

**SECTION III  
GENERAL SPECIFICATIONS FOR CONSTRUCTION  
BID NUMBER 171005**

**1. GENERAL**

All work shall be done in compliance with District job orders or other instructions furnished to the Contractor by the District Representative. It is understood that the electric circuits of the District are to continue in normal operation wherever possible during this work and the Contractor is to provide and use all protection equipment necessary for protection of his employees and to guard against interfering with the normal operation of said circuits. Contractor agrees to secure from the District information as to the nature of the circuits involved in all cases before work is commenced. Prior to commencing work on or near energized circuits, the Contractor will obtain clearance from the District's dispatcher and comply with any instructions issued to him.

**2. LOCATION OF WORK**

The location of the work is in the vicinity of Elwha River road where it crosses the Elwha River, approximately 5 miles west of Port Angeles. See attached vicinity map for more details.

The structures are located in existing right of way and easements with the existing 69 kV lines generally de-energized and 12.5 kV distribution lines generally energized.

**3. SCOPE OF WORK**

The project will consist of the following:

- Remove (5) 2-pole 69 kV wood H structure transmission poles, all of which have 3-phase distribution underbuild.
- Remove (1) 3-phase wood distribution pole.
- Remove associated primary, secondary services, transformers and guys.
- Install (4) 2-pole 115kV transmission fiberglass H-structures, all will have 3-phase distribution underbuild and PUD owned fiber optic. Each H-structure requires 16 downguys.
- Install associated primary taps, secondary services, transformers and downguys.
- Remove 2,800 feet of existing 1/0 ACSR transmission and 3-phase 556 AAC distribution conductor.
- Install 2,800 feet of new transmission and 3-phase distribution 3M ACCR 270-T35 Transmission conductor.
- Install 2,800 feet of new 48 str fiber optic cable.

- Transfer and resag adjacent spans of existing 1/0 ACSR transmission and 3-phase 556 AAC distribution conductor.

#### **4. TIME AND MANNER OF WORK**

The Contractor agrees to commence the construction of the Project within ten (10) days after written notice by the District to proceed. The contractor shall provide a project Manager or Line Superintendent experienced in high voltage transmission and distribution line construction having the resources to complete the District's contract, and having the authority to sign change orders and other project related contractual documents. **A resume for the proposed Project Manager or Line Superintendent shall be submitted with the bid and approved by the District. A preliminary Project Plan and Schedule shall be submitted with the bid and a final Project Plan and Schedule shall be provided after the contract is awarded and before the beginning of any work.** If the schedule moves, the Contractor shall update their Schedule and notify the District of any changes immediately.

The Contractor will not be required to dig holes, set poles, or install anchors if there is more than six inches of frost in the ground; nor to perform any construction on such days when, in the judgment of the District, snow, rain, or wind or the results of the snow, rain, or frost make it impracticable to perform any operations of construction. To the extent of the time lost due to the conditions described herein and approved in writing by the District the time of completion set out above will be extended. The time for completion shall be extended for a period of any reasonable delay (other than a delay resulting from the failure of the Contractor to secure sufficient labor) which is due exclusively to causes beyond the control and without the fault of the Contractor, including acts of God, fires, floods, direction of the District to cease construction as herein provided, and acts or omissions of the District with respect to matters for which the District is solely responsible. Provided, however, that no such extension of time for completion shall be granted the Contractor unless within ten days after the happening of any event relied upon by the Contractor for such an extension of time, the Contractor shall have made a request therefor in writing to the District.

The time for completion shall be automatically extended for any delays in the delivery of District-supplied materials. However, this is the only compensation the Contractor shall be allowed for District-caused delays.

#### **5. SUPERVISION AND INSPECTION**

The Contractor shall cause the construction work on the project to receive constant supervision by a competent foreman who shall be present at all times during working hours where construction is being carried on. The Contractor shall also employ, in connection with the construction of the project, capable, experienced, skilled, and reliable workers as may be required for the various classes of work to be performed. Directions and instructions given to the foreman by the District shall be binding upon the Contractor.

The District reserves the right to require the removal from the project of any employee of the Contractor if, in the judgment of the District, such removal shall be necessary in order to protect the interest of the District. The District shall have the right to require the

contractor to increase the number of his employees and to increase or change the amount or kind of tools and equipment if at any time the progress of the work shall be unsatisfactory to the District; but the failure of the District to give any such directions shall not relieve the Contractor of his obligations to complete the work within the time and in the manner specified in these documents.

