



**Request for Proposals (RFP):** RPF Number 20-0630-0001  
**RFP Title:** San Ysidro Wash Project Poles and Anchors  
**Issue Date:** June 19, 2020  
**Bid Due Date:** July 3, 2020  
**Bid Opening Date:** TBD

**Important Note: Indicate Company Name and RFP Title on the front of the sealed bid envelope.**

Jemez Mountains Electric Cooperative, Inc. (JMEC) is seeking an RFP (Request for Proposal) for the design build tubular steel structures and anchor system for a project to relocate JMEC 69kV transmission line poles south of the town of San Ysidro, New Mexico in Sandoval County, New Mexico.

The firm that is selected to be the Awardee of this RFP will work in close cooperation with the JMEC Engineering Staff and the Owner's Engineer; Burns & McDonnell. The successful candidate awarded the RFP will be required to be fully committed to working with the JMEC Engineering Staff and Burns & McDonnell to meet tight deadlines to expedite this work. Deadline for sealed bids is July 3, 2020, *see Submittal information below.*

**Requirements:**

- **Professional References**
- **Bidder Requirements: Hold a valid Business license. Hold a valid Certificate of General Liability Insurance no less than \$3,000,000; and business auto liability insurance covering owned, hired and non-owned vehicles with minimum combined bodily injury and property damage limit of \$1,000,000 per occurrence. Worker's Compensation Insurance, to cover obligations imposed by Federal and State statutes pertaining to Contractor's employees engaged in the performance of any services, and Employer's Liability Insurance with a minimum limit of One Million Dollars (\$1,000,000). Contractor shall provide to JMEC current certificates of such coverage. The JMEC Board of Trustees, Management, and Employees must be listed as additional insured under the Contractor's Liability Insurance. Contractor must be fully bonded and licensed.**
- **Submittal Information:**
- ***Please submit a Sealed Bid no later than COB July 3, 2020, to Karen Wisdom, Contract Administrator, at 19365 US 84/285, Hernandez, NM 87537 or PO Box 128, Espanola, New Mexico, 87532. Bids that are emailed will be rejected.***

- Jemez Mountains Electric Cooperative, Inc. reserves the right to accept and/or reject any and all proposals. In ALL cases, any award resulting from the RFP shall always be in the best interests of Jemez Mountains Electric Cooperative, Inc.

Scope of work:

**TECHNICAL SPECIFICATIONS**

RFP/BID #: 20-0630-0001

Closing: TBD

The drawings associated with these technical specifications are in the file:

PART 1.PDF

Download and review all drawings and review the attached specifications to determine the requirements of this project.

**OH164 TRANSMISSION LINE RELOCATE:**

**PART I – TUBULAR STEEL STRUCTURES**

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## DIVISION 1 - GENERAL REQUIREMENTS

### SECTION 011104 - SUMMARY OF WORK

#### PART 1 - GENERAL

##### 1.01 SUMMARY:

- A. This Section summarizes the Work covered in detail in the complete Contract Documents.

##### 1.02 CONTRACT INFORMATION:

- A. Owner: Jemez Mountains Electric Cooperative  
JMEC Engineer Russ Groves  
Phone (505)231-9785
  - 1. Contract Identification: RFP/BID #20-0631-0001 OH164 69kV  
Transmission Line Relocate
  - 2. Point of Delivery: San Ysidro, NM
- B. Owner's Engineer: Burns & McDonnell, 15950 N. Dallas Parkway Suite 700, Dallas, TX 75248
  - 1. Project Manager: Steve Hirst
  - 2. Engineer: Alberto Ruiz
  - 3. Phone: 972-455-3138

##### 1.03 PROJECT DESCRIPTION:

This project consists of the specifications and drawings for bids for the tubular steel structures associated with the relocation of the 69kV OH164 Transmission Line project described below. Prices will be based on the unit structure prices provided in the attached "Jemez OH164 Bid Sheets". Supplier is to provide pricing for JEMEZ Absolute delivery dates as stated in SECTION 013204..

The transmission and distribution lines are located approximately 1.2-miles south of the town of San Ysidro in Sandoval County, New Mexico. This project starts just east of the intersection of the Salado Rio River and Highway 550 extending southwest approximately 0.24-miles. The existing transmission conductor is 4/0 ACSR (6/1) Strand 'Penguin' and the existing shield wire is 2/0 ACSR (6/1) Strand 'Quail'. The existing distribution conductor is 1/0 ACSR (6/1) 'Raven' and the neutral is 4 AWG ACSR (7/1) Strand 'Swanate'. Currently, the structures are located in an erosion prone area and will be relocated to an area of JMEC's choosing. A new section of steel monopole dead ends on drilled shaft foundations will carry both the transmission and distribution lines over the river crossing. This line section will be located in between the existing transmission and distribution centerlines. In order to transition the transmission and distribution lines onto the new poles, guyed wood monopole dead ends will be installed in-line with the existing transmission and distribution lines on both sides of the river crossing. These poles will then be used to slack-span the circuits onto the new steel monopole structures

Work Covered by Contract Documents:

The Supplier shall furnish all materials shown in the detailed bid items as shown in this specification and in accordance with the project plans and specifications.

1.04 MEASUREMENT AND PAYMENT:

- A. Unit Price Contracts: All Work indicated and specified in the Contract Documents shall be included in the Unit Price schedule in the Agreement.
- B. Change Orders and Payment Procedures: Stated in the Jemez Mountains GENERAL TERMS AND CONDITIONS.

1.05 COPIES OF DOCUMENTS:

- A. Furnished Copies: After execution of Agreement, Supplier will be furnished, at no cost, a maximum of (six) sets of Contract Documents consisting of full-size Contract Drawings including revised Drawings and the Project Manual, in addition to those used in execution of the Agreement.
- B. Additional Copies: Additional copies of above documents will be supplied upon request at printing and delivery cost.

1.06 LIST OF DRAWINGS:

- A. Contract Drawings:
  - 1. Each sheet of the Contract Drawings bears the following general title: OH164 Relocate 69kV Transmission Line.
  - 2. Individual sheet numbers and titles are as stated on cover sheet.
- B. Reference Drawings:
  - 1. Reference Drawings included with the set of Contract Drawings are as stated on the cover sheet.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 011104

SECTION 013204 - PROJECT MEETINGS, SCHEDULES, AND REPORTS

PART 1 - GENERAL

1.01 SUMMARY:

- A. Project Meetings:
  - 1. Preliminary Conference.
- B. Schedules and Reports:
  - 1. Initial Coordination Submittals.
  - 2. Work Progress Schedule.
  - 3. Work Progress Reports.
  - 4. Delivery Schedule.
- C. Related Work Specified Elsewhere:
  - 1. Submittals: SECTION 013304.

2. Equipment and Materials: SECTION 016004.

1.02 SCHEDULES AND REPORTS:

- A. Initial Coordination Submittals: Within 10 days after the Effective Date of Purchase Order Agreement, Supplier shall submit to Purchaser for review and acceptance:
1. A preliminary Work progress schedule.
  2. A preliminary schedule of Submittals, as stated in SECTION 013304.
  3. Certification of insurance or copies of policies as required by the JEMEZ Mountain GENERAL TERMS AND CONDITIONS.
- B. Work Progress Schedule:
1. After submittal of preliminary Work progress schedule, submit to Purchaser a detailed Work progress schedule within 30 days after the Effective Date of Agreement. Base the schedule on the preliminary Work progress schedule and incorporate review comments and other feedback.
  2. The schedule shall show the Work in a graphic format suitable for displaying scheduled and actual progress.
    - a. Prepare schedules as a horizontal bar chart with separate bar for each major portion of the Work or operation.
    - b. The schedule shall also show the Work broken down into major phases and key items with the dates Work is expected to begin and be completed. Sequence of listings shall be in the chronological order of the start of each item of Work.
    - c. Scale and spacing shall allow space for notations and revisions.
    - d. Sheet size: Minimum 8-1/2x11 inches.
  3. Provide sub-schedules to define critical portions of entire schedules.
  4. Coordinate Work progress schedule with Work progress reports and delivery schedule.
  5. Purchaser will review and comment on Work progress schedule and, upon agreement between Purchaser and Supplier on necessary changes:
    - a. Supplier shall print and distribute copies of the accepted schedule to Purchaser, Sub suppliers, and other parties required to comply with scheduled dates.
  6. Supplier shall not change the accepted Work progress schedule without prior concurrence of Purchaser.
  7. Submit to Purchaser an updated schedule at least once monthly. Schedule shall show actual progress and any proposed changes in the schedule of remaining Work.
- C. Work Progress Reports:
1. Submit weekly a report on actual Work progress. More frequent reports may be required should the Work fall behind the accepted schedule.
  2. Work progress reports shall consist of marked copies of prints made from the accepted Work progress schedule, and a narrative report which shall include but not be limited to the following:
    - a. A description of current and anticipated delaying factors, if any.
    - b. Impact of possible delaying factors.
    - c. Proposed corrective actions.
  3. A Work progress report shall accompany each application for partial payment. Work reported complete but not readily apparent to Purchaser must be substantiated with supporting data.

4. Should operations fall behind accepted schedule to an extent that completion of Work within the Contract Time appears doubtful, Supplier shall, at no change in Contract Price, take corrective action to get back on schedule.
- D. Delivery Schedule:
1. Supplier shall provide pricing for the delivery dates as shown below.. Supplier pricing must be valid for 60 days after bid close.
  2. JEMEZ Preferred and Absolute delivery dates are as follows:
    - a. ABSOLUTE:
      - (1) STRUCTURES: JULY 31, 2020
      - (2) ANCHOR BOLTS: JULY 15, 2020
  3. Within 30 days after the Date of Agreement, Purchaser and Supplier shall agree on a delivery schedule for all Equipment and Materials to be furnished for which the delivery time is not named in the Proposal or specified.
  4. Actual delivery dates shall be subject to the ability of Purchaser or installing contractor to receive and care for the delivered items.
  5. Supplier shall notify Purchaser at least 15 days in advance of any delivery date, and shall not make any shipments without written approval of Purchaser.
  6. No delivery will be approved until proper Submittals pertaining to storage and installation have been received and accepted.
  7. Any items delivered without written approval may be returned to the point of origin, or unloaded and stored at a place and in a manner determined by Purchaser, and Supplier will be charged with any additional expense resulting therefrom.
  8. If written order by Purchaser delays any shipment for more than 30 days after the time set forth in the Contract Documents or the agreed delivery schedule, Purchaser will pay Supplier for storage at a rate to be mutually agreed upon at that time. Time of storage will be figured from 30 days after the later of the dates defined above to receipt of Supplier's certified statement of the actual shipping date.
  9. Items stored by Supplier as provided herein shall be protected by Supplier with fire and extended coverage insurance endorsed to include the so-called "All Risks" coverage endorsement to the full value of the items stored, and a satisfactory certificate proving protection for Purchaser shall be delivered to Purchaser. The cost of such insurance shall be included with the rate charged for storage.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 013204

SECTION 013304 - SUBMITTALS

PART 1 - GENERAL

1.01 SUMMARY:

- A. This Section includes definitions, descriptions, transmittal, and review of Submittals.
- B. Related Work Specified Elsewhere:

1. Project Meetings, Schedules, and Reports: SECTION 013204.
2. Contract Closeout: SECTION 017804.

1.02 GENERAL INFORMATION:

A. Submittal Documents:

- a. At a minimum the following documents shall be submitted.  
Structural Calculations (performed and sealed by a New Mexico P.E.):
- b. Three (3) paper copies and one (1) PDF copy.  
Approval drawings: Three (3) paper copies and one (1) electronic copy.
- c. Reference documents: Three (3) paper copies and one (1) electronic copy.
- d. **Final drawings (sealed by a New Mexico P.E.):** Three (3) paper copies and one (1) electronic copy.
- e. Preliminary Installation, Operation & Maintenance (IOM) manuals: One (1) paper copies and one (1) electronic copy.
- f. Final Installation, Operation & Maintenance (IOM) manuals: One (1) paper copy and one (1) electronic copy. Two (2) additional paper copies will be shipped with any and all equipment to the field.

B. Definitions:

1. Shop Drawings, product data, and Samples are technical Submittals prepared by Supplier, Sub supplier, manufacturer, or subcontractor and submitted by Supplier to Owner and Owner's Engineer as a basis for approval of the use of Equipment and Materials proposed for incorporation in the Work or needed to describe installation, operation, maintenance, or technical properties.
  - a. Shop Drawings include custom-prepared data of all types including drawings, diagrams, performance curves, material schedules, templates, instructions, and similar information not in standard printed form applicable to other projects.
  - b. Product data includes standard printed information on materials, products, and systems; not custom-prepared for this Contract, other than the designation of selections from available choices.
  - c. Samples include both fabricated and unfabricated physical examples of Materials, products, and Work; both as complete units and as smaller portions of units of Work; either for limited visual inspection or (where indicated) for more detailed testing and analysis. Mockups are a special form of Samples which are too large to be handled in the specified manner for transmittal of Sample Submittals.
2. Informational Submittals are those technical reports, administrative Submittals, certificates and guarantees not defined as Shop Drawings, product data, or Samples.
  - a. Technical reports include laboratory reports, tests, technical procedures, technical records, and Supplier's design analysis.
  - b. Administrative Submittals are those nontechnical Submittals required by the Contract Documents or deemed necessary for administrative records. These Submittals include maintenance agreements, Bonds, photographs, physical work records, statements of applicability, copies of industry standards, Contract record data, and similar type Submittals.
  - c. Certificates and guarantees are those Submittals on Equipment and Materials where a written certificate or guarantee from the manufacturer or Supplier is called for in the Specifications.

3. Refer to ARTICLES 1.03 and 1.04 of this Part for detailed lists of documents and specific requirements.
- C. Quality Requirements:
1. Submittals such as drawings and data submitted to Owner and Owner's Engineer shall be of suitable quality for legibility and reproduction purposes. Every line, character, and letter shall be clearly legible. Drawings such as reproducible shall be useable for further reproduction to yield legible hard copy.
  2. Documents submitted to Owner and Owner's Engineer that do not conform to specified requirements shall be subject to rejection by Owner and Owner's Engineer, and upon request, Supplier shall resubmit conforming documents. If conforming Submittals cannot be obtained, such documents shall be retraced, redrawn, or photographically restored as may be necessary to meet such requirements. Supplier's (or its Sub supplier's) failure to initially satisfy the legibility quality requirements will not relieve Supplier (or its Sub supplier) from meeting the required schedule for Submittals.
- D. Language and Dimensions:
1. All words and dimensional units shall be in the English language.
  2. Metric dimensional unit equivalents may be stated in addition to the English units. However, English units of measurement shall prevail.
- E. Submittal Completeness:
1. Submittals shall be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable Owner and Owner's Engineer to review the information effectively.
  2. Where standard drawings are furnished which cover a number of variations of the general class of Equipment, each drawing shall be annotated to indicate exactly which parts of the drawing apply to the Equipment being furnished. Such annotation shall also include proper identification of the Submittal permanently attached to the drawing.
  3. Reproduction or copies of Contract Drawings or portions thereof will not be accepted as complete fabrication or erection drawings but will be acceptable when used by Supplier as a drawing upon which to indicate information on erection or to identify detail drawing references. Whenever the Contract Drawings are revised to show that additional Supplier's information, Owner's title block shall be replaced with Supplier's title block, and Engineer's professional seal shall be removed from the drawing.
- F. Form of Submittals:
1. Submittals and other Project documents shall be transmitted in electronic format as specified.
    - a. Selected Submittals may be provided in paper ("hardcopy") copies with advance approval of Owner, and using the procedures specified herein.
    - b. Equipment instruction books and operating manuals shall be provided in paper copies in addition to specified electronic format.
  2. Electronic Format:
    - a. Scanned Submittals and documents are not acceptable. Transmit Submittals and Project documents in:
      - (1) Nonproprietary, native electronic format, incorporating any necessary reference files, or
      - (2) Adobe \*PDF files created directly from native electronic format, or
      - (3) Owner-approved equal.



- b. For any given Submittal, the file name and format shall be consistent for initial submission and subsequent revisions of the same. Use consistent naming convention throughout.
  - (1) Nonconforming Submittals are subject to rejection by Owner.
- c. Provide "as-constructed" Submittals, record documents, Equipment instruction books and operating manuals, and other documents on CD-ROM in AutoCAD or Adobe \*PDF format as required and approved by Owner.

1.03 TECHNICAL SUBMITTALS:

- A. Items shall include, but not be limited to, the following:
  - 1. Manufacturer's specifications.
  - 2. Catalogs, or parts thereof, of manufactured Equipment.
  - 3. Shop fabrication and erection drawings.
  - 4. General outline drawings of Equipment showing overall dimensions, location of major components, weights, and location of required building openings and floor plates.
  - 5. Detailed Equipment installation drawings, showing foundation details, anchor bolt sizes and locations, base plate sizes, relative location of Owner's connections, and all clearances required for erection, operation, and disassembly for maintenance.
  - 6. Schematic diagrams for electrical items, showing external connections, terminal block numbers, internal wiring diagrams, and one-line diagrams.
  - 7. Bills of material and spare parts list.
  - 8. Instruction books and operating manuals.
  - 9. Material lists or schedules.
  - 10. Performance tests on Equipment by manufacturers.
  - 11. Samples and color charts.
  - 12. All drawings, catalogs, or parts thereof, manufacturer's specifications and data, samples, instructions, and other information specified or necessary:
    - a. For Owner and Owner's Engineer to determine that the Equipment and Materials conform with the design concept and comply with the intent of the Contract Documents.
    - b. For the proper erection, installation, operation, and maintenance of the Equipment and Materials which Owner and Owner's Engineer will review for general content but not for basic details.
    - c. For Owner and Owner's Engineer to determine what supports, anchorages, structural details, connections, and services are required for the Equipment and Materials, and the effects on contiguous or related structures, Equipment, and Materials.
- B. Schedule of Submittals:
  - 1. Prepare for Owner's concurrence a schedule for submission of all Submittals specified or necessary for Owner's or Owner's Engineer's approval of the use of Equipment and Materials proposed for incorporation in the Work or needed for proper installation, operation, or maintenance. Submit the schedule with the Work progress schedule. Schedule submission of all Submittals to permit review, fabrication, and delivery in time to not cause delay in the Work of Owner or its Subcontractors or any other contractors as described herein.
  - 2. In establishing schedule for Submittals, allow 20 days in Owner's office for reviewing original submittals and 20 days in Owner's office for reviewing resubmittals.

3. Submittals requiring revision shall be resubmitted 20 days after receipt of Owner's review notations.
4. The schedule shall indicate the anticipated dates of original submission for each item and Owner's approval thereof, and shall be based upon at least one resubmission of each item.
5. Schedule all Submittals required prior to fabrication or manufacture for submission within 30 days of the Notice to Proceed. Schedule Submittals pertaining to storage, installation, and operation at the Site for Owner's approval prior to delivery of the Equipment and Materials.
6. Resubmit Submittals the number of times required for Owner's or Owner's Engineers "Submittal Approved." However, any need for resubmittals in excess of the number set forth in the accepted schedule, or any other delay in obtaining approval of Submittals, will not be grounds for extension of the Contract Time provided Owner and Owner's Engineer complete their reviews within the times specified.

C. Transmittal of Submittals:

1. All Submittals (Shop Drawings, product data, and Samples) for Equipment and Materials furnished by Supplier, Subcontractors, manufacturers, and Sub suppliers shall be submitted to Owner and Owner's Engineer by Supplier.
2. Transmit all Submittals to Owner and Owner's Engineer for approval as follows:
  - a. Submittal Information Block:
    - (1) Affix to all paper copies whether Submittal is prepared by Supplier, subcontractor, or Sub supplier. Use transparent decal type Submittal Information Blocks for Shop Drawings and use gummed paper type for product data and Sample Submittals. All Submittal Information Blocks needed for this Contract will be furnished to Supplier at no charge at the initial coordination conference.
    - (2) Electronic files of Submittal Information Blocks will be provided to Supplier for use on electronic Submittals.
    - (3) An example of the Submittal Information Block is included as an appendix to this Section.
  - b. Mark each Submittal by Project name and number, Contract title and number, and the applicable Specification Section and Article numbers. Include in the letter of transmittal the drawing number and title, sheet number if applicable, revision number, and electronic file name if applicable. Unidentifiable Submittals will be returned for proper identification.
  - c. Check and approve Submittals of subcontractors, Sub suppliers, and manufacturers prior to transmitting them to Owner or Owner's Engineer. Supplier's submission shall constitute a representation to Owner and Owner's Engineer that Supplier approves Submittals and has determined and verified all design criteria, quantities, dimensions, materials, catalog numbers, compliance with Laws and Regulations, and similar data, and Supplier assumes full responsibility for doing so; and Supplier has coordinated each Submittal with the requirements of the Work and the Contract Documents.

- d. At the time of each submission, call to the attention of Owner and Owner's Engineer in the letter of transmittal any deviations from the requirements of the Contract Documents.
  - e. Make all modifications noted or indicated by Owner and Owner's Engineer and return revised Submittals until approved. Direct specific attention in writing, or on revised Submittals, to changes other than the modifications called for by Owner or Owner's Engineer on previous Submittals. After paper copy Submittals have been approved, submit copies thereof for final distribution. Previously approved Submittals transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the Submittal and resubmit for review.
  - f. Following completion of the Work and prior to final payment, furnish record documents and approved Samples and Shop Drawings necessary to indicate "as constructed" conditions, including field modifications, in the number of copies specified. Furnish additional copies for insertion in Equipment instruction books and operating manuals as required. All such copies shall be clearly marked "PROJECT RECORD."
    - (1) Submit a final record copy of the Master Field Drawing list which shall indicate the final revision status of each drawing on the list.
3. Quantity Requirements:
- a. Except as otherwise specified, transmit all Shop Drawings in the following quantities:
    - (1) Initial Submittal:
      - (a) Paper – Two copies to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
    - (2) Resubmittals:
      - (a) Paper - Two copies to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
    - (3) Submittal for final distribution:
      - (a) Paper - Two copies plus the number required by Supplier, to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
    - (4) As-constructed documents:
      - (a) Paper - Two copies to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
  - b. Transmit Submittals of product data as follows:
    - (1) Initial Submittal:
      - (a) Paper - Two copies to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
    - (2) Resubmittals:
      - (a) Paper – Two copies to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
    - (3) Submittal for final distribution:
      - (a) Paper - Two copies plus the number of copies required by Supplier, to Owner.
      - (b) Electronic - One copy to Owner and Owner's Engineer.
  - c. Transmit Submittals of Material Samples, color charts, and similar items as follows:

- (1) Initial Submittal - Two to Owner and Owner's Engineer.
  - (2) Resubmittal - Two to Owner and Owner's Engineer.
  - (3) Upon approval, One Sample will be returned to Supplier.
- d. Transmit Submittals of Equipment instruction books and operating manuals as follows:
- (1) Initial Submittal:
    - (a) Paper - Two copies to Owner. Only Owner's comments will be returned to Supplier.
    - (b) Electronic - One copy to Owner.
  - (2) Resubmittals:
    - (a) Paper - Two copies to Owner. Only Owner's comments will be returned to Supplier.
    - (b) Electronic - One copy to Owner.
  - (3) Submittal for Final Distribution - Two paper copies to Owner.
- e. When all Submittals have been updated to "as-constructed" conditions, transmit to Owner and Owner's Engineer in electronic format.
- f. Owner may copy and use for internal operations and Owner's staff training purposes any and all document Submittals required by this Contract and approved for final distribution, whether or not such documents are copyrighted, at no additional cost to Owner. If permission to copy any such Submittal for the purposes stated is unreasonably withheld from Owner by Supplier or any Sub supplier, manufacturer, or subcontractor, the Supplier shall provide to Owner 50 copies plus the number of copies required by Supplier at each final distribution issue.
4. Supplier's erection drawings and other Submittals required for the installation of Equipment furnished under this Contract for installation under other contracts will be transmitted to installing contractor by Owner in the final distribution of such Submittals.
- D. Owner's Review:
1. Owner or Owner's Engineer will review and take appropriate action on Submittals in accordance with the accepted Schedule of Submittals. Owner's review and approval will be only to determine if items of Equipment and Materials covered by the Submittals are compatible with the design concept and conform to information given in the Contract Documents.
  2. Such review and approval will not extend to design data reflected in Submittals which is peculiarly within the special expertise of Supplier or Supplier's Subcontractors or Sub suppliers. Review and approval of a component item as such will not indicate approval of the assembly in which the item functions.
  3. Owner's or Owner's Engineer's review and approval of Shop Drawings, product data, or Samples will not relieve Supplier of responsibility for any deviation from requirements of the Contract Documents unless Supplier has in writing called Owner's attention to such deviation at the time of submission, and Owner and Owner's Engineer has given written concurrence in and approval of the specific deviation. Approval by Owner shall not relieve Supplier from responsibility for errors or omissions in Submittals.
- E. Submittal Action Stamp:

1. Owner's Engineer's review action stamp, appropriately completed, will appear on all Submittals of Supplier when returned by Owner. Review status designations listed on Owner's action stamp are defined as follows:

A - SUBMITTAL APPROVED Signifies Equipment or Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work. Supplier is to proceed with fabrication or procurement of the items and with related Work. Copies of the Submittal are to be transmitted to Owner for final distribution.

B - SUBMITTAL APPROVED AS NOTED (RESUBMIT) Signifies Equipment or Material represented by the Submittal conforms with the design concept and complies with the intent of the Contract Documents and is approved for incorporation in the Work in accordance with Owner's notations. Supplier is to proceed with fabrication or procurement of the items and with related Work in accordance with Owner's notations and is to submit a revised Submittal responsive to notations marked on the returned Submittal or written in the letter of transmittal.

C - SUBMITTAL RETURNED FOR REVISION (RESUBMIT) Signifies Equipment or Material represented by the Submittal appears to conform with the design concept and comply with the intent of the Contract Documents but information is either insufficient in detail or contains discrepancies which prevent Owner from completing its review. Supplier is to resubmit revised information responsive to Owner's annotations on the returned Submittal or written in the letter of transmittal. Fabrication or procurement of items represented by the Submittal and related Work is not to proceed until the Submittal is approved.

D - SUBMITTAL NOT APPROVED (SUBMIT ANEW) Signifies Equipment or Material represented by the Submittal does not conform with the design concept or comply with the intent of the Contract Documents and is disapproved for use in the Work. Supplier is to provide Submittals responsive to the Contract Documents.

E - PRELIMINARY SUBMITTAL Signifies Submittals of such preliminary nature that a determination of conformance with the design concept or compliance with the intent of the Contract Documents must be deferred until additional information is

furnished. Supplier is to submit such additional information to permit layout and related activities to proceed.

F - FOR REFERENCE, NO APPROVAL REQUIRED Signifies Submittals which are for supplementary information only; pamphlets, general information sheets, catalog cuts, standard sheets, bulletins and similar data, all of which are useful to Owner (or Owner) in design, operation, or maintenance, but which by their nature do not constitute a basis for determining that items represented thereby conform with the design concept or comply with the intent of the Contract Documents. Owner reviews such Submittals for general content but not for basic details.

G - DISTRIBUTION COPY (PREVIOUSLY APPROVED) Signifies Submittals which have been previously approved and are being distributed to Supplier, Owner, Construction Manager, and others for coordination and construction purposes.

F. Instruction Books and Operating Manuals:

1. In addition to electronic Submittals specified above, equipment instruction books and operating manuals prepared by the manufacturer shall include the following:
  - a. Index and tabs.
  - b. Instructions for installation, start-up, operation, inspection, maintenance, parts lists and recommended spare parts, and data sheets showing model numbers.
  - c. Applicable drawings.
  - d. Warranties and guarantees.
  - e. Name and address of nearest manufacturer-authorized service facility.
  - f. All additional data specified.
2. Information listed above shall be bound into hard-back binders of three-ring type. Sheet size shall be 8-1/2" x 11". Binder color shall be white. Capacity shall be a minimum of 1-1/2 inches, but sufficient to contain and use sheets with ease.
  - a. Provide the following accessories:
    - (1) Label holder.
    - (2) Business card holder.
    - (3) Sheet lifters.
    - (4) Horizontal pockets.
  - b. The following information shall be imprinted, inserted, or affixed by label on the binder front cover:
    - (1) Owner's name.
    - (2) Owner's facility or plant name.
    - (3) Equipment item name.
    - (4) Volume number (if applicable).
    - (5) Contract number.
    - (6) Manufacturer's name and address.

- c. The following information shall be imprinted, inserted, or affixed by label on the binder spine:
  - (1) Equipment item name.
  - (2) Owner's name and Owner's facility or plant name.
  - (3) Manufacturer's name.
  - (4) Contract number.
  - (5) Volume number (if applicable).
- d. Submit mockup of cover and spine for Owner's review.

1.04 INFORMATIONAL SUBMITTALS:

- A. Informational Submittals are comprised of technical reports, administrative Submittals, and guarantees which relate to the Work, but do not require Owner approval prior to proceeding with the Work. Informational Submittals include:
  - 1. Test reports.
  - 2. Certification on Materials:
    - a. Steel mill tests.
    - b. Welding inspection reports
  - 3. Shipping and/or packing lists.
  - 4. Job progress schedules.
  - 5. Equipment and Material delivery schedules.
  - 6. Warranties and guarantees.
- B. Transmittal of Informational Submittals:
  - 1. All Informational Submittals furnished by Supplier, Sub suppliers, manufacturers, and subcontractors shall be submitted to Owner by Supplier unless otherwise specified.
    - a. Identify each Informational Submittal by Project name and number, Contract title and number, and the Specification Section and Article numbers marked thereon or in the letter of transmittal. Unidentifiable Submittals will be returned for proper identification.
    - b. At the time of each submission, call to the attention of Owner and in the letter of transmittal any deviations from the requirements of the Contract Documents.
  - 2. Quantity Requirements:
    - a. Technical reports and administrative Submittals except as otherwise specified:
      - (1) Paper: Two copies to Owner.
      - (2) Electronic: One copy to Owner.
    - b. Written certificates and guarantees:
      - (1) Owner: Two copies.
  - 3. Test Reports:
    - a. Responsibilities of Supplier and Owner regarding tests and inspections of Equipment, Materials, and completed Work are set forth elsewhere in these Contract Documents.
    - b. The party specified responsible for testing or inspection shall in each case, unless otherwise specified, arrange for the testing laboratory or reporting agency to distribute test reports as follows:
      - (1) Owner: Two copies.
      - (2) Supplier: Two copies.
      - (3) Manufacturer or Sub supplier: One copy.

C. Owner's Review:

1. Owner or Owner's Engineer will review informational Submittals for indications of Work or Material deficiencies.
2. Owner or Owner's Engineer will respond to Supplier on those informational Submittals which indicate Work or Material deficiency.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 013304



## SUBMITTAL INFORMATION BLOCK

Supplier fill in all blanks  
without preprinted information

For the use of Purchaser

Project Name _____ Project number _____ Contract Title _____ Contract No. _____ Spec. Sect. No. _____ Art. No. _____	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Purchaser Record Stamp</b> </div>										
<div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;"> <b>Supplier's Approval</b>                      (See Contract Documents)                 </div> Supplier _____ _____ Approved By _____ Date _____ <p style="text-align: center; font-size: small;">(Do not send drawing to Purchaser without Supplier's prior Approval.)</p>	<div style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;"> <b>Purchaser's Action</b> (See Contract Documents)                 </div> Date Received _____ <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center; border-bottom: 1px solid black;">Initials &amp; Date</th> <th style="width: 50%; text-align: center; border-bottom: 1px solid black;">Initials &amp; Date</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">A _____</td> <td style="border-bottom: 1px solid black;">E _____</td> </tr> <tr> <td style="border-bottom: 1px solid black;">B _____</td> <td style="border-bottom: 1px solid black;">F _____</td> </tr> <tr> <td style="border-bottom: 1px solid black;">C _____</td> <td style="border-bottom: 1px solid black;">G _____</td> </tr> <tr> <td style="border-bottom: 1px solid black;">D _____</td> <td style="border-bottom: 1px solid black;">_____</td> </tr> </tbody> </table>	Initials & Date	Initials & Date	A _____	E _____	B _____	F _____	C _____	G _____	D _____	_____
Initials & Date	Initials & Date										
A _____	E _____										
B _____	F _____										
C _____	G _____										
D _____	_____										

Supplier fill in this block  
on all Submittals

1. Use this decal on all Shop Drawings, whether prepared by Supplier, Subsupplier, or Subcontractor. Place as near as possible to the drawing title in the lower right corner.
2. Affix the gummed edge paper Submittal Information Blocks to all "product data" type Submittals immediately inside the front cover.

## SECTION 016004 - EQUIPMENT AND MATERIALS

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. This Section includes general requirements for transportation and handling, delivery, storage, and protection of Supplier-furnished Equipment and Materials.
- B. Related Work Specified Elsewhere:
  - 1. Substitutions and Product Options: JEMEZ Mountains GENERAL TERMS AND CONDITIONS.
  - 2. Submittals: SECTION 013304.

#### 1.02 DEFINITIONS:

- A. Definitions used in this paragraph are not intended to negate the meaning of other terms used in the Contract Documents, including such terms as "systems," "structures," "finishes," "accessories," "furnishings," "special construction," and similar terms. Such terms are self-explanatory and have recognized meanings in the construction industry.
  - 1. "Products": Items purchased for incorporation in the Work, regardless of whether they were specifically purchased for the Project or taken from the previously purchased stock. The term "product" includes the terms "Material," "Equipment," "system," and other terms of similar intent.
  - 2. "Equipment": A product with operational or nonoperational parts, regardless of whether motorized, manually operated, or fixed. Equipment may require service connections such as wiring or piping.
  - 3. "Materials": Products that must be substantially cut, shaped, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form parts of the Work.

#### 1.03 QUALITY ASSURANCE:

- A. Equipment and Material Incorporated into the Work:
  - 1. Conform to applicable Specifications, codes, standards, and requirements of regulatory agencies.
  - 2. Provide products that comply with the requirements of the Contract Documents, undamaged and, unless otherwise indicated, new and unused at the time of installation. Provide products that are complete with all accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and for the intended use and effect.
    - a. Standard Products: Where they are available and comply with Specifications, provide standard products of types that have been produced and used successfully in similar situations on other projects.
    - b. Continued Availability: Where, because of the nature of its application, Owner is likely to need replacement parts or additional amounts of a product at a later date, either for maintenance and repair or replacement, provide standard products for which the manufacturer has published assurances that the products and its parts are likely to be available to Owner at a later date.
  - 3. Comply with size, make, type, and quality specified, or as specifically approved in writing by Purchaser.
  - 4. Manufactured and Fabricated Products:

- a. Design, fabricate, and assemble in accordance with the applicable standard trade, engineering, and shop practices.
  - b. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
  - c. Two or more items of the same kind shall be identical, by the same manufacturer.
  - d. Equipment and Material shall be suitable for service conditions intended.
  - e. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing by Purchaser.
5. Do not use Material or Equipment for any purpose other than that for which it is designed or is specified.
- B. Nameplates: Along with required labels and operating data, manufacturer or producer's nameplates, imprints, or trademarks may be placed on surfaces exposed to view.
1. Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous.
  2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated Equipment. Locate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
    - a. Name of product and manufacturer including address and telephone number.
    - b. Model and serial number.
    - c. Capacity.
    - d. Speed.
    - e. Ratings.
- C. Electronic Equipment Compliance:
1. Supplier warrants that all equipment, devices, items, systems, software, hardware, or firmware provided shall properly, appropriately, and consistently function and accurately process date and time data including without limitation: calculating, comparing, and sequencing. This warranty supersedes anything in the Specifications or other Contract Documents which might be construed inconsistently. This warranty is applicable whether the equipment, device, item, system, software, hardware, or firmware is specified with or without reference to a manufacturer's name, make, or model number.

#### 1.04 TRANSPORTATION AND HANDLING:

- A. Shipment Preparation:
1. Supplier shall prepare Equipment and Materials for shipment in a manner to facilitate unloading and handling, and to protect against damage or unnecessary exposure in transit and storage. Provisions for protection shall include the following:
    - a. Crates or other suitable packaging materials.
    - b. Covers and other means to prevent corrosion, moisture damage, mechanical injury, and accumulation of dirt in motors, electrical equipment, and machinery.
    - c. Suitable rust-preventive compound on exposed machined surfaces and unpainted iron and steel.
    - d. Grease packing or oil lubrication in all bearings and similar items.

- B. Marking: Tag or mark each item of Equipment and Material as identified in the delivery schedule or on Submittals and include complete packing lists and bills of material with each shipment. Each piece of every item need not be marked separately provided that all pieces of each item are packed or bundled together, and the packages or bundles are properly tagged or marked.
- C. Bills of Material: Supplier shall mail bills of material to Purchaser prior to delivery of each shipment and shall include bills of material with each shipment.
- D. Delivery:
  - 1. Furnish Purchaser all requirements for unloading and handling of Equipment and Materials upon delivery sufficiently in advance to allow installing contractor sufficient preparation time. Include type and capacity of unloading equipment required as applicable.
  - 2. Deliver Equipment and Materials in an undamaged condition, in original containers or packaging, with identifying labels intact and legible.
  - 3. Mark partial deliveries of component parts to identify the Equipment or Material, to permit easy accumulation of parts, and to facilitate assembly.
- E. Receipt and Unloading:
  - 1. Deliver all Equipment and Materials to the Point of Delivery complete with packing lists and bills of material. Installing contractor will furnish receipts to shipper upon delivery.
  - 2. Installing contractor will receive, check, unload, inventory, accept, and store all Equipment and Materials delivered to the Point of Delivery in accordance with proper notice. Installing contractor will report any damage to Purchaser prior to or during unloading and advise Purchaser of any shortage at time of delivery. Purchaser will verify such reports and so notify Supplier.
  - 3. Installing contractor will be responsible for proper location of railroad cars for unloading, any additional switching operations required, and all demurrage charges and substantiated claims for damage to cars or trucks resulting from unloading operations.

1.05 STORAGE AND PROTECTION:

- A. Storage Requirements:
  - 1. Furnish Purchaser all requirements for storage and protection of all Equipment and Materials sufficiently in advance of delivery to allow installing contractor sufficient preparation time.
  - 2. Installing contractor will furnish all facilities needed for storage of Equipment and Materials at the Project Site.
  - 3. Installing contractor will assume responsibility for and protect all Equipment and Materials in accordance with Supplier's recommendations.

PART 2 - PRODUCTS - Specified in applicable Sections.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 016004

## SECTION 017504 - MANUFACTURER'S FIELD SERVICES

### PART 1 - GENERAL

- 1.01 SUMMARY: This Section includes requirements of manufacturers of Equipment and Materials for services to be performed at the Project Site in regards to erection, start-up, and testing of Equipment and Materials
- 1.02 SERVICES REQUIRED:
- A. Services With Equipment and Materials Furnished Under This Contract:
1. Furnish the services of qualified, competent field representative and necessary assistants for Equipment and Materials furnished under this Contract, as required to perform all manufacturers' Field Services called for in the Specifications. Field representative shall be certified by the manufacturer of the specified product or system as having the necessary knowledge and experience to perform the required functions.
  2. Where such service is specified, installing contractor will not perform any work related to the installation or operation of Equipment or Materials furnished under this Contract without direct observation and guidance of the Supplier's or manufacturer's field personnel unless Purchaser concurs otherwise.
  3. Supplier shall arrange to have the Supplier's or manufacturer's field personnel perform the following:
    - a. Observe the erection, installation, start-up, and testing of Equipment.
    - b. Instruct and guide installing contractor in proper procedures.
    - c. Supervise the initial start-up, operational check, and any required adjustments of Equipment.
    - d. Instruct Owner's designated personnel in proper operation and maintenance of all Equipment and Materials as required by Purchaser.
  4. Supplier shall arrange for field personnel to report to the Site at times designated by Purchaser, advise Purchaser of arrival at the Site, and furnish Purchaser a written report covering all Work done at least once each week and when completed.
  5. Field representative shall be acceptable to Purchaser and shall not be changed during the installation operations without Purchaser's consent unless field representative proves unsatisfactory to Supplier.
  6. Field representative shall represent Supplier at the Site, and all instructions given to him shall be as binding as if given to Supplier.
  7. All work by installing contractor in connection with the installation of Equipment and Materials shall be subject to approval of the field representative, but the direct responsibility for planning, supervising, and executing the installation work will remain with installing contractor. Approval or acceptance by Purchaser and said field representative will not relieve installing contractor of responsibility for defective work.
  8. All start-up, adjustments, and testing of Equipment will be performed in the presence of Purchaser and Supplier's field representative, unless otherwise agreed, and such operations will be in accordance with Supplier's instructions. No start-up or testing will be undertaken without Supplier's approval.

9. It shall be the duty of Supplier's field representative during the progress of installation, start-up and testing, and such other times as may be required, by Purchaser, to instruct Owner's designated personnel in the proper operation and maintenance of the Equipment. Such instruction shall terminate only when both the field representative and Purchaser are satisfied that the Owner's personnel are properly instructed.

PART 2 - PRODUCTS: Specified in applicable Sections.

PART 3 - EXECUTION

3.01 OPERATION AND TESTING:

- A. Duties of the field representative during erection or installation shall include:
  1. Instructing and guiding the installing contractor concerning proper methods and procedures on all technical phases of installation.
  2. Inspecting and indicating approval or disapproval of each phase of the Work as it progresses.
  3. Reporting his observations in writing to the installing contractor, with copies to Purchaser, at least once each week unless otherwise agreed.
  4. Determining when Equipment is ready for start-up and operational checks.
- B. Placing Equipment In Operation:
  1. Installing contractor will place all Equipment and Materials furnished by this Contract and those furnished by Purchaser or others under separate contract into successful operation according to instructions of the Supplier or manufacturer, including making of all required adjustments, tests, operation checks, and the following:
    - a. Cleaning, sounding, blowing-out, flushing of lubricating oil and water systems and other pipelines.
    - b. Lubrication (lubricants supplied by Supplier unless specified to be furnished by Purchaser, Owner, or others).
    - c. Tests of lubrication system safety interlocks and system performance.
    - d. Final alignment checks and measurements made under observation of Purchaser and Owner. Alignment checks shall include opening connections if required to ensure there are no abnormal stresses on Equipment from pipes, ducts, or other attachments. Alignment shall be within tolerances specified by the manufacturer, and measurements shall be recorded and furnished to Purchaser.
    - e. Motor rotation checks before connecting couplings.
    - f. Inspection of sleeve bearings for adequate contact.
    - g. Checking of anchor-bolt tensions, grout, and shims. Anchor bolts shall be tightened with calibrated torque wrenches using care not to over stress bolts.
  2. After "run-in" and acceptance of alignment, major Equipment shall be affixed in place using standard tapered dowels with jack-out nuts at head end to facilitate removal.
  3. All above operations shall be recorded on forms furnished by Purchaser.
  4. Provide all necessary field representatives and assistants as part of the Work to accomplish the above operations until such time as individual items, systems, Equipment, or sections of the plant are acceptable for operation by Purchaser and Owner.
  5. Provide field representatives and assistants on continuous basis as required to complete events, such as, without interruption once they have been started.

C. Performance Tests:

1. Equipment and Materials Furnished under this Contract:
  - a. Purchaser may conduct acceptance tests after installation to determine if the Equipment and Materials installed as part of the Work perform in accordance with Contract Documents and as guaranteed. Final acceptance of Equipment and Materials will be based on acceptable results of such tests.
  - b. No tests will be conducted on Equipment or Materials for which manufacturer's Field Services are specified unless manufacturer's field representative is present and declares in writing that the Equipment and Materials are ready for such test.
  - c. Supplier will be notified by Purchaser so that Supplier can have a representative, or manufacturer's representative, present during any tests of Equipment or Materials furnished by this Contract for which manufacturer's Field Services are not specified.
  - d. The tests will be made as set forth in the Contract Documents unless the interested parties mutually agree upon some other manner of testing.

END OF SECTION 017504

SECTION 017804 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY:

A. Definition:

1. "Closeout": is defined to include general requirements near the end of Contract Time, in preparation for installation by others, performance and acceptance testing, final acceptance, final payment, normal termination of Contract, and similar actions evidencing completion of the Work. Specific requirements for individual units of Work are specified in Sections of DIVISION 2 through 9. Time of closeout is directly related to "Substantial Completion" of the installation or erection contract, and therefore may be either a single time period for the entire Work or a series of time periods for individual units of the Work which have been certified as Substantially Complete at different dates.
2. "Substantial Completion": means the event when (i) erection or installation of the Equipment and Materials furnished by this Contract has been completed by the installing contractor and required Field Services have been furnished, (ii) the Equipment and Materials are operating safely for the purpose of commissioning and startup, (iii) all testing of the Work has been completed and all test data properly evaluated, (iv) the performance guarantees have been met and warranty period started, and (v) Supplier has delivered to Purchaser all operating instructions, maintenance manuals, and warranties.

B. Related Work Specified Elsewhere:

1. Prerequisites for Final Acceptance and Payment: JEMEZ Mountains GENERAL TERMS AND CONDITIONS.

2. Submittals: SECTION 013304.
3. Manufacturer's Field Services: SECTION 017504.
4. Warranties: SECTION 01785.

1.02 REQUIREMENTS FOR FINAL PAYMENT:

- A. General: Unless otherwise required elsewhere by these Contract Documents, the following shall be furnished to Purchaser prior to application for final payment.
  1. Field Services.
  2. Maintenance and operating instructions.
  3. Guarantees.
  4. Certifications of inspection.
  5. "Record Document" Submittals.
  6. Other documents as required by Contract Documents.
  7. Spare parts.
- B. Final Payment: Specified in GENERAL TERMS AND CONDITIONS.
- C. Net 30 days on receipt of invoice.

1.03 PROJECT RECORD DOCUMENTS:

- A. General: In addition to requirements of JEMEZ Mountains GENERAL TERMS AND CONDITIONS, maintain at the Supplier's facilities and at installation Site one record copy of:
  1. Drawings.
  2. Specifications.
  3. Addenda.
  4. Change Orders and other Modifications to the Contract.
  5. Approved Shop Drawings, product data, and Samples.
- B. Recording:
  1. Label each document "PROJECT RECORD" in neat, large, printed letters.
  2. Record information concurrently with fabrication or Field Services progress.
  3. Record Drawings: Legibly mark to record actual construction:
    - a. Where Submittals are used for mark-up, record a cross-reference at corresponding location on Drawings.
    - b. Field changes of dimension and detail.
    - c. Changes made by Change Order or other Modifications. Note related Change Order numbers where applicable.
    - d. Details not on original Contract Drawings.
  4. Record Specifications and Addenda: Legibly mark each Section to record:
    - a. Manufacturer, trade name, catalog number, and Supplier of each product and item of Equipment actually furnished, particularly optional and substitute items.
    - b. Changes made by Addendum, Change Order, or other modifications.
    - c. Related Submittals.
  5. Miscellaneous Record Submittals: Refer to other Sections of these Specifications for requirements of miscellaneous record keeping and Submittals in connection with actual performance of the Work.



6. Instruction Books and Operating Manuals: Specified in SECTION 013304.
  7. Electronic Documentation:
    - a. In addition to paper copies, provide electronic versions of record documents showing "as-constructed" conditions, master field drawing list showing final revisions, instruction books, and operating manuals on CD-ROM in Adobe \*PDF.
- C. Delivery:
1. Deliver Record Documents to Purchaser.
  2. Accompany submittal with transmittal letter in duplicate, containing:
    - a. Date.
    - b. Contract title and number.
    - c. Supplier's name, address, and telephone number.
    - d. Number and title of each Record Document.
    - e. Signature of Supplier's authorized representative.

1.04 WARRANTIES AND BONDS: Specified in SECTION 013304, in JEMEZ Mountains GENERAL TERMS AND CONDITIONS, and in JEMEZ Mountains SUPPLEMENTAL TERMS AND CONDITIONS.

PART 2 - PRODUCTS - Not Applicable.

PART 3 - EXECUTION - Not Applicable.

END OF SECTION 017804

## SECTION 017854 – WARRANTIES

### PART 1 - GENERAL

#### 1.01 SUMMARY:

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
  1. Refer to Jemez Mountains GENERAL CONDITIONS for terms of the Contractor's period for correction of the Work.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
  1. Procedures for submitting warranties: SECTION 013304.
  2. Contract closeout procedures: SECTION 017804.
  3. Specific requirements for warranties on products and installations specified to be warranted: DIVISIONS 2 through 9.
  4. Certifications and other commitments and agreements for continuing services to Owner: Specified throughout the Contract Documents.
- C. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of the warranty on the Work that incorporates the

products. Manufacturer's disclaimers and limitations on product warranties do not relieve Suppliers, manufacturers, and Subcontractors required to counter sign special warranties with Contractor.

1.02 WARRANTY REQUIREMENTS:

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Expressed warranties made to Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the Law. Expressed warranty periods shall not be interpreted as limitations on the time in which Owner can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, Owner reserves the right to refuse to accept the Work, until Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.03 SUBMITTALS:

- A. Submit written warranties to Engineer prior to the date certified for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than the Date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of Engineer.
- B. When the Contract Documents require Contractor, or Contractor and a Subcontractor, Supplier, or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by required parties. Submit a draft to Owner, through Engineer, for approval prior to final execution.
  - 1. Refer to DIVISIONS 2 through 9 Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 017854

## DIVISION 5 – STRUCTURES

### SECTION 05200 - TUBULAR STEEL STRUCTURES

#### PART 1 - GENERAL

##### 1.01 SUMMARY:

- A. This section includes all work necessary to design, fabricate, test, package, ship and deliver tubular steel structures to the Owner as indicated and specified.

##### 1.02 REFERENCES:

###### A. Applicable Standards:

1. American Concrete Institute:
  - a. 318 - Building Code Requirements for Reinforced Concrete.
2. American Institute of Steel Construction (AISC):
  - a. Manual of Steel Construction.
  - b. Quality Criteria and Inspection Standards.
3. American National Standards Institute (ANSI):
  - a. B18.2.1 - Square and Hex Bolts and Screws including Hex Cap Screws, and Lag Screws.
  - b. B18.2.2 - Square and Hex Nuts.
  - c. C2 - National Electrical Safety Code (NESC).
4. American Society for Testing and Materials (ASTM):
  - a. A6 - General Requirements for Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use.
  - b. A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
  - c. A325 - High Strength Bolts for Structural Steel Joints, including suitable Nuts and Plain Hardened Washers.
  - d. A354 - Quenched and Tempered Alloy Steel Bolts, Studs, and Other Externally Threaded Fasteners.
  - e. A370 - Mechanical Testing of Steel Products.
  - f. A385 - High Quality Zinc Coating (Hot Dip).
  - g. A449 - Quenched and Tempered Steel Bolts and Studs.
  - h. A563 - Carbon and Alloy Steel Nuts.
  - i. A577 - Ultrasonic Angle-Beam Examination of Steel Plates.
  - j. A578 - Straight Beam ultrasonic Examination of Plain and Clad Steel Plates for Special Applications.
  - k. A615 - Deformed Billet Steel Bars for Concrete Reinforcement.
  - l. A673 - Sampling Procedures for Impact Testing of Structural Steel.
  - m. A871 - High Strength Low-Alloy Structural Steel Plate with Atmospheric Corrosion Resistance.
  - n. B6 - Zinc (Slab Zinc).
  - o. E165 - Liquid Penetrant Inspection Method.
  - p. E709 - Magnetic Particle Examination.

5. American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI):
    - a. ASCE/SEI 48-05 - Design of Steel Transmission Pole Structures.
  6. American Welding Society (AWS):
    - a. C2.1 - Recommended Safe Practice for Thermal Spraying.
    - b. D1.1 - Structural Welding Code - Steel.
  7. National Electrical Manufacturers Association (NEMA) Standards Publication TT 1, Tapered Tubular-Steel Structures.
  8. American Society for Nondestructive Testing, Recommended Practice No. SNT-TC-1A, Supplement A through E.
  9. Zinc Institute:
    - a. Z170 15M - Inspection Manual for Hot-Dip Galvanized Products.
  10. Other applicable standards suggested by the Contractor and approved by the Engineer.
  11. Other applicable standards suggested by the Contractor and approved by the Engineer.
- B. In cases where the above standards are in conflict, unless specifically noted elsewhere in the Contract Documents, the most stringent requirements shall govern.

### 1.03 SUBMITTALS:

- A. Compliance Submittals:
1. Submit as specified in DIVISION 1.
  2. Provide detailed drawings and data necessary for design, testing, assembly, erection and operation of all structures furnished, including, but not limited to the following:
    - a. Structure Calculations:
      - (1) The horizontal and vertical deflection as measured from the horizontal and vertical axis, for each specified loading condition at each level of wire attachment.
      - (2) Complete calculations used in the final design of each structure under the maximum loading criteria.
    - b. Foundation Loading Diagrams:
      - (1) The simultaneous shear in each direction, simultaneous moment in each direction, and vertical load at each structure's base plate for each specified loading condition.
      - (2) State whether indicated loads are working loads or multiplied by an overload factor. If overload factors are applied, define the magnitude and furnish data and references pertinent to these factors.
    - c. Items b.(1) through b.(2) shall be included in the Proposal.
    - d. Structural Drawings:
      - (1) Code markings to correspond with identical markings stamped on the individual fabricated steel members and assemblies (before galvanizing).
      - (2) Complete fabrication and erection drawings for each structure with complete dimensions.
      - (3) Detailed instruction and diagrams on the recommended method of joining and separating slip-jointed column sections.
      - (4) Detailed instructions and diagrams on the recommended method of joining flange connections.
      - (5) Shipping weight of each assembled structure and each component part.

- (6) Total quantity of bolts, nuts, and washers listed by size and length for each structure.
    - (7) Center of gravity and lifting point of each component.
    - (8) Anchor bolt setting plans, including size, length, and quantity of anchor bolts per structure.
  - e. Drawings showing additional detail as required by the Engineer.
- B. Test Reports: Submit as specified in DIVISION 1 for all material supplied.
  - 1. Mill test reports.
  - 2. Charpy "V" notch tests, as specified.
  - 3. Weld inspection reports.
- C. Provide minimum to maximum torque range values for all bolted connections including anchor bolts.
- D. The Contractor shall submit with his Proposal, as applicable, the recommended construction procedures required to prevent crossarm damage due to wind-induced vibration (aeolean vibration) prior to conductor and/or insulator installation. Failure to submit this data will be construed as Contractor's guarantee that no damage due to aeolean vibration will occur on free-standing structures without conductors and/or insulators installed.
- E. The Contractor shall provide data files in PLS-POLE (latest version) format of the model of each structure type and height for inclusion into the Owner's PLS-CADD design model. All PLS-POLE model files shall be submitted in "backup" file format and included on compact disc (CD) media device. Engineer may accept an alternate data format provided it is easily imported into the PLS-CADD model.

#### 1.04 QUALITY ASSURANCE:

- A. The following minimum qualifications are required:
  - 1. Be regularly engaged in the fabrication of tubular steel transmission poles.
  - 2. Have a staff regularly engaged in the design and detailing of tubular steel poles.
  - 3. Have previously designed and fabricated tubular steel transmission poles of the general type, strength, and size indicated and specified.
  - 4. All structure calculations and drawings shall be sealed by a Licensed Professional Engineer in the state of New Mexico.

#### 1.05 DELIVERY, STORAGE AND HANDLING:

- A. Bundling by Piece:
  - 1. All like pieces for the same structure types shall be bundled and shipped together.
  - 2. Members for two separate structure types shall not be packaged into the same bundles.
  - 3. Small parts, for example, clip angles and U-bolts shall be packed in containers, according to part, size, and structure type. Several individual containers for more than one structure type may be packed into a larger one.
  - 4. Bolts shall be shipped in bulk sorted by diameter and length.
  - 5. Nuts and washers shall be shipped in bulk sorted by diameter.
- B. Bundling by Structure:
  - 1. As an alternative and in conjunction with bundling by piece, some structures may be bundled by structure.
  - 2. All the pieces necessary to erect one complete structure shall be bundled and shipped together.

3. Members for two separate structures shall not be packaged into the same bundles.
  4. Small parts, for example, clip angles and U-bolts shall be packed in containers, according to part, size, and structure. Several individual containers for one structure may be packed into a larger one.
  5. Bolts shall be shipped in bulk sorted by diameter and length.
  6. Nuts and washers shall be shipped in bulk sorted by diameter.
- C. Bundling straps or bands, or their equivalent, and related items as well as containers and crating shall be of sufficient strength to contain and protect the contents under normal export shipping, handling, and storage yard conditions. The banding material shall be galvanized or aluminized steel or other equivalent material which will not rust or otherwise deteriorate during shipping and storage. The containers shall be constructed in a manner which will prevent pilferage of contents from the unopened container.
- D. Vehicles in which steel is shipped or stored shall be clean and free from foreign materials which could in any way injure the steel or the structure coating.
- E. The weight of bundles or containers shall not exceed (8,000) pounds.

## PART 2 - PRODUCTS

### 2.01 MANUFACTURERS:

- A. Acceptable Manufacturers:
1. Structures:
    - a. Falcon Steel Co.
    - b. Sabre - FWT, Inc.
    - c. Meyer
    - d. Valmont Industries, Inc.
    - e. Others as approved by Owner
  2. Protective Coating:
    - a. ZRC Products Company – ZRC Cold Galvanizing Compound.
    - b. Madison Chemical Industries, Inc. – Corrocote II Classic.
    - c. Sauereisen, Inc. – Urethane Membrane No. 87.
    - d. Tnemec Company, Inc. - 46H-413 Hi-Build Tneme-Tar.
    - e. Other products approved by Engineer.

### 2.02 GENERAL:

- A. Provide new materials free from defects and suitable for their application and the mechanical stresses to which they will be subjected shall be used.
- B. Provide structures complete with the following:
1. Fastening hardware.
  2. Brackets and grounding attachments.
  3. Pole bands.
  4. Climbing devices.
  5. Anchor bolt assemblies and templates.
  6. Paint for repair of damaged surfaces.
- C. Spare Materials: Provide 5 percent more fastening hardware than required to assemble and erect the structures.

- D. All steel used in the shafts, base plates and miscellaneous hardware shall be made by the open hearth, basic oxygen or electrical furnace process and conform to ASTM A6.
- E. Steel material shall have an absorbed energy requirement of 15 ft-lbs at -20 degrees F in the longitudinal direction when tested conforming to ASTM A370.
- F. Provide materials for shafts, arms, arm brackets, flanges and base plates up to 1-1/4-inch thickness conforming to ASTM A36, A572 (see paragraph G) or A871. Base plates greater than 1-1/4 inch and up to 4 inches in thickness shall conform to ASTM A633, Grade E or A871.
- G. Maximum silicon content for plate and angle materials shall be .04 to .06 percent in A572 steel.
- H. Provide anchor bolts conforming to ASTM A615 with ASTM A563 Grade C nuts.
- I. Provide bolts conforming to ASTM A325 or A354 Grade BC.
- J. Nuts shall conform to ASTM A563.
- K. Provide zinc for hot-dipped galvanized coating conforming to ASTM B6.

2.03 GENERAL STRUCTURES DESIGN:

- A. Structure analysis and design shall conform to ASCE/SEI 48-11 - Design of Steel Transmission Pole Structures.
- B. Description:
  - 1. Structures shall be able to withstand the indicated loads and include provisions for attachment of temporary rigging, conductors, overhead ground wires and their associated hardware. The indicated loads include all overload capacity factors, therefore, the allowable material stress shall equal the yield stress modified using the methods included in the ASCE/SEI 48-11 - Design of Steel Transmission Pole Structures - Design of Steel Transmission Pole Structures.
  - 2. Shape: Provide 12-sided monopoles with a uniform taper from the base to top.
  - 3. Section Joints: Provide slip-joint connections as indicated.
  - 4. Provide base plate type structures open at the bottom.
  - 5. Provide base plate type structures with a symmetric equally spaced bolt hole patterns.
- C. The proposed structure design shall permit the use of the following erection methods:  
Crane Erection

2.04 ELECTRICAL DESIGN:

- A. The electrical clearances indicated are minimum clearances from the conductor over its whole length to the structural steel members.
- B. Examine the actual location of the conductor as it passes through or by the structure.
- C. Provide sufficient auxiliary views which show scaled dimensions from energized conductor and hardware to structure members to ensure that the indicated minimum clearances are maintained.

2.05 STRUCTURAL DESIGN AND DETAILING:

- A. Anchor Bolts:
  - 1. Provide in one-piece preassembled clusters of bolted-together cages with top and bottom positioning templates. Templates shall have diameters 6 inches larger and smaller than the anchor bolt circle. The top template shall support the assembled cage during lifting and setting operations without detrimental deflection.

2. Design for embedment in drilled shaft and concrete foundations having a minimum compressive strength of 3000 psi and conforming to ACI 318. The connection of the bolts through the base plate to the foundation shall be designed using the ultimate-strength method included in ACI 318.
  3. Design to support the structures with leveling nuts on the anchor bolts. The dimension from top of foundation to bottom of base plate shall be a minimum of 1.5 times the bolt diameter and a maximum of 2.0 times the bolt diameter.
  4. Provide assemblies with a clear distance of not less than 3 inches between adjacent bolts.
  5. Provide full-length deformed rods (rebar anchor bolts) threaded at the top a distance not less than the projection above the indicated foundation. Threads and nuts shall be compatible with the bolt.
  6. Provide two nuts per bolt.
- B. Foundation Rotation: Design considering all loads indicated except the normal load case for a rotation of 1.5 degrees measured from the vertical axis of the shaft rotated at the indicated ground line.
1. Deflection Limits: Design such that the Normal load case does not deflect the structures beyond the limit of 1.5 degrees measured from the vertical axis of the shaft rotated at the indicated ground line.
- C. Distortion and Warp: Provide members and assemblies conforming to ASTM A384.
- D. Overlapping and Contacting Surfaces: Seal weld all surfaces to conform to ASTM A385.
- E. Vent and Drain Holes: Provide all fabricated assemblies with vent or drain holes to conform to ASTM A385.
- F. Slip-Joints:
1. Design the overlap length to be a minimum of 1.5 time the maximum inside diameter of the female section including allowances for fabrication tolerances.
  2. Joints shall be located a minimum of 25 feet above the indicated ground line on embedded structures.
- G. Bolts and Bolt Holes:
1. Member Connections: Fastener sizes and strengths shall be uniform for each structure type.
  2. Palnuts shall not be used.
  3. Punched Holes: Holes may be punched in steel plate of 13/16-inch thickness or less. Plate material greater than 13/16-inch shall be drilled or subpunched and reamed or cut with a machine guided oxygen torch.
  4. All holes shall be perpendicular to the member and be cylindrical, sharp and clean cut without excessive tear-outs or depressions due to punching.
  5. Holes adjacent to the gauge line of bends shall be made after bending to avoid distortion.
- H. Provide all necessary hardware and brackets required for complete erection of the structures including jacking lugs and lifting plates.
- I. Water Pockets: Design members, arm boxes and brackets to allow proper drainage.
- J. Grounding Attachments: Provide as indicated.
- K. Structure Identification Tag: Provide a steel plate permanently attached to each pole section with the following information (as a minimum) punched in 3/4-inch high letters on the plate:
- a. Manufacturer



- b. Bid No.
  - c. Jemez Mountains
  - d. Structure Number
  - e. Section Number (i.e. Section X of X)
  - f. Structure Type and Height
  - g. Section Length
  - h. Total Structure Weight
  - i. Section Weight
  - j. Shaft Moment Capacity at the Base (k-ft)
  - k. Date (Month & Year)
  - l. Manufacturer Ref./Dwg. No.
- L. Member Identification: Mark with punched or bead welded identifying numbers a minimum of 1-inch high.
- M. Welds:
- 1. Design to conform to AWS D1.1, SECTION 2.
  - 2. Design such that no field welding will be required.
  - 3. All welding materials shall conform to the latest revision of the "Electrode and Flux Specifications" set forth in ANSI/AWS D1.1.
  - 4. Welding shall be performed by the manual shielded metal-arc process, submerged-arc process, gas metal-arc process, or gas shielded flux-core-arc process.
    - a. Shield metal-arc welding shall be done with appropriate strength low hydrogen electrodes which have been properly conditioned in accordance with ANSI/AWS D1.1.
    - b. All preheating shall meet minimum recommended requirements by the steel manufacturer for each type and thickness of steel.
    - c. All welds shall be free from overlaps and cracks.
    - d. Longitudinal welds in female split joint areas and for a minimum of twelve (12) inches on either side of circumferential seam intersections or attachments intersections shall be 100% penetration with 100% fusion.
    - e. Longitudinal welds in other areas (e.g. pole shaft and arms) shall be 80% minimum penetration with 100% fusion to that depth in material 3/8" thick and less and shall be minimum 90% penetration with 100% fusion to that depth in material greater than 3/8 inch thick.
    - f. All circumferential welds shall be 100% penetration with 100% fusion for the entire length of the welds.
    - g. Base plate-to-pole shaft welds, arm base-to-arm welds, vangs-to-shaft welds, arm box joint welds, and all welds in major load carrying "tee" joints shall be 100% penetration with 100% fusion.
    - h. All fillet welds shall have 100% fusion throughout the entire cross section of the welds.
    - i. All undercutting shall conform to the following:
      - (1) Base plate to pole shaft welds, circumferential groove welds, longitudinal welds in a female telescoping joint, and arm shaft to pole connection plate welds, shall have no undercutting in excess of 0.008 inch with the exception that a 0.02 inch undercut is allowed for two (2) inches in any twelve inches of weld length.

- (2) Longitudinal welds in vang, pull-offs, seam welds of arms, step welds, ladder lugs and other areas shall have no undercutting in excess of 0.02 inch.
  - j. Porosity, fusion and inclusion type defects shall not exceed limits stated in ANSI/AWS D1.1.
  - k. All weld repair shall be in accordance with ANSI/AWS D1.1 and repaired welds shall be inspected per the same methods and procedures specified for the original welds.
  - l. Welding procedure and electrode selection shall be adjusted so as to provide a notch toughness of 15 ft-lbs absorbed energy at -20°F as measured by the charpy "V" notch test.
- 5. Mechanically remove all welding flux, slag and burrs prior to galvanizing.
- N. Interchangeable Sections: Sections for each structure shall fit and be interchangeable with all other structures of the same height and type.
- O. Tolerances: Variations from Design Dimensions shall not exceed the following:
  - 1. Anchor Bolt Cages: The maximum displacement of all bolts in the assembly from the centerline of the bolt holes shall not exceed 1/2 the distance between the edge of the bolts and the edge surface of the holes.
  - 2. Arms:
    - a. Length - plus or minus 1 inch.
    - b. Rise - plus or minus 1 inch in 10 feet.
    - c. Horizontal and vertical displacement at the outer end under the normal loading case - plus or minus 2 inches in 10 feet.
  - 3. Base Plate:
    - a. Eccentricity to center of shaft - plus or minus 1/8-inch.
    - b. Length and width - plus 1 inch or minus 1/4-inch.
  - 4. Holes:
    - a. Displacement - 1/2 the distance between the edge surface of the hole and the edge of the bolt.
    - b. Eccentricity - plus or minus 1/16-inch.
    - c. Size and shape after galvanizing:
      - (1) Joints:
        - (a) Punched holes - plus 1/16-inch larger than the design diameter.
        - (b) Drilled, reamed and subpunched holes - plus 1/8-inch larger than the design diameter.
      - (2) Anchor bolts holes - plus 3/8-inch larger than the nominal diameter of the bolt.
  - 5. Shafts:
    - a. Diameter - plus 1/4-inch and minus 0-inch in 12 inches.
    - b. Length (single pole) - minus 0.25 percent of the total design length.
    - c. Length (multipole) - minus 0.25 percent of the total design length for each shaft and plus 2 inches variation between shafts.
  - 6. Slip joint overlap - plus 10 percent and minus 0 percent of the design length.

## 2.06 SURFACE COATING:

- A. Hot-Dip Galvanizing:

1. Surface Preparation: Pre-clean utilizing a caustic bath, acid pickle and flux or mechanical method to remove mill scale, rust, grease or other deleterious substances. Protect against embrittlement using the method specified in ASTM A143.
  2. Members and Assemblies: Galvanize conforming to ASTM A123 after all bending, cutting, hole drilling, punching, welding and other fabricating operations are complete.
  3. Fasteners: Galvanize to conform to ASTM A153.
  4. Anchor Bolts: Galvanize the threaded portion of the bolt and 6 inches below the threads to conform to ASTM A123.
  5. Finish: Provide a galvanized coating that is continuous, adherent and free of uncoated spots, blisters, chemical flux and projections which will interfere with the intended use of the structure and assemblies. Holes shall be clean and free of superfluous spelter.
- B. Corrosion Resistant Coating:
1. Apply evenly from the as indicated on structure drawings.
  2. Surface Preparation: to manufacturer's recommendations.
  3. Thickness: to manufacturer's recommendations.

#### 2.07 TEST OF MATERIALS:

- A. Adequate tests and inspections shall be made to determine whether the material furnished conforms to the applicable standards.
- B. Ultrasonic inspection of all complete penetration welds and testing of the remainder of the welds shall be performed in accordance with NEMA TT1. All personnel performing nondestructive testing shall be qualified in accordance with the American Society for Non-Destructive Testing Recommended Practice No. SNT-TC-1A, Supplement A through E.
- C. All materials for base plates, shafts, crossarms, arms, and major attachments shall be tested as specified in NEMA TT1 for notch toughness on a heat lot basis.
- D. Each individual base plate shall be tested after welding in accordance with ASTM A578.
- E. Certified test reports, including complete test results for all structures shall be provided to the Engineer.
- F. When galvanized protective coating is used all weld tests shall be performed after galvanizing.

#### 2.08 PROOF-OF-FIT TEST:

- A. The Contractor shall perform Proof-of-Fit tests on structure types as directed by the Owner. Payment will be made at the Unit Prices in the Proposal. The Unit Price shall include Proof-of-Fit Tests for all structure types.
- B. Shafts having slip joints shall be mated and matched at the Contractor's plant to ensure that component parts fit to the tolerances required.

### PART 3 - EXECUTION

#### 3.01 DAMAGED AND MISFABRICATED MEMBERS:

- A. The Contractor shall provide field services of representatives, equipment and material to correct errors, discrepancies or omissions in the structures furnished as required by the Owner or Engineer.
- B. Misfabricated pieces shall be repaired or replaced by the Contractor at no additional cost to the Owner. Costs incurred due to delays caused by these misfabricated pieces shall be borne by the Contractor.

3.02 COATING REPAIR:

A. Galvanized Structures:

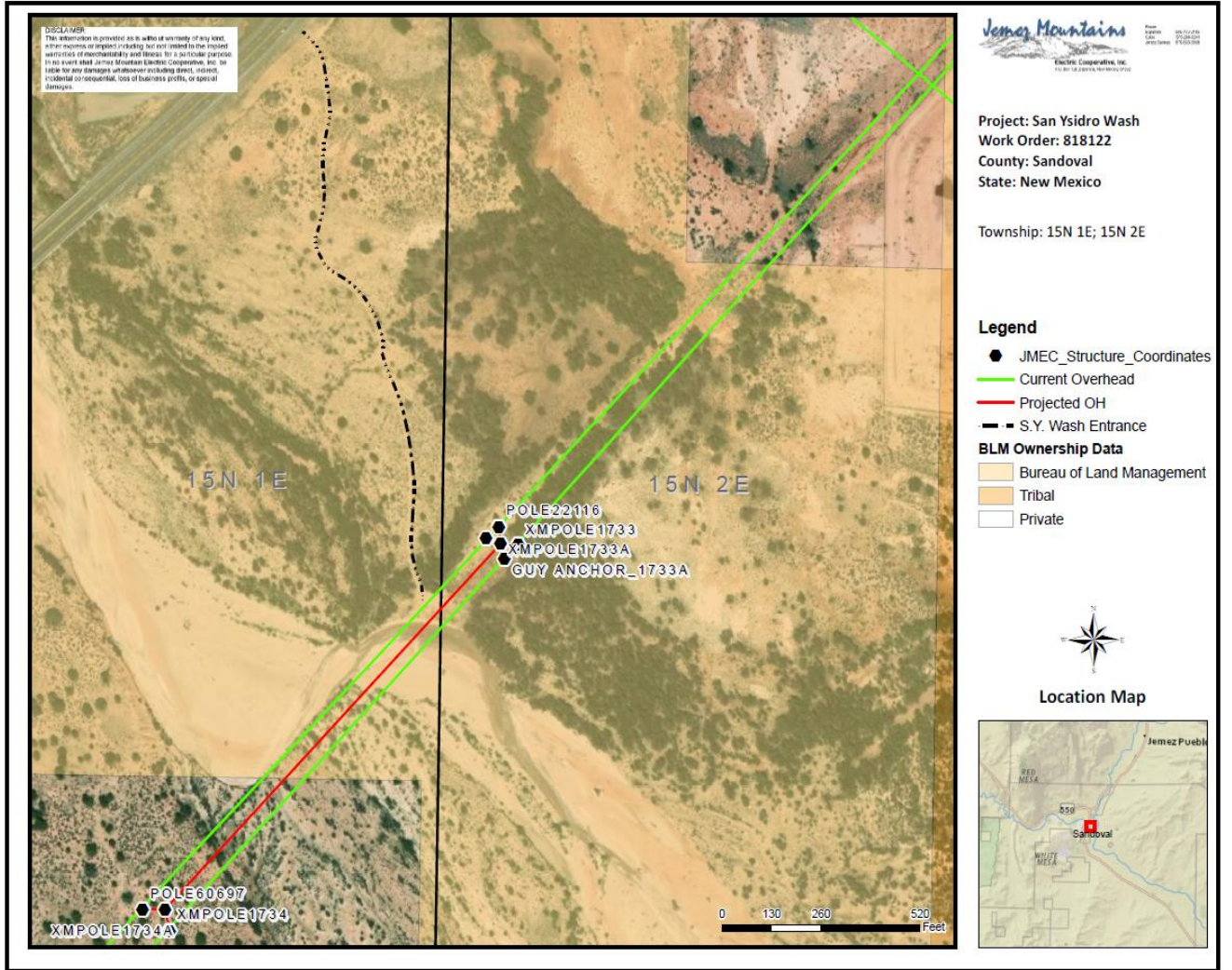
1. All rust shall be removed from damaged areas by wire brushing, chipping, or sand blasting.
2. Damaged areas shall be coated with a cold process galvanized coating as manufactured by ZRC Products Company (ZRC Cold Galvanizing Compound) or approved equal in accordance with the manufacturer's recommendations.

3.03 MEASUREMENT AND PAYMENT:

- A. Payments shall be as specified in the General Conditions.
- B. Payment for all Work associated with design, manufacture, testing and delivery of the materials f.o.b. to the specified location(s) shall be at the unit prices in the Proposal.
- C. Miscellaneous: Costs for performing all Work not included under item(s) B (and C) above shall be included in the total Contract Price.
- D. Payment shall be contingent upon:
  1. Receipt of an updated work progress report as specified in Division 1.
  2. Delivery of complete units as specified in this Section and undamaged.
  3. Receipt of invoices which include, as a minimum, the description, quantity and proposal price (including sales tax) of the unit for each item listed. Incomplete units delivered shall not be invoiced.

END OF SECTION 05200

# MAP For San Ysidro Transmission Line Relocation Project



### **Local Vendor Preference.**

The JMEC Board of Trustees has approved and supports a local vendor preference which applies to all competitive *bids* for equipment, materials, supplies and *contractual services* in which the *contractual services* are procured using a *bid* solicitation process based solely on price. No consideration *shall* be given to any other factors such as qualifications, references or experience in determining contract award, provided the vendor whose price is determined to be the lowest has met all the *bid specifications* and requirements. The preference does not apply to *public Works/construction* projects which *must* be awarded to the low responsive, responsible bidder to specification per Public Contract Code. A preference *will* apply to *professional service* contracts awarded by means of the *RFP* process.

Local Vendor *shall* mean any business which: Has had a fixed office or distribution point located in and having a street address within the JMEC service area for at least six months immediately prior to the issuance of the request for competitive *bids* by the purchasing agent, and;

Employs at least one full-time or two part-time employees whose primary residence is located within Jemez Mountains Electric Cooperative service area, or if the business has no employees, *shall* be at least fifty percent owned by one or more persons whose primary residence(s) is located within Jemez Mountains Electric Cooperative service area; and Will credit all sales taxes generated pursuant to the contract awarded as a result of the application of this local vendor preference to its business location in the Jemez Mountains Electric Cooperative service area.

If the low bidder is not a local vendor, any local vendor that submitted a *bid* that is within ten percent of the low *bid shall* have the option of submitting a new *bid* within 48 hours (not including weekends and holidays) of the time indicated in the *bid* documents of the *bid* opening. Such new *bids must* be in an amount less than or equal to the low *bid* announced by the Purchasing Agent. If the Purchasing Agent receives any new *bids* from local vendors who have the option of submitting new *bids* within said forty-eight (48) hour period, the Purchasing Agent *shall* award the contract to the local vendor submitting the lowest *bid*. If no new *bids* are received, the contract *shall* be awarded to the original low bidder as announced by the Purchasing Agent. If more than one new *bid* is received from local vendors, and there is a tie for the low *bid*, the contract *shall* be awarded to the local vendor whose original *bid* was the lowest.

### **Gratuities and Anti-kickback Provisions.**

Contractor shall not, under any circumstances, extend any gratuity or special favor to members of the JMEC Board of Trustees or employees that might be reasonably construed as an attempt to influence the recipients in the conduct of their official duties.