

BID DOCUMENT NO. 455-22

**CONDITIONS FOR
ELECTRICAL SYSTEM TREE TRIMMING**

DESCRIPTION OF THE WORK

1.1 The Contractor shall furnish two Tree Trimming crews. The Contractor shall supply all necessary tools, equipment and any other specialized materials as needed to perform Distribution and/or Transmission Tree Trimming work for the District located throughout District's service area located in Okanogan County, Washington. Contractor shall perform all Work in accordance with specifications attached hereto and made a part hereof, hereinafter referred to as the "Work." The District may authorize less than two (2) crews, but this shall not relieve the Contractor's obligation to furnish a normally composed Tree Trimming Crew(s). The Work shall be performed under the direction of a District representative.

OPTION TO RENEW

2.1 The District shall have the option, in its sole discretion, to renew this agreement for two additional one-year period (s). The option to renew shall be exercised in writing. Such an extension shall be upon all of the terms and conditions set forth herein and in compliance with all of the appropriate labor rates established by Washington State Prevailing Wage Rates or by any union agreement.

SUBCONTRACTORS & PREVAILING WAGE RATES

3.1 The contractor shall submit to the District in advance a list of any subcontractors they may want to use. Only after District approval may any subcontractor receive payment for Work under this agreement. No payment will be made to any subcontractor performing Work under this contract until the District receives the original Statement of Intent to Pay Prevailing Wages approved by the Department of Labor and Industries.

COMMENCEMENT AND DELIVERY

4.1 The Contractor shall commence Work under this contract within twenty one (21) calendar days after the date of receipt of notice of award. This contract shall terminate on December 31, 2022 or before if the contract amount has been reached. This time shall include final clean-up of the premises or area where contractor is working. Contractor shall begin, perform and complete the Work in accordance with the schedule assigned by the District.

SITE CONDITIONS

5.1 The Contractor shall satisfy the District as to their knowledge concerning the nature and location of the Work, the general and local conditions, particularly those affecting transportation, disposal, handling and storage of materials, availability of labor and applicable wage rates, water and electric power, roads, climatic conditions and seasons, physical conditions at the actual work sites, equipment and facilities needed preliminary to and during work execution, and all other matters which can in any way affect the Work, or the cost thereof. Failure of the Contractor to acquaint himself with all available information regarding any applicable condition shall not relieve him of the responsibility for properly estimating both the difficulties and the costs of successfully performing the Work.

5.2 The Contractor shall be solely responsible for their employees' warehouse facilities and conditions such as job shacks, portable toilets, fresh water facilities and the like. It will be at the Contractor's expense and only with District approval that these items can be set on District property.

- **WORK PROCEDURE, AS SPECIFIED IN PART III, BID FORMS, SECTION 3, SCHEDULE**
- **AREA DESCRIPTION & SCOPE OF WORK BY AREA**

6.1 The Contractor shall trim trees and/or brush from all District equipment or electric conductors as directed by the District's Representative. This includes, but is not limited to, all electric conductors, transmission lines, primary lines, vaults, padmount transformers, switch cabinets, overhead switches and substations. All tree trimming shall be done so as to obtain maximum clearance within District specifications. Transmission and Distribution Specifications – Tree Trimming, are attached as Appendix 1.

6.2 Area Description: Okanogan PUD has 25 Tree Trimming areas within its service area. (see Appendix 2 part 6)

6.3 Scope of Work by Area: Contractor will follow all industry standard practices for safety and ANSI A300 (Part 1) -2001 Standard Practices (Pruning) and adhere to the District's specifications as defined in Appendix 1. Contractor will be provided map printouts showing PUD infrastructure and road access as well as specific instructions for each area, if necessary, by the District's representative. 2023 work schedules are variable depending on weather and access conditions. There will be certain specific jobs that fall outside of scheduled tree trimming work that are necessary to prevent hazardous conditions involving tree-conductor conflicts. These jobs will be assigned specifically as needed by the District's representative. Written Area Descriptions are attached as Appendix 2 to Section 6.

6.4 It is understood that the electric circuits of the District are to continue in normal operation during this "Work," and the Contractor is to provide and use all protective equipment necessary for protection of their employees and to guard against interfering with the normal operation of said circuit. The Contractor agrees to secure from the District information as to the nature of the circuits involved in all cases before work is commenced.

