound ABC (OR-OSHA requires a 5 lb extinguisher for all commercial work)
 - iv. Adequate muffler and exhaust system to prevent sparks
- ii) No Smoking is allowed while working or traveling in the operation area
- iii) Full commercial Fire Equipment Requirements can be obtained on the ODF website.

Contractor shall comply with all local, state, federal, and property owner fire regulations.

2.3.1 Site Access, Work Conditions and Special Usage

The following conditions apply to site access, work, and usage.

1. Four wheel drive vehicles may be required to access the site.

2.4 **Culturally Sensitive Sites**

If the Contractor finds a previously undiscovered sensitive cultural find, immediately cease all activities at that site and notify the Site Project Manager. If the Contractor inadvertently disturbs unknown sensitive cultural finds, but immediately ceases all activities and follows the procedures listed in 00290.50 (of the 2008 ODOT Standard Specifications for Construction), the Agency (as provided in 00290.51(b) of the 2008 ODOT Standard Specification for Construction), to the extent permitted by Article XI, Section 7 of the Oregon Constitution and the Oregon Tort Claims Act, will indemnify, within the limits of the Tort Claims Act, the Contractor for costs associated with monitoring, recovery, site restoration or other required archaeological work, provided neither the Agency nor the State shall be required to indemnify the Contractor for such costs resulting from, arising out of or relating to the willful misconduct, negligence or other wrongful acts attributable to the Contractor or other persons on the Project site. Delays to work due to discovery of new cultural sensitive finds will be considered for exclusion from Contract time.

The 2008 ODOT Standard Specifications for Construction can be viewed at:

http://www.oregon.gov/ODOT/HWY/SPECS/pages/standard_specifications.aspx

2.5 **Vandalism**

The contractor shall provide protection of the Work from vandalism until the contracted Work is completed. If reasonable protection has been provided the Contractor's responsibility for

damage resulting from vandalism will be limited to \$2,000 per occurrence. Requests for reimbursement of amounts in excess of \$2,000 shall be in writing and directed to the PPM. Upon receipt, the PPM will investigate, evaluate the amount of damages and their cause, and determine whether, and how much, the Contractor will be recompensed.

2.6 Document Definitions

Plans	FCD (Rev #06) dated [03/31/14] 04/22/2014 . The project plans provide the detail of what work is needed at the site contract.
Statement of Work (SOW)	The Statement of Work (SOW) is written specifically for this project and identifies the scope of work to be completed.
Specification Manual	The Specification Manual is to be used as a reference document to aid in clarification of the Statement of Work and Plans and is intended to be used in combination of the plans. The Specification Manual includes sections and details that may not be applicable to this project.
Wireless Requirements	Microwave and antenna install standards are included in the Wireless requirements documents and take precedence over the Plans and the SOW. Please follow these guidelines very closely.
Shelter Plans	When applicable shelter plans are included; these are for reference. When the contract includes installation of a building the Owner (State of Oregon) will provide the building. Refer to the Statement of Work to determine the location of the building for transfer to the contractor. <u>The building plans are generated at the manufacture, by the manufacture. These plans are specific to the building however, not specific to the site and the site conditions. Refer to the SOW, the CDs and the Specification Manual for site specific conditions.</u>
Tower Plans	When applicable tower plans are included; these are for reference. When the contract includes installation of a tower the Owner (State of Oregon) will provide the tower and the tower assembly drawings. Refer to the Statement of Work to determine the location of the tower for transfer to the contractor.
Climbing Certification	All work to be performed 6-ft or more above the tower foundation will require a valid Climbing Certification. The certificates are a requirement of the State and must be submitted as a submittal with proper approvals by the State. Even if the tower work is access by means other than climbing are the, the Climbing Certification is still required.
Order of precedent	In the event that there is conflicting information among the SOW, Plans, or Specifications, the contractor shall notify the Owner. The order of precedent for these documents is Statement of work, Plans, and then specifications.

2.7 Construction Inspections

The contractor shall coordinate all required inspections at least 48 hours in advance with the inspector and CQ. Notifications are “work week” hours and exclude weekends and State holidays. In the event that an inspection must be canceled this notice shall be sent no less than 24 hours in advance to the inspector and CQ. **If cancelations are not made 24 hours in advance or the inspection results are found to be failing the contractor may be subject to the cost incurred by the Owner for the canceled service or the re-inspection of work that failed inspection.**

Contractor shall coordinate all inspections required by the Owner and the Jurisdiction. The following inspection services are provided by the Owner as needed (these are in addition to Jurisdiction inspections):

1. Special Inspection (SI) for Soils Density foundation (Over 2500 PSI design strength) sub grade, vehicle and crane area fills materials, and compound sub-grade.
2. Special Inspection (SI) for Concrete reinforcement (Over 2500 PSI design strength). Special Inspection and Owner
3. Special Inspection (SI) for Concrete placement (Over 2500 PSI design strength) Special Inspection and Owner. Note the Special Inspector will collect up to eight (8) compression cylinders, five (5) of which the Owner defines break schedule and the remaining are for the contractor to choose dates if needed.
4. Grounding Inspection, the Owner will inspect all grounding. No grounding hidden or below grade grounding is to be covered until it has been inspected.
5. Gas line pressure test, the Owner will inspect the gas line pressure test, the contractor shall provide the materials and labor for the test.
6. HVAC and Generator Commissioning, the Owner will witness commissioning provided by the contractor.
7. Tower inspections, the Owner's tower crew will inspect the tower work performed by the contractor. Note requires one calendar week notice for scheduling. This inspection also requires that the Contractor have a tower crew on site to resolve any issues found.