The manner of performance of the work and all equipment used therein shall be subject to the inspection, tests, and approval of the District. The District shall have the right to inspect all payrolls and other data and records of the Contractor relevant to the work. The Contractor will provide all reasonable facilities necessary for such inspection and tests. The Contractor shall have an authorized agent accompany the inspector when final inspection is made and, if requested by the District, when any other inspection is made.

In the event that the District shall determine that the construction contains or may contain numerous defects, it shall be the right of the District to have an inspection made by an engineer approved by the District for the purpose of determining the exact nature, extent, and locations of such defects.

## **6. HOURS OF WORK**

Normal working hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday, unless otherwise authorized by the District. The lunch period shall be observed from 12:00 Noon to 12:30 p.m. unless unusual circumstances prevail.

Upon request, the District will generally authorize the Contractor's crew to work ten hours per day four days per week. Hours of work will be from 7:00 a.m. until 5:30 p.m., Monday through Thursday or Tuesday through Friday. Under such an arrangement, work outside of normal working hours may be restricted to activities that do not require the immediate presence or availability of District Inspector or staff.

The District or the Contractor may terminate this four-day workweek schedule and revert to a five-day workweek at any time with one week prior notice to the other.

The Contractor shall comply with all provisions of WAC 296-127-022, "Overtime According to Chapter 49.28 RCW."

## **7. HOLIDAYS**

The Contractor shall observe holidays that correspond with District holidays on the same day as observed by the District. The Contractor shall conform to normal working hours and a five day work week for any week the District observes a holiday.

## **8. COORDINATION WITH DISTRICT**

It shall be the Contractor's responsibility to maintain communication with the District to coordinate construction of the utility system. The Contractor will be required to schedule the work accordingly and shall keep the District Representative informed of such schedules.

**9. COORDINATION WITH OTHER UTILITY COMPANIES**

Should another utility wish to jointly occupy a trench, bore, or plow contracted for by the District, the Contractor shall negotiate any additional costs associated with said joint use with the other utility; and those costs shall be borne by that utility. The manner of installation and the coordination of the other utility's installation shall be between the Contractor and other utility. Such installation shall conform to District Specifications for joint use of a trench or plow. The District's Project Manager will inform the other utilities of the scope of the Project and provide contact information for the successful bidder on that Project.

**10. CUSTOMER RELATIONS**

The Contractor agrees that his personnel and equipment shall at all times present a neat appearance. All work shall be done and all contacts with customers handled with due regard for the District's public relations. The Contractor agrees that complaints of any nature received from property owners or public authorities shall receive immediate attention. All complaints shall be reported within 24 hours to the District Representative.

In those areas where poles are not adjacent to roadways, the Contractor shall provide for his access to the poles as necessary. This includes contacting owners of any locked gates. The Contractor shall use appropriate care to avoid undue damage to property or terrain and prevent erosion problems. Any damage done to property or terrain shall be restored by the Contractor to the owner's satisfaction. The Contractor shall notify property owners of work to be done on their property when owner is available at the site.

**11. WORK ON ENERGIZED LINES AND JOB SPECIFIC INFORMATION**

- The structures are located in existing right of way and easements with the existing 69 kV transmission lines generally de-energized and 12.5 kV distribution lines generally energized.
- Nominal transmission voltage of 69 kV = 313 kV maximum switching-transient voltage
- Nominal distribution voltage of 12.5 kV = 49 kV maximum switching-transient voltage
- Transmission and distribution one-line diagrams are included for reference.
- All poles with primary distribution are installed with a #6 copper ground wire. Verify integrity of each ground as necessary.
- Pole test, treat and fumigate data is available upon request.
- Anchors specified are 8" and 12" single helix. Each anchor is required to hold 14,000 lbs. The contractor must demonstrate that value with a torque indicator or other means supplied by the contractor. If it is determined that a screw anchor will not provide the required holding strength then a dig in anchor may be installed at the unit rate specified in the bid.
- The Contractor shall provide cellular telephones or radios modified to the District frequency for crew communication with the District.

- Structure #1 is located in a field with damp soils. Traffic in and out of this site is to be limited to as little as possible to avoid damage to the driveway and field. The driveway leading to this structure has an old brittle culvert that needs protection before heavy trucks go over it. The contractor is required to supply and install a steel plate and bedding over the culvert before crossing it.
- The wood structure between structure #1 and #2 is in poor condition and likely not safely climbable. There is no road access to get near this structure.
- A 100 ton press is required to press the ACCR 270-T35 deadends.
- See conductor installation instructions, specific minimum radius requirements and roller array stringing blocks are required to install the ACCR 270-T35 conductor.
- Conductor tension stringing charts are provided in the supplied documents.
- Pole butts are 3' in diameter. Poles will need to be assembled by the contractor and X-brace pole holes are to be drilled on site by the contractor.
- Representatives from 3M and RS Poles intend to be onsite during the beginning of the job to go over specific installation instructions.
- There are single-phase customers fed off structures #1, #2 and #3 that are to remain in power, there is a 3 phase customer fed off structure #3 that can have minimal periodic outages with coordination between the District and the customer. The distribution open point between Laird Substation and Silverado Substation will initially be located at structure #2. The contractor will be allowed to move the open point with coordination with the District and customers. The two distribution circuits do not phase.

## **12. ELECTRICAL SERVICE OUTAGES**

The Contractor shall plan his work to keep the distribution lines energized at all times. However, interruption of individual service may be necessary when transferring existing conductors to the new line and when converting existing overhead service to underground. The Contractor shall comply with the following guidelines when interrupting service:

### **a. Residential Customers**

The Contractor shall notify customer 24 hours in advance of interrupting service.

### **b. Business Customers**

Business customers shall remain in service during business hours. The Contractor may schedule with the business customer for an interruption convenient for the customer.

All switching will be at the direction of the District's dispatcher.

**13. SURVEY MONUMENTS**

Survey monuments identified on the construction plans shall not be disturbed, except in those cases where construction activities require their temporary removal. Positions of survey monuments that require temporary removal shall be preserved and subsequently restored in their original locations by a registered professional land surveyor as required by RCW 58.09 and WAC 332-120. Monument Removal Permits, as required by WAC 332-120, shall be secured prior to the removal of any survey monument. All activities associated with monument preservation, removal and subsequent restoration shall be at the contractor's expense.

The District Project Engineer shall be notified when any identified land survey monument is inadvertently disturbed or removed during the course of construction. Such monuments shall be either restored in their original locations or their original positions shall be preserved with suitable reference monuments. This work shall be performed by a registered professional land surveyor as required by RCW 58.09 at the contractor's expense.

**14. LOCATES**

The Contractor shall be responsible for obtaining all underground locates.

**15. LOCATIONS OF STRUCTURES**

Structures, guys, etc. shall be placed in locations determined by the Engineer and staked by the Engineer, as shown on the Drawings and structure lists. Structures, guys, etc. shall not be erected in any other location without prior approval of the Engineer.

**16. MATERIALS**

All materials necessary for the work to be constructed shall be furnished by the District or arranged for by the District Representative. All materials and poles issued to the Contractor become his responsibility. The Contractor will be required to provide a secure area for storage of material issued by the District's Warehouseman.

All District-supplied material, including poles, shall be obtained by the Contractor at the District's Central Warehouse Facility, 100 Hooker Road, Sequim, Washington on Monday through Friday between 8:30 a.m. and 3:30 p.m., except holidays.

The Contractor shall give a minimum of 24 hours advance notice to the District Representative before materials are issued.

The Contractor or his authorized representative will give to the District's Warehouseman a signed receipt in such form as the District shall provide for all materials furnished to the Contractor. Upon completion of the project, the Contractor shall return to the District all materials furnished by the District in excess of those required for construction.

The Contractor shall return to the District's Central Warehouse Facility all materials removed from the existing lines and account for those units in the manner directed by the District Representative. The Contractor shall return to the District's Port Angeles Warehouse all removed poles unless otherwise instructed by the District Representative.

All poles to be returned to the District's Port Angeles Operations Center shall be removed in whole and not cut through their entire length.

The Contractor will be responsible for all excess material used on the project not accounted for, together with any used material that is not returned to the District. Any materials that are not returned to the District by the Contractor will be billed to the Contractor at District book value plus warehousing.

All materials issued by the District to the Contractor shall be in working condition when received by the Contractor. Any material not in good working condition upon completion of the project shall be replaced at the Contractor's expense.

Contractor must keep all unused issued material separate from wreck-out material for each job. Returned materials must be separated by like kind, and hardware must not be placed on top of or in contact with insulators. Contractor will not allow any garbage (e.g., lunch sacks, bottles, etc.) to be included with returned materials.

**17. CONTRACTOR SAFETY PLAN**

The Contractor shall be familiar with and shall comply with the District's Contractor Safety Plan, Exhibit B.

**18. LIQUIDATED DAMAGES**

Construction completion of this project on or before September 1, 2017 is of upmost importance to the District. Should the Contractor neglect, refuse, or fail to complete construction within the time herein proposed; beginning September 2, 2017 all direct and overhead costs incurred by the District attributed to the delay will be charged to the contractor as liquidated damages. Estimated costs may include but are not be limited to:

\$700.00 per day for the District's project Inspector and project Engineer (includes associated vehicle costs).

The District shall have the right to deduct from and retain out of such monies which may then be due, or which may become due and payable to the Contractor, if the amount due and to become due from the District to the Contractor is insufficient to pay in full any such liquidated damages, the Contractor shall pay to the District the amount necessary to effect such payment in full. Provided, however, that the District shall promptly notify the Contractor in writing of the manner in which the amount retained, deducted, or claimed as liquidated damages was computed.

**19. CHANGES IN CONTRACT DOCUMENTS**

The District may, from time to time during the progress of the project, make such changes in, additions to, or subtractions from, the Plans, Specifications, Drawings, and/or Exhibits as conditions may warrant. Provided, however, that if the cost to the Contractor shall be materially increased by any such change or addition, the District shall pay the Contractor for the reasonable cost thereof in accordance with a contract amendment or change order agreement signed by the District and the Contractor. No claim for additional compensation for any such change or addition will be considered unless the Contractor shall have made a written request therefor to the District prior to

the commencement of work in connection with such change or addition. If the cost to the Contractor shall be materially decreased by any such change or subtractions, the District shall deduct an appropriate amount in accordance with a contract amendment or change order agreement signed by the District and the Contractor.

**20. CONSTRUCTION NOT IN SPECIFICATIONS OR PLANS**

The Contractor also agrees that when it is necessary to construct units not shown in the Specifications or Plans, it will construct such units for a price proposed in writing by the Contractor to the District and approved by the District prior to such work being done.

No payment shall be made to the Contractor for correcting errors or omissions on the part of the Contractor that result in construction not in accordance with the Plans and Specifications.

**21. DEFECTIVE WORKMANSHIP**

The acceptance of any workmanship by the District shall not preclude the subsequent rejection thereof if such workmanship shall be found to be defective after installation; and any such workmanship found defective before final acceptance of the work or within one year after completion shall be remedied or replaced, as the case may be, by and at the expense of the Contractor. In the event of failure by the Contractor so to do, the District may remedy such defective workmanship and in such event the Contractor shall pay to the District the cost and expense thereof. The Contractor shall not be entitled to any payment hereunder so long as any defective workmanship, in respect of the project, of which the Contractor shall have had notice, shall not have been remedied or replaced, as the case may be.

**22. PERMITS AND PROTECTION**

The District will obtain a permit from Clallam County when required. The Contractor shall comply with all conditions of the permits. The Contractor shall maintain and provide all legal and necessary guards, railings, lights, warning signs, etc. during the execution of the work; the proper protection and convenience of all workers and the public; and shall be responsible for keeping the works free from trespassers. The Contractor shall comply with, make contact and perform submittals as set forth in the WSDOT General and Special Provisions for Permits and Franchises attached hereto as Exhibit "D".

**23. COMPLIANCE WITH STATUTES AND REGULATIONS**

The Contractor shall comply with all applicable statutes, ordinances, rules, and regulations pertaining to the work. Crew and equipment shall be and shall operate within the rules and regulations set forth by the Washington Industrial Safety and Health Act of 1973 (WISHA) and the Williams-Steiger Occupational Safety and Health Act of 1970 (OSHA), including 29 CFR 1910.269.

**24. DISTRICT LINE WORK INSPECTOR HOURS AND RATES**

The District requires that specific types of work done by the contractor only be done while the District inspector is available.



Typical work that requires inspector availability is as follows but may not be limited to:

- Any work on energized lines.
- Any work requiring a customer outage.
- Any work requiring switching, including setting and returning circuits to and from non-reclose.
- Night work as required by WSDOT.
- Inspection of trench or pole hole prior to backfilling.
- Transmission or primary distribution conductor sagging.

Standard District inspector availability is during business hours from 8 am to 4:30 pm, Monday thru Friday, excluding holidays.

It is expected that inspector availability will need to be increased as required by the contractor to perform some work outside the standard inspector availability. Additional inspector time will be billed to the contractor at the overtime rate of \$116.53, with the inspector charges being subtracted from contract pay requests.