6.5 All vehicles used under this "Work," shall be equipped and marked to meet all rules and regulations of Federal, State, County and Local Highway Regulations, and all personnel shall be trained and qualified as may be required by the State of Washington Department of Labor and Industries Rules and Regulations.

6.5 (a). *No vehicles or equipment aged more than two (2) years (manufacture date must be 2020 or later) shall be used during this "Work". This is to include all chainsaws, chippers, Split Dump trucks and Lift trucks.*

6.6 All brush, chips and cut material shall be disposed of by hauling away and dumping in areas designed or appropriate for disposal. The work area must be left clear of any debris. Exceptions for on-site disposal may be made only with prior written approval from the District.

6.7 The Contractor shall be responsible for obtaining permission to trim and/or remove trees and vegetation. Written permission may be obtained for tree removal. The Contractor shall use permits furnished by the District for tree removal. The Contractor shall have the customer sign said permit and the crew foreman shall also sign said permit. If permission is not given for removal of vegetation of any type because of a customer complaint, the crew foreman shall notify the District before continuing. The District's Representative shall make contact with the customer and notify the Contractor how to proceed.

6.8 The Contractor shall at all times present a neat appearance. All work shall be done, all contacts with customers made, and all complaints 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 and any action taken by the Contractor in connection with such complaints shall be reported to the District for any payment or benefit of any kind to any person.

6.9 The Contractor shall locate its equipment away from the District's Headquarters, unless otherwise authorized in writing by the District.

6.10 The District may require that the Contractor provide, at their own expense, cellular Phones to each crew working under this agreement. Oftentimes emergencies arise and the District may need to contact the crews.

EMERGENCY, EXTRAORDINARY OR UNUSUAL CONDITIONS

7.1 There may be situations where the Contractor may be required to perform certain work that may not be specifically itemized within this agreement. Any Work performed shall be of the tree trimming nature and shall be safe to perform. In the event that the Contractor is required to do work not normally performed, the price shall be the same as in the bidding schedule. Any costs for wages, equipment rates, the District shall approve materials or other items asked for by the Contractor in writing before any of the Work is started.

RECORDS

8.1 It shall be the responsibility of the Contractor's Foreman to compile an itemized accurate account of Work performed. Payment shall be made to Contractor from billed invoices received based on man-hours worked and equipment used. (See Part III - Bid Forms, Section 3, Schedule. The Contractor shall invoice on a monthly basis.

8.2 The Contractor shall keep an up-to-date record of all payment and expenditures by the District. The Contractor shall notify the District as to the amount of funds remaining in the contract.

8.3 Failure to comply with any of the aforementioned conditions may constitute a breach of contract.

SAFETY PROVISIONS

9.1 The Contractor shall at all times exercise the necessary precautions for the safety of employees on the Work, and shall comply with all applicable provisions of Federal and State or other safety rules and laws, and construction codes, all in addition to compliance with provisions of like or similar nature that may be specified elsewhere herein.

9.2 The Contractor shall maintain all work areas free from dust and smoke which would cause a hazard or nuisance to the surrounding public and the District. No separate payment shall be made for dust control which the Contractor is required to provide.

9.3 The Contractor shall exercise the necessary precaution to prevent unauthorized fires either within or adjacent to the limits of the "Work" and he shall be responsible for all damage from fire due directly or indirectly to his own activities, or to those of his employees or of his subcontractors, or their employees. The Contractor shall conform to all Federal, State, County and Municipal governmental regulations pertaining to burning, fire prevention and control within or adjacent to the "Work."