SECTION 3 – CIVIL LAND IMPROVEMENTS

3.1. GENERAL REQUIREMENTS

- 3.1.1. Contractor shall not burn debris and slashes on site. Contractor shall not leave on site any debris and slash material removed during construction. Contractor shall dispose of removed material at an approved and suitable location.
- 3.1.2. Contractor shall ensure site compound is free of vegetation upon site completion.
- 3.1.3. Road improvements may be necessary for construction activities. Any road improvements for or as a result of construction activities are the responsibility of the Contractor and the Contractor shall, at no cost to Owner, provide all materials, equipment, and labor to perform the improvements. Contractor shall obtain pre-approval from the SPM and the property owner for any and all proposed road improvements.
- 3.1.4. Inspections required for this section are soils density. Soils density is performed by Owner's Special Inspector and CQ. The Contractor shall notify the inspector and CQ 48 hours in advance. All fill material is required to be compacted in accordance with the plans. Only structural fill (foundation sub grade, vehicle and crane areas) required special inspection.
- 3.1.5. Contractor shall coordinate with the Owner's special inspector for all concrete, soils density, proctor, and steel inspections. Proctor samples shall be collected for all proposed fill material (native and imported).
- 3.1.6. Contractor shall coordinate with the CQ and SPM 48 hours in advance for all inspections. The minimum required inspections include concrete, steel, soils density,

grounding, erosion control, and periodic inspections. All required inspections are defined in the Plans and SOW.

3.1.7. Contractor shall inspect, and document with photos, all installed equipment and structures for damages and quality immediately upon final construction/installation or assembly and include all such photos in the Contractors daily construction progress report.

3.1.8. Trench backfill and fill areas below foundations and structural areas require the fill to be tested in 6" lifts. Contractor shall coordinate with the Owner's inspector for these tests. If test are not performed the Contractor shall excavate and refill the area with the tester on site at the Contractor's expense.

3.2. SITE-SPECIFIC WORK

3.2.1. [Reserved]

SECTION 4 – FOUNDATIONS AND EQUIPMENT SUPPORT

4.1 GENERAL REQUIREMENTS

4.1.1 [Reserved]

4.2 SITE-SPECIFIC WORK

4.2.1 [Reserved]

SECTION 5 – TOWER, STEEL PLATFORMS, AND STEEL INSTALLATION

5.1. GENERAL REQUIREMENTS

5.1.1. All exterior hardware must be galvanized or stainless steel per Spec. Manual requirements.

5.1.2. All Contractor supplied steel parts must be hot dipped galvanized.

5.1.3. All required field modifications to steel must be properly treated with cold galvanizing compound.

5.1.4. All exterior zip ties must be stainless steel. Protruding ends of all interior nylon zip ties must be flush cut. All interior zip ties must be black UV resistant nylon.

5.1.5. Contractor shall provide a new lock on the anti-climb devise; the lock must be a master lock 175LH or equivalent. The lock combination to be used will be provided by the CQ during construction.

5.1.6. All exposed unistrut and all-thread ends must be covered with appropriately sized rubber caps.

5.1.7. Contractor shall notify the CQ 48 hours in advance of beginning construction of the tower and 24 hours in advance of completing construction of the tower to full height.

5.1.8. All installations on the tower require an inspection by the Owner. Contractor shall request this inspection through the SPM and CQ at least one week in advance of desired inspection date.

5.1.9. Contractor shall have tower climbers on site during the Owner's tower inspection. The tower climbers shall be equipped with the necessary equipment to address deficiencies found during inspection.

5.2. SITE-SPECIFIC WORK

The contractor shall isolate the ice bridge from the tower by installing isolators at the tower end of the bridge. SECTION 6 – SHELTER AND SHELTER IMPROVEMENTS

6.1. GENERAL REQUIREMENTS

6.1.1.[Reserved]

6.2. SITE-SPECIFIC WORK

6.2.1. Contractor shall provide and construct a new single entry port on the shelter wall. Valmont part #B574 or equivalent, as shown in the plans and per the manufacturer's recommendations.

6.2.2. Contractor shall ensure that the new entry port is adequately sealed from weather.

6.2.3. Contractor shall provide and install a new overhead cable tray per the Plans and per the manufacturer's recommendations.