APPENDIX 1

Public Utility District No. 1 of Okanogan County

TRANSMISSION AND DISTRIBUTION SPECIFICATIONS

Tree Trimming

- I. The transmission and distribution clearance specifications are designed to prevent tree-conductor conflict on the Okanogan PUD (District) system on a 3-year vegetation management cycle.
- II. Tree removal is a District priority. The priority for removal is: danger trees, fast growing trees under the conductors, fast growing trees beside the conductors, or moderately fast growing trees under the conductors.
- III. Trees with tree houses, swings, lower limbs that make them climbable, or cannot be trimmed to a reasonably attractive appearance should be removed.
- IV. Tree clearance is determined by the growth rate of the species. Slow growing trees grow an average of less than 1' per year. Moderately fast growing trees grow 1'-3' per year and fast growing trees average over 3' of growth per year. Irrigated trees may exceed these guidelines and should be classified individually or treated as fast growing trees.
- V. Under Conductors – Trees that are trimmed should have crowns reduced to a height 12' below the primary conductors.
- VI. Beside Conductors – Minimum clearances are specified for slow, moderate, and fast growing tree species. These range from 6' to 12' for distribution, and 10' to 15' for transmission with underbuild. Brush should be removed beyond the minimum side clearances. All danger trees should be removed from both sides of the conductors.
- VII. Overhanging Branches – Branches should be removed for a height of 15' over distribution and all overhang should be removed over transmission conductors.
- VIII. Danger Trees – All trees that are dead, dying, diseased, or structurally defective, and their direction of failure is reasonably expected to be toward the conductors, should be removed or pruned to eliminate risk.
- IX. Exceptions and Liability – Side clearance on sound, healthy conifer stems beside the conductors may be reduced to 4', but clearances for overhang and below conductors must be achieved as per the specification. Any and all other exceptions must be approved by a District representative. Contractors may be held responsible for re-

trimming, cost of restoration of service, or damages for trees not trimmed to specifications and not approved by the District.

- X. Secondary and Neutral Clearances – Trees on open wire and all other secondary wire should be trimmed or removed to provide a minimum of 3' of clearance. Secondary will only be trimmed with approval of the District Representative. Secondary beyond the last District pole should only be trimmed upon specific direction by a District representative.
- XI. Other Facilities – Large branches or trees laying on or applying pressure to guywires, poles, or other District facilities should be trimmed or removed. Vines should be removed. No trimming should be done for television cable, telephone cable or private electrical facilities.
- XII. Stumps – All stumps shall be cut as close to the ground as practical. The District does not provide stump grinding as part of tree removal service.

TECHNICAL SPECIFICATIONS

A. Tree Trimming

Tree trimming shall be governed by principles of modern arboriculture. Refer to ANSI A300 (1995), International Society of Arboriculture Tree Pruning Standards (1995), and Pruning Trees near Electric Utility Lines (Shigo-1990). Correct tree trimming should promote tree growth away from electrical conductors, provide longer periods of clearance, and reduce future work. Correct tree trimming techniques include collar cuts, directional pruning, and drop-crotch trimming.

B. Collar Cuts

The most important technique in trimming trees is the collar cut. The collar cut is the cutting of a limb just beyond the point of intersection with the trunk of the tree or another limb at the branch collar. When properly made, it will allow the tree's protective zone to aid in closing the wound. Tree trimming shall be performed using the collar cut method. Topping, flush cuts, or branch tipping shall not be practiced. Lateral limbs that are left will be at least one-third the size of the limb being cut. Ripping or peeling of the cambium layer of a limb is not acceptable.

C. Directional Trimming

Directional trimming is a technique that promotes future tree growth to a desired direction. When trimming trees under facilities, the limbs growing upward should be cut back to limbs growing away from the conductors. This is called "trimming to laterals". When trimming trees to the side of facilities, the limbs growing outward would be cut back to limbs growing vertical, parallel to, or in a downward direction. This technique will promote future tree growth away from facilities, thereby reducing future work. Rounding over or topping trees for aesthetics is not allowed.

D. Drop-Crotch Trimming

Drop-crotch trimming is a technique that removes a limb back to another limb or the tree's stem within the crown. The goal is to thin out unwanted growth. Minimal drop-crotch trimming should be practiced on deciduous trees that are subject to excessive re-sprouting or sun scald. When trimming conifers to the side of facilities, limbs should be cut back to the stem instead of tipping the ends of the branches.

E. Climbing Hooks

Climbing hooks injure thin barked trees and should only be used on removals, or where the tree cannot be reached by a lift or climbed safely without hooks.

F. Tree Removal

Tree removal is an important element of the District's vegetation management program. Tree removal eliminates hazardous conditions, improves access to facilities, and reduces future work. Tree removals will be pursued wherever feasible.

Tree Removal Candidates:

1. Climbable trees in close proximity to transmission or primary conductors at or near homes, schools, parks, businesses and any other location in which people normally or frequently visit.
2. Trees with tree houses in close proximity to transmission or primary conductors.
3. Fast growing trees that may interfere, with transmission or primary conductors before the next scheduled maintenance trimming (*cycle-busters*).
4. Naturally seeded trees which will eventually interfere with transmission or primary conductors.
5. Small trees which will eventually interfere with transmission or primary conductors.
6. Deciduous trees that require extensive drop-crotch trimming.
7. Dead, dying, diseased, deformed or unstable trees which have a high probability of falling and contacting transmission or primary conductors.

Tree Removal Conditions:

1. Generally, the time to remove a tree should be limited to twice the time it would take to trim the tree. Exceptions would be danger or cycle-buster trees.
2. Rule of Thumb - If greater than 50% of a trees (or branch) foliage must be removed to achieve clearance then the entire tree (or branch) should be removed.
3. Tree removals should be limited to fifteen feet either side of primary conductors and within transmission rights of way. Exceptions would be danger trees.
4. Danger trees should only be removed if there is a threat of the tree or limbs failing and contacting transmission or primary conductors.
5. Stumps shall be cut as close to the ground as practical.
6. Tree removal requires signed permission from the property owner. Right of way easements or permits may have already granted permission for tree removal, in which case notification to the property owner is required.

G. Brush Disposal

In residential or maintained areas, tree limbs resulting from crew activities should be chipped and removed from the site. Tree limbs should not be left overnight unless the crew has notified the property owner. Large tree limbs and logs greater than six inches in diameter should be offered to the property owner or otherwise disposed of at the direction of the District Representative. Work sites will be left in a safe and orderly condition.

The following will only be at the direction of the District Representative or with written permission of the property owner. In rural or unmaintained areas, tree limbs, brush and logs resulting from crew activities should be disposed of on the site. If brush is chipped, it should be blown on site in a manner that does not create chip piles or block water drainage. Any brush not chipped should be lopped and scattered in lengths not to exceed three feet. Brush that is lopped and scattered should be in contact with the ground, but no deeper than twelve inches. If the property owner requests the brush and logs to be piled, it should not be highly visible to the public, create access limitations to the right of way, or create fire hazards. Burning of brush is not allowed. Work sites will be left in a safe and orderly condition.

APPENDIX 2- Section 6

Area # and Boundary Descriptions

- Area 1:** Starting at Nick Cain Rd, North to Malott, City of Malott, N on B&O Rd, and B&O Rd North, NE on Old Highway 97 to M Bar J Trailer Court.
- Area 2:** M Bar J Trailer Court NE to Okanogan City Limits, West of Okanogan River, including Saddle View Dr. and all river crossing's, east of the River US Highway 97, including Colville Reservation to Okanogan at Hwy 20 Bridge.
- Area 3:** S Okanogan City limits, N to Wood Hill Rd & Okanogan Cemetery, North on Elmway to Shellrock Point W of River, North on US 97 to Omak City Limits, including Rodeo Trail, Cameron Lake Rd and all river crossing's.
- Area 4:** All of Omak City Limits, including Shellrock Point North to Ross Canyon Rd and Copple Rd, East on Engh Rd to Omak River Rd, South along River to Omak City Limits, including all of East Omak and river crossings. North on Omak-Riverside Eastside to Riverside on Colville Reservation, East of River.
- Area 5:** Conconully Highway from end of DNR school section NW to Conconully, including all taps (except Green Lake), Silver Hill, West Fork Rd to Peacock Meadows junction, Sinlahekin Rd on the Upper Lake to end of tap, North Fork Salmon Cr. N of town to end of line and Conconully city limits.
- Area 6:** Salmon Cr Rd from Okanogan City Limits North and West along main road to its junction with Conconully Highway, including Happy Hill, Poechman Rd, Green Lake Rd to Conconully Highway, all of Spring Coulee, Dry Coulee, Windy Hill and East Dry Coulee and all taps.
- Area 7:** Copple Rd North along Old Riverside Highway to Riverside, including Riverside Cutoff Rd, south along Conconully Highway to Okanogan City Limits, includes all areas from Conconully Hwy to west to Old Riverside Hwy to east, north of Omak city limits.
- Area 8:** Highway 20 Northwest to Loup Loup Canyon Rd, including Buzzard Lake Rd, south to Cook Mountain and Chiliwist Rd, including Olema Rd, and Northstar Rd and main Chiliwist valley to Old Highway 97.
- Area 9:** South from Malott on Old Highway 97; south on US 97 to Highway 17, including Cassimer Bar, West to Brewster and Old Highway 97, includes Indian Dan Canyon, Paradise Hill, Harmony Heights and all of Brewster Flats including Northstar Rd, Valley Rd and the Monse River Rd area.
- Area 10:** Town of Riverside from Riverside Cutoff, north on US 97 including Hubbard Rd and north of Riverside including Pharr Rd, Tunk Creek Rd and Keystone Road to Crawfish/Keystone Junction including all river crossing's.
- Area 11:** Tunk Creek Rd at the junction, North on Keystone Rd to Keystone Orchard/Ranch, up main Tunk Creek Rd to and including Crawfish Lake, east on Haden Creek Rd and north on Lyman Lake Rd to Aeneas Valley Road. Includes all of Tunk Valley.

- Area 12:** From Pine Creek Substation north to South Pine Creek, West on Fish Lake Rd to Stalder Rd, including US 97 north to Crumbacher Estates and Laveta Lane, south of Hwy 7/US 97 junction.
- Area 13:** Highway 7/US 97 junction north on Highway 7 to River Loop Rd north of Tonasket and junction with Hwy 7 North. Includes all taps and river crossing's.
- Area 14:** Janis Rd/South Janis Rd from Janis Bridge on US 97, Eberle Rd, north along US 97 to Tonasket, including Clarkson Mill, S. State Frontage Rd, City of Tonasket.
- Area 15:** From Highway 7 North & Loomis-Oroville Rd Junction west to Loomis, south through Sinlahekin valley to end of line, north through Sinlahekin Valley to Palmer Lake, including Chopaka Rd. east to Enloe Dam; north on Highway 7 to Oroville city limits, including Wannacut Lake, Elemeham Mtn. Rd, Blue Lake Rd. and all river crossing's.
- Area 16:** East of Okanogan River and US 97 from Ellisforde, up Swanson Mill Rd to include all of Mt. Hull area to Dry Gulch Rd; north on US 97 to Oroville city limits and all river crossing's.
- Area 17:** West of Tonasket on North Pine Creek main road, including Lemanasky Rd, North Lemanasky Rd, Horse Spring Coulee and North Pine Creek south to S. Pine Creek Rd
- Area 18:** Includes City of Oroville west to Enloe Dam on Loomis-Oroville Rd, north to Canadian border on US 97, east on Molson-Chesaw Rd to Longhorn Dr. and Orchard Vista, north on Eastlake Rd to end of line.
- Area 19:** City of Brewster from Unger Rd and Chinook Way west, encompassing Brewster City limits southwest to Indian Dan Canyon Rd/US 97 intersection, and south to Columbia River.
- Area 20:** US 97 from Indian Dan Canyon south on US 97 to Starr Rd and end of line, including all of City of Pateros and northwest on Highway 153 to Alta Lake Rd and including Watson Draw.
- Area 21:** Highway 153 from Alta Lake Rd north on Hwy 153 to US20/Hwy 153 junction south of Twisp, including towns of Methow and Carlton, Libby Creek, McFarland Creek, Benson Creek and all river crossing's.
- Area 22:** Includes Twisp-Carlton Rd west of Methow River north to Twisp, City of Twisp, west on Twisp River Rd to end of line, including Poor Man Creek Rd to end of line, north on US 20 to Rivers Bend Trailer/RV Park, east to Thurlow Rd, including Lower Beaver Creek and rural areas between. Some of this area overlaps with service territory of Okanogan Co-Op.
- Area 23:** US Highway 20 East from Tonasket to Hanging Rock Rd and taps south; includes all of Chewiliken Valley to end of JH Green Rd in Tunk Valley; all of Aeneas Valley on main Aeneas Valley Road, Cape Labelle, Frosty Creek to end of line, including all areas between US 20 and Tunk Valley.
- Area 24:** East from Tonasket through Antoine Valley, including Siwash Creek to Rhemke Rd, South Oberg Rd, and north to Havillah Rd/Nealy Rd junction. Does not include Mt. Hull.

Area 25: From the Dry Gulch/Havillah Rd junction east on Nealy Rd to Chesaw, east and south to include all of Pontiac Ridge to end of line, north to Canada border on Bolster Rd, west on Mary Ann Creek to Molson and the Nine Mile area, encompassing all areas between to include town of Molson and rural roads and taps between.