SECTION 7 – FENCES, GATES, AND SIGNAGE

7.1 GENERAL REQUIREMENTS

7.1.1 [Reserved]

7.2 SITE-SPECIFIC WORK

7.2.1 [Reserved]

SECTION 8 – ELECTRICAL SYSTEMS

8.1. GENERAL REQUIREMENTS

8.1.1 [Reserved]

8.2. SITE-SPECIFIC WORK

8.2.1. [Reserved]

SECTION 9 – GROUNDING

9.1 GENERAL REQUIREMENTS

9.1.1 Contractor shall install all new grounding and grounding upgrades required by the Project Plans and Statement of Work.

9.1.2 Contractor shall perform all grounding work in accordance with the Plans, the Statement of Work, and in accordance with current revision of the Harris Corporation Installation Manual AE/LZT 123 4618/1 "Site Grounding and Lightning Protection Guidelines" (Harris Grounding) in addition to all applicable local, state, and national codes.

9.1.3 Contractor shall provide three point fall of potential test of the installed ground ring upon site completion. The testing procedure must be in conformance with Harris guidelines. This test requires an Owner's witness; therefore the contractor must schedule the test one (1) week in advance with the CQ and SPM. Contractor is not responsible for the resulting measured resistance (ohms) of the site ground system that has been installed according to the Plans and Harris Grounding Guidelines.

- 9.1.4 All below-grade grounding constructed as part of this contract requires inspection before back fill. Contractor shall schedule the grounding inspection, coordinating that schedule with the CQ at least 48 hours in advance.
- 9.1.5 In the event that there is a conflict between the Plans or Statement of Work and the Harris Grounding Guidelines, the Contractor shall request clarification through the SPM and CQ.
- 9.1.6 New buildings, tower, and ice bridge installs and grounding upgrades require new ground bar installations as shown in the Plans. Ground bar locations are at the tower (TGB) and interior (MGB) and exterior (EGB) of the entry port.
- 9.1.7 The Plans may not give a full representation of all required grounding bonds. Contractor shall bond all exterior metal components and structures per Harris Grounding Guidelines.

9.2 SITE-SPECIFIC WORK

- 9.2.1 Contractor shall provide and install new tower ground ring per the Plans and this Statement of Work.
- 9.2.2 Contractor shall replace damaged or missing grounding components around shelter and tower.
- 9.2.3 Contractor shall provide and install new replacement exterior ground buss bars at tower and shelter. Valmont "B2988" or equivalent 24" ground bar.
- 9.2.4 **Contractor shall bond the bridge to the equipment shelter exterior ground bus bar. As shown in Figure 4-44 of the Harris Grounding Guidelines.**
- 9.2.5 Contractor shall re-attach and extend existing ground kit leads to new ground buss bars as needed.
- 9.2.6 Contractor shall tie new ground buss bars into ground ring.
- 9.2.7 Contractor shall provide and construct a new interior shelter halo ground for the equipment room and generator room.

SECTION 10 – LOW VOLTAGE/ALARMS/TELCO

10.1 GENERAL REQUIREMENTS

10.1.1. [Reserved]

10.2 SITE-SPECIFIC WORK

10.2.1. [Reserved]

SECTION 11 – EQUIPMENT SET AND TRANSPORTATION

11.1 GENERAL REQUIREMENTS

11.1.1. [Reserved]

11.2 SITE-SPECIFIC WORK

11.2.1. [Reserved]

SECTION 12 – FIRE PROTECTION AND HVAC

12.1 GENERAL REQUIREMENTS

12.1.1. [Reserved]

12.2. SITE-SPECIFIC WORK

12.2.1. [Reserved]

SECTION 13 – COMMUNICATION EQUIPMENT INSTALLATION AND TESTING

13.1. GENERAL REQUIREMENTS

13.1.1. [Reserved]

13.2. STATEMENT OF WORK

13.2.1. [Reserved]

SECTION 14 – CUTOVERS, COORDINATION, DECOMMISSIONING, AND SITE DEMOLITION

14.1. GENERAL REQUIREMENTS

14.1.1. [Reserved]

14.2. STATEMENT OF WORK

14.2.1. [Reserved]

SECTION 15 – EXISTING CONDITIONS AND DOCUMENTATION - THIS SECTION APPLIES TO THE PRE-BID STAGE OF THE PROCUREMENT ONLY

If designated below as Applicable, the related documents are available for Bidders to review. Please contact Agency Contract Representative to arrange a date and time.

A. Construction Pre-Construction Memo:

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

B. Environmental Reference Documents:

1. Environmental Site Assessment

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

2. NEPA Report

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

3. FAA Approval

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

C. Engineering Study Reference Documents:

1. Tower Structural Analysis (including the Foundation Design)

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

2. Shelter Structural Analysis

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

3. Tower Mapping

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

4. Soil Resistivity Report

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

5. Geotechnical Evaluation

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

6. Survey

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

D. Leasing Reference Documents:

1. Fully Executed Lease

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

E. Utility Reference Documents:

1. Easement Access

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

2. Utility Coordination Report

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

F. Permitting Reference Documents

1. Zoning Approval

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

2. Land Use Approval

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments:

3. Building Permit Application

Not Applicable

Applicable

Attached to bid package

To be provided before start of work

Comments: