

# **Project Manual**

## **69 kV Transmission Line Reconstruction**



**Waverly Utilities**  
**Waverly, Iowa**

**October 2024**

**DGR Project No. 419619**



# Project Manual

## 69 kV Transmission Line Reconstruction

Waverly Utilities  
Waverly, Iowa

October 2024

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\_\_\_\_\_ Dennis Haselhoff, P.E. \_\_\_\_\_ on \_\_\_\_\_ October 18, 2024 \_\_\_\_\_

The official copy of this engineering document is on file at the office of the Owner.

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DGR Project No. 419619

**DGR Engineering**

1302 South Union Street  
Rock Rapids, IA  
(712) 472-2531  
dgr@dgr.com

# Project Manual

## 69 kV Transmission Line Reconstruction

**Waverly Utilities  
Waverly, Iowa**

Contact persons for this project are as follows:

**Owner's**

**Representative:**

Waverly Utilities  
1002 Adams Parkway  
Waverly, IA 50677  
Phone: 319-559-2000

Curt Atkins  
General Manager  
Email: [catkins@waverlyutilities.com](mailto:catkins@waverlyutilities.com)

**Engineer:**

DGR Engineering  
1302 S Union Street  
Rock Rapids, Iowa 51246  
Phone: 712-472-2531

Dennis Haselhoff, P.E.  
Project Manager  
Email: [dennis.haselhoff@dgr.com](mailto:dennis.haselhoff@dgr.com)

Dylan Schueler, P.E.  
Project Engineer  
Email: [dylan.schueler@dgr.com](mailto:dylan.schueler@dgr.com)

# Project Manual

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Waverly Utilities  
Waverly, Iowa

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# Category I

## Bidding Information and Contract Forms

- Notice to Bidders
- Notice of Public Hearing
- Instructions to Bidders
- Bid Bond
- Bidder Status Form
- Bid Form
- Performance Bond
- Payment Bond
- Agreement

## Miscellaneous Forms

- Notice of Award
- Notice to Proceed
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- Work Change Directive
- Change Order
- Field Order
- Waiver and Release of Lien
- Certificate of Contractor and Indemnity Agreement
- Engineer's Statement of Final Completion and Owner's Acceptance of Contract Construction
- Contractor's Receipt for Final Payment
- Iowa Contractor's Tax Statement
- Property Damage Release Form

## NOTICE TO BIDDERS

Notice is hereby given that sealed bids will be received by the Director, Operations of the Waverly Utilities, Waverly, Iowa, at 1002 Adams Parkway, Waverly, IA 50677 before 1:00 PM on November 20, 2024, for the 69 kV Transmission Line Reconstruction project. Bids received after the deadline for submission of bids as stated herein shall not be considered and shall be returned to the late bidder unopened. At said time and place, sealed bids will be publicly opened, read, and tabulated by the Director, Operations of Waverly Utilities. Bids will be considered by the Board of Trustees of Waverly Utilities at its meeting at 1:00 PM on December 10, 2024. The Board of Trustees may award a Contract at said meeting, or at such other time and place as shall then be announced.

The general nature of the work on which bids will be received consists of:

Reconstruction of approximately 0.82 mile of 69 kV transmission line.

The above work shall be in accordance with the specifications and proposed form of contract now on file in the offices of, Waverly Utilities, Waverly, Iowa, by this reference made a part hereof, as though fully set out and incorporated herein.

Complete digital project bidding documents are available at [www.questcdn.com](http://www.questcdn.com). You may download the digital plan documents at no charge by inputting the **Quest project # 9367780** on the website's Project Search page. Please contact QuestCDN.com at 952-233-1632 or [info@questcdn.com](mailto:info@questcdn.com) for assistance in free membership registration, downloading, and working with this digital project information. An optional paper set of the proposal forms and specifications for individual use may be obtained from the office of the Engineer, DGR Engineering, 1302 South Union Street, PO Box 511, Rock Rapids, IA 51246, telephone: 712-472-2531, fax: 712-472-2710, email: [dgr@dgr.com](mailto:dgr@dgr.com), no deposit required.

Each bid shall be made out on a blank form furnished by the Waverly Utilities and must contain bid security as required by Iowa Code Section 26.8. The bidder's security shall be in the form of either (1) a cashier's check or certified check drawn on a state chartered or federally chartered bank, in an amount equal to ten (10) percent of the amount of the Bid; or (2) a certified share draft drawn on a state-chartered or federally chartered credit union, in an amount equal to ten (10) percent of the amount of the Bid; or (3) a Bid Bond executed by a corporation authorized to contract as a surety in the State of Iowa, in an amount equal to ten (10) percent of the amount of the Bid. The bid security shall be made payable to Waverly Utilities. The bid security must not contain any conditions either in the body of or as an endorsement thereon. Such bid security shall be forfeited to the Waverly Utilities as liquidated damages in the event the successful bidder fails or refuses to enter into a contract within fifteen (15) days after the award of the contract and post satisfactory Performance and Payment Bonds.

The sealed envelope containing the bid shall be clearly marked "BID ENCLOSED – 69 KV TRANSMISSION LINE RECONSTRUCTION" on the outside of the envelope.

Each successful Bidder will be required to furnish a corporate Surety Bond in an amount equal to one hundred percent (100%) of its Contract price. Said Bond shall be issued by a responsible Surety approved by Waverly Utilities and shall guarantee the faithful performance of the Contract and the terms and conditions therein contained and shall guarantee the prompt payment of all material and labor, and protect and save harmless Waverly Utilities from claims and damages of any kind cause by the operations of the Contract.

Payment to the Contractor for said construction work will be made from cash on hand or such other funds that legally may be used or obtained for such purposes. Payments will be made on the basis of estimated prepared by the Contractor and approved by the Engineer, solely for the purpose of payment; approval by





## **INSTRUCTIONS TO BIDDERS**

### **ARTICLE 1 - DEFINED TERMS**

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office* - The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.
  - B. *Successful Bidder* - The responsible Bidder submitting a responsive Bid to whom OWNER (on the basis of OWNER's evaluations as hereinafter provided) makes an award.

### **ARTICLE 2 - COPIES OF BIDDING DOCUMENTS**

- 2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Notice to Bidders, may be obtained from the Issuing Office.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license or grant for any other use.

### **ARTICLE 3 - QUALIFICATIONS OF BIDDERS**

- 3.01 To demonstrate Bidder's qualifications to perform the Work, prior to award, within five days of Owner's request, the apparent lowest Bidder shall submit written evidence such as financial data, previous experience, present commitments, statement of compliance with any statutory requirements, and such other data as may be deemed appropriate by OWNER for making a complete evaluation.
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

**ARTICLE 4 - SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE**

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

4.02 *Existing Site Conditions*

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
1. The Supplementary Conditions identify:
    - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
    - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
    - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
    - d. Technical Data contained in such reports and drawings.
  2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
  3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and

data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others. Information or data regarding Underground Facilities may be missing or incomplete. Location and avoidance of underground facilities is a part of the Work as required by the Supplementary Conditions.

- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

#### 4.03 *Site Visit and Testing by Bidders*

On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

- 4.04 Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

### **ARTICLE 5 - BIDDER'S REPRESENTATIONS**

- 5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;



- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

## **ARTICLE 6 - NOT USED**

## **ARTICLE 7 - INTERPRETATIONS AND ADDENDA**

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties

recorded by Engineer as having received the Bidding Documents. Questions received less than seven days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents.

## **ARTICLE 8 - BID SECURITY**

8.01 Each Bid must be accompanied by Bid security made payable to Owner in an amount of ten percent (10%) of the Bidder's maximum Bid price if in the form of a certified or bank check, share draft or a Bid Bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or the expiration of the Bid time for acceptance as specified on the Bid Form, whereupon Bid security furnished by such Bidders will be released on request.

8.03 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be released on request within seven days after the Bid opening.

## **ARTICLE 9 - CONTRACT TIMES**

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

## **ARTICLE 10 - LIQUIDATED DAMAGES**

10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

## **ARTICLE 11 - SUBSTITUTE AND "OR-EQUAL" ITEMS**

11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each such request shall comply with the requirements of Paragraphs

7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer's decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

## **ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS AND OTHERS**

- 12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.
- 12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 7.06 of the General Conditions.
- 12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

## **ARTICLE 13 - PREPARATION OF BID**

- 13.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
  - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
  - C. Where the Bid Form includes more than one item, the Bidder may attach a substitute Proposal Form printed by a computer in lieu of completing the printed

Proposal Form. If a substitute Proposal Form is used, it shall be attached to the back side of the printed Proposal Form. Such computer printed substitute Proposal Form shall include the following at the top of each page:

1. Project Title
2. Letting Date
3. Bidder's Name

- 13.02 The substitute computer printed Proposal Form shall have column headings that include the Item Number, Number of Units, Item Description, Unit Bid Price, Amount Bid for each item, Total Gross Sum Bid below the last bid item and bidder's name, signature in ink and title at the end of the Proposal Form. The signature on the substitute computer printed Proposal Form shall be the same as that on the bound Bid Form. The total gross sum bid shall also be written in ink in the space provided in the bound Bid Form. In case of a discrepancy between the item number, item description, and/or quantity shown in the bound Bid Form and those shown in the substitute computer printed Proposal Form, the bid item description and/or quantity shown in the bound Bid Form shall govern. The unit bid price shown on the substitute computer printed Proposal Form shall govern whether or not the amount shown is correct. The substitute Proposal Form page size and size of printed characters shall be approximately the same as the bound Bid Form. Solid lines for separating may be arranged either vertically or horizontally on the substitute Proposal Form. Pages must be numbered by page number of the total pages (Page 1 of 4). Item numbers must follow the Item numbers on the Bid Form. Any abnormalities which are not waived by the Owner as a technicality will result in rejection of the bid.
- 13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. If required by State where work is to be performed, the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown.
- 13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.
- 13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.06 A Bid by an individual shall show the Bidder's name and official address.
- 13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.08 All names shall be typed or printed in ink below the signatures.
- 13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

- 13.10 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number, if any, for the state of the Project, shall also be shown on the Bid Form.

#### **ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS**

The Bid shall be furnished on the basis (lump sum or unit price) as indicated on the Bid Form.

##### *14.01 Lump Sum*

- A. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.

##### *14.02 Unit Price*

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

#### **ARTICLE 15 - SUBMITTAL OF BID**

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy each of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with all attachments listed in Article 7 of the Bid.
- 15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Notice to Bidders and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly

marked on the outside with the notation "BID ENCLOSED." Whether using the mail, personal delivery, or some other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the place and prior to that time indicated in the Notice to Bidders. Note that the location for the Bid opening may be a rural location not reliably covered by the "delivery time guarantee" of various delivery services. A mailed Bid shall be addressed to the Owner at the address specified by the Notice to Bidders.

15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

15.04 **Two (2) copies of the Bid Form shall be submitted.**

15.05 Address for submission of bids is as follows:

Waverly Utilities  
Attn: Curt Atkins  
1002 Adams Parkway  
Waverly, IA 50677

#### **ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID**

16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.

16.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work. This provision to withdraw a Bid without forfeiting the Bid Security does not apply to Bidder's errors in judgment in preparing the Bid

#### **ARTICLE 17 - OPENING OF BIDS**

17.01 Bids will be opened at the time and place indicated in the Notice to Bidders and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

## **ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE**

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

## **ARTICLE 19 - EVALUATION OF BIDS AND AWARD OF CONTRACT**

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.
- 19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- 19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work in accordance with the Contract Documents. If the Contract is to be awarded, Owner will award the Contract to the lowest responsive, responsible Bidder whose Bid is in the best interests of the Project.
- 19.06 The Owner will, in evaluating Bids, consider the requirements of the resident bidder preference law, and allow such preferences to resident bidders as are required to be allowed under State Law. Bidder shall, when submitting a Bid, furnish an executed Bidder Status Form for the Owner to use when applying the preference law. Failure to submit a fully completed Bidder Status Form with the bid may result in the bid being deemed nonresponsive and rejected.

## **ARTICLE 20 - BONDS AND INSURANCE**

20.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

## **ARTICLE 21 - SIGNING OF AGREEMENT**

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

## **ARTICLE 22 - SALES AND USE TAXES**

22.01 The unit prices for construction units in this Proposal shall be deemed to include provisions for the payment of all moneys which will be payable by the Bidder or the Owner in connection with the construction of the project on account of taxes imposed by any taxing authority upon the sale, purchase or use of materials, supplies, labor, and equipment to be incorporated in the project as part of such construction units. The Bidder shall furnish to the appropriate taxing authorities, all required information and reports pertaining to materials and services used in the construction of the project.

The Contractor shall pay sales and use taxes to the State of Iowa, for all materials incorporated in the work. The Contractor shall, at the conclusion of the project, furnish the Owner with a complete and accurate schedule of all purchases of equipment used in the project, along with the associated taxes paid on this equipment. See SC-7.09.A.1 for additional requirements.

## **ARTICLE 23 - RETAINAGE**

23.01 Retainage on the Project shall follow the requirements of Iowa Code Chapter 573.

## **ARTICLE 24 - OWNER-FURNISHED MATERIAL**

24.01 The Owner will supply certain materials for the project. The Contractor shall become familiar with the quantity, size, and type of Owner-furnished material, including delivery schedule and conditions.



## BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

---

BIDDER (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

### BID

Bid Due Date:

Description (*Project Name— Include Location*):

### BOND

Bond Number:

Date:

Penal sum \_\_\_\_\_

\$ \_\_\_\_\_

(Words)

(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

**BIDDER**

**SURETY**

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Seal)

Bidder's Name and Corporate Seal

Surety's Name and Corporate Seal

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

Signature

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

Signature (Attach Power of Attorney)

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

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Attest: \_\_\_\_\_

Signature

Attest: \_\_\_\_\_

Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

*Note: Addresses are to be used for giving any required notice.*

*Provide execution by any additional parties, such as joint venturers, if necessary.*

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
  - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
  - 3.2 All Bids are rejected by Owner, or
  - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

# Bidder Status Form

## To be completed by all bidders

## Part A

Please answer "Yes" or "No" for each of the following:

- Yes  No My company is authorized to transact business in Iowa.  
*(To help you determine if your company is authorized, please review the worksheet on the next page).*
- Yes  No My company has an office to transact business in Iowa.
- Yes  No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- Yes  No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- Yes  No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

## To be completed by resident bidders

## Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

*You may attach additional sheet(s) if needed.* City, State, Zip: \_\_\_\_\_

## To be completed by non-resident bidders

## Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers?  Yes  No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

*You may attach additional sheet(s) if needed.*

## To be completed by all bidders

## Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Firm Name: \_\_\_\_\_

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

**You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156. This form has been approved by the Iowa Labor Commissioner.**

## Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- Yes  No My business is currently registered as a contractor with the Iowa Division of Labor.
- Yes  No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- Yes  No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- Yes  No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- Yes  No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.
- Yes  No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- Yes  No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- Yes  No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.
- Yes  No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- Yes  No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- Yes  No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

**BID FORM**

**ARTICLE 1 – BID RECIPIENT**

1.01 This Bid is submitted to:

Waverly Utilities  
1002 Adams Parkway  
Waverly, IA 50677

1.02 This Bid is submitted by:

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

1.03 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

**ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS**

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 30 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

**ARTICLE 3 – BIDDER’S REPRESENTATIONS**

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied, if any are available, all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

## **ARTICLE 4 – BIDDER’S CERTIFICATION**

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
  - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
  - 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
  - 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
  - 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

## **ARTICLE 5 – BASIS OF BID**

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

**BID FORM**  
**WAVERLY UTILITIES**  
**WAVERLY, IOWA**

The bid pricing shall be made on a unit basis so that Engineer may specify any combination of construction units deemed necessary. The various construction units included in this bid and upon which quotations are required are defined by symbols and descriptions listed in Section 01 2000 of the Technical Specifications.

Unit	Description	Unit Price				Extended Price
		Est # of Units	Labor	Materials	Labor & Materials	
40(1)	Wood Pole, Length 40', Class 1 (ea.)	3				
40(H1)	Wood Pole, Length 40', Class H1 (ea.)	3				
45(1)	Wood Pole, Length 45', Class 1 (ea.)	2				
45(H1)	Wood Pole, Length 45', Class H1 (ea.)	2				
LWP-75(H2)	Laminated Wood Pole, Length 75', Class H2 (ea.)	1				
LWP-75(H3)	Laminated Wood Pole, Length 75', Class H3 (ea.)	1				
LWP-80(H1)	Laminated Wood Pole, Length 80', Class H1 (ea.)	2				
LWP-80(H2)	Laminated Wood Pole, Length 80', Class H2 (ea.)	2				
LWP-85(H2)	Laminated Wood Pole, Length 85', Class H2 (ea.)	2				
LWP-85(H3)	Laminated Wood Pole, Length 85', Class H3 (ea.)	1				
LWP-90(H3)	Laminated Wood Pole, Length 90', Class H3 (ea.)	2				
LWP-95(H2)	Laminated Wood Pole, Length 95', Class H2 (ea.)	1				
LWP-100(H4)	Laminated Wood Pole, Length 100', Class H4 (ea.)	2				
TM-1	69 kV Phase Conductor Deadend, Quadrant, 1Ø (ea.)	12				
TM-2	Static, Deadend Assembly, Single (ea.)	6				
TP-69	69 kV Tangent, Horizontal Line Post, 3Ø (ea.)	7				
TP-69B	69 kV Tangent, Stacked, Horizontal Line Post, 3Ø (ea.)	6				
TS-4G	69 kV Vertical, Medium Angle, 3Ø(ea.)	1				
T2-3/0 ACSR	Phase Conductor, T2-3/0 ACSR, Pigeon (Mft.)	13				
3/8" EHS	Shield Wire, 3/8" EHS (Mft.)	4.34				
E3-3	Insulated Down Guy, 3/8" EHS, Single (ea.)	21				
E3-3D	Insulated Double Down Guy, 3/8" EHS, Single (ea.)	1				
D6	Screw Anchor, Triple Helix (ea.)	20				
E5	5' Anchor Extension (ea.)	40				
RC	Remove Conductor (Mft.)	17.34				
RCL	Remove Clamp (ea.)	18				
RP	Remove Pole & Pole Top Assembly (ea.)	22				



**BID FORM**  
**WAVERLY UTILITIES**  
**WAVERLY, IOWA**

The bid pricing shall be made on a unit basis so that Engineer may specify any combination of construction units deemed necessary. The various construction units included in this bid and upon which quotations are required are defined by symbols and descriptions listed in Section 01 2000 of the Technical Specifications.

Unit	Description	Unit Price				Extended Price
		Est # of Units	Labor	Materials	Labor & Materials	
XC-15-(4)	Transfer (4) 15 kV Conductor (ea.)	25				
XF	Transfer Fiber (ea.)	46				
XFDE	Transfer Fiber Deadend (ea.)	6				
XT-(3)	Transfer Three-Phase Transformer Bank (ea.)	1				
XRP-(3)	Transfer Three-Phase Primary Riser (ea.)	3				
XRP-SEC	Transfer Secondary Riser (ea.)	1				
WPG	Wood Pole Ground (ea.)	24				
LMS	Lighted Marking Sphere (ea.)	4				
NMS	Non-Lighted Marking Sphere (ea.)	4				
LC	Line Clearance (as req'd)	1				
TC	Traffic Control (as req'd)	1				
U1	Mobilization (as req'd)	1				
V1	Construction Allowance (as req'd)	75,000	\$ -	\$ -	\$ 1.00	\$ 75,000.00

**TOTAL (BASE BID): \$**

## **ARTICLE 6 – TIME OF COMPLETION**

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

## **ARTICLE 7 – ATTACHMENTS TO THIS BID**

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security in the form of \_\_\_\_\_;
  - B. List of proposed subcontractors
  - C. List of proposed suppliers
  - D. List of project references

## **ARTICLE 8 – DEFINED TERMS**

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

**ARTICLE 9 – BID SUBMITTAL**

BIDDER: *[Indicate correct name of bidding entity]*

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

*[Signature]* \_\_\_\_\_

*[Printed name]* \_\_\_\_\_

*(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: \_\_\_\_\_

*[Signature]* \_\_\_\_\_

*[Printed name]* \_\_\_\_\_

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

Submittal Date: \_\_\_\_\_

Address for giving notices:

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

Telephone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Contact Name and e-mail address: \_\_\_\_\_

\_\_\_\_\_

Bidder's License No.: \_\_\_\_\_

*(where applicable)*

## PERFORMANCE BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:

### CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

### BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form:  None  See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

### CONTRACTOR AS PRINCIPAL

### SURETY

\_\_\_\_\_  
Contractor's Name and Corporate Seal *(seal)*

\_\_\_\_\_  
Surety's Name and Corporate Seal *(seal)*

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

By: \_\_\_\_\_  
Signature *(attach power of attorney)*

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

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

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

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:
  - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
  - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
  - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
  - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
  - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
  - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
  - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
    - 5.4.1. After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
    - 5.4.2. Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
  - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
  - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.
12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
14. Definitions
  - 14.1. Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
  - 14.2. Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
  - 14.3. Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
  - 14.4. Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
  - 14.5. Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
16. Modifications to this Bond are as follows:

**PAYMENT BOND**

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*:

**CONSTRUCTION CONTRACT**

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

**BOND**

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form:  None  See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

**CONTRACTOR AS PRINCIPAL**

**SURETY**

\_\_\_\_\_ *(seal)*

\_\_\_\_\_ *(seal)*

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

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

**By:** \_\_\_\_\_  
 Signature *(attach power of attorney)*

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

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

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Title

**Attest:** \_\_\_\_\_  
 Signature

**Attest:** \_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Title

\_\_\_\_\_  
 Title

**Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.**

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
  - 5.1. Claimants who do not have a direct contract with the Contractor,
    - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
    - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
  - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
  - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - 7.2. Pay or arrange for payment of any undisputed amounts.
  - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. **Definitions**
  - 16.1. **Claim:** A written statement by the Claimant including at a minimum:
    1. The name of the Claimant;
    2. The name of the person for whom the labor was done, or materials or equipment furnished;
    3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
    4. A brief description of the labor, materials, or equipment furnished;
    5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
    6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
    7. The total amount of previous payments received by the Claimant; and
    8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
  - 16.2. **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
  - 16.3. **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
  - 16.4. **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
  - 16.5. **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.
18. Modifications to this Bond are as follows:

AGREEMENT  
BETWEEN OWNER AND CONTRACTOR  
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between Waverly Utilities – Waverly, Iowa (“Owner”) and \_\_\_\_\_ (“Contractor”).

Owner and Contractor hereby agree as follows:

**ARTICLE 1 – WORK**

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: **69 kV Transmission Line Reconstruction**

**ARTICLE 2 – THE PROJECT**

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: **69 kV Transmission Line Reconstruction**

**ARTICLE 3 – ENGINEER**

3.01 The Project has been designed by DGR Engineering.

3.02 The Owner has retained DGR Engineering (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

**ARTICLE 4 – CONTRACT TIMES**

4.01 *Time of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

A. The Work will be substantially completed on or before **November 7, 2025**, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **December 31, 2025**.



#### 4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. Substantial Completion: Contractor shall pay Owner \$500.00 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.
  2. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$500.00 for each day that expires after such time until the Work is completed and ready for final payment.
  3. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

#### **ARTICLE 5 – CONTRACT PRICE**

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
- A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.
  - B. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the Contractor's Bid. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 10.06 of the General Conditions. Unit prices have been computed as provided in Paragraph 13.03 of the General Conditions.

#### **ARTICLE 6 – PAYMENT PROCEDURES**

##### 6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

## 6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 1<sup>st</sup> day of each month during performance of the Work as provided in Paragraph 6.02.A.1. below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract
- a. 95 percent of Work completed (with the balance being retainage);  
and
- b. 0 percent (with the balance being retainage) of cost of materials and equipment not incorporated in the Work (but delivered, suitably stored, and accompanied by documentation satisfactory to Owner.
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to ninety-five percent (95%) of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E. of the General Conditions, and less two hundred percent (200%) of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

## 6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as required by Iowa law..

## **ARTICLE 7 – INTEREST**

- 7.01 All amounts not paid when due shall bear interest at the rate of seven percent (7%) per annum, or the maximum rate allowed by Iowa law, whichever is less.

## **ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS**

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:

- A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
- B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1.) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2.) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings. If no such reports have been made available to Contractor, Contractor agrees that none are required from Owner.
- E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1.) the cost, progress, and performance of the Work; (2.) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3.) Contractor's safety precautions and programs.
- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

## ARTICLE 9 – CONTRACT DOCUMENTS

### 9.01 *Contents*

- A. The Contract Documents consist of the following:
1. Notice to Bidders
  2. Instructions to Bidders
  3. This Agreement (pages A-1 to **A-8**, inclusive).
  4. Performance Bond (pages 1 to 2, inclusive).
  5. Payment Bond (pages 1 to 2, inclusive).
  6. General Conditions (pages 1 to 65, inclusive).
  7. Supplementary Conditions (pages SC-1 to **SC-9**, inclusive).
  8. Specifications as listed in the table of contents of the Project Manual.
  9. Drawings (not attached but incorporated by reference) consisting of the Drawings listed on the attached sheet index.
  10. Addenda (numbers \_\_\_\_ to \_\_\_\_, inclusive).
  11. Exhibits to this Agreement (enumerated as follows):
    - a. Contractor's Bid (pages BF-1 to **BF-7**, inclusive).
  12. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
    - a. Notice to Proceed.
    - b. Work Change Directives.
    - c. Change Orders.
    - d. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

## **ARTICLE 10 – MISCELLANEOUS**

### *10.01 Terms*

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

### *10.02 Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

### *10.03 Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

### *10.04 Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

### *10.05 Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:

1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

#### 10.06 Multiple Parts; Copies Same as Originals; Electronic and Scanned Signatures Permitted

- A. This Agreement may be executed in multiple parts and in duplicates. Any duplicates of this Agreement shall each be given full effect.
- B. Any photocopies, electronic copies, or scanned copies of this Agreement shall be given full force and effect as the original(s).
- C. Given the distance between the parties and the time-sensitive nature of this Agreement, the parties stipulate that each party and/or their individual representatives may execute this Agreement using an electronic or scanned signature. Such electronic or scanned signatures shall be given full effect by the parties.

#### 10.07 *Other Provisions*

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on \_\_\_\_\_ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

**Waverly Utilities**

Sign: \_\_\_\_\_

Sign: \_\_\_\_\_

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

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

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

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

*(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

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

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

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

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

Address for giving notices:

Address for giving notices:

**1002 Adams Parkway**

**Waverly, IA 50677**

License

No.: \_\_\_\_\_

*(where applicable)*

*(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)*

## **Miscellaneous Forms**



## NOTICE OF AWARD

Date of Issuance: \_\_\_\_\_  
Owner: \_\_\_\_\_ Owner's Contract No.: \_\_\_\_\_  
Engineer: **DGR Engineering** Engineer's Project No.: \_\_\_\_\_  
Project: \_\_\_\_\_ Contract Name: \_\_\_\_\_  
Bidder: \_\_\_\_\_  
Bidder's Address: \_\_\_\_\_

### TO BIDDER:

You are notified that Owner has accepted your Bid dated \_\_\_\_\_, 20\_\_ for the above Contract, and that you are the Successful Bidder and are awarded a Contract for: **Total Work**.

The Contract Price of the awarded Contract is: \$ \_\_\_\_\_ [Contract is subject to unit prices]

[  ] unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

Drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver with the executed Agreement(s) the Contract security **Performance and Payment Bonds** and insurance documentation as specified in the Instructions to Bidders (Article 20), General Conditions (Articles 2 and 6) and the Supplementary Conditions.
2. Other conditions precedent (if any): **Insurance Certificates – Including additional insureds as specified in the Supplementary Conditions**

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner: \_\_\_\_\_  
\_\_\_\_\_  
Authorized Signature  
Sign: \_\_\_\_\_  
Print: \_\_\_\_\_  
Title: \_\_\_\_\_

Copy: **DGR Engineering**

---

**NOTICE TO PROCEED**

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Owner: \_\_\_\_\_ Owner's Contract No.: \_\_\_\_\_  
Contractor: \_\_\_\_\_ Contractor's Project No.: \_\_\_\_\_  
Engineer: **DGR Engineering** \_\_\_\_\_ Engineer's Project No.: \_\_\_\_\_  
Project: \_\_\_\_\_ Effective Date of Contract: \_\_\_\_\_  
Contract Name: \_\_\_\_\_

---

**TO CONTRACTOR:**

Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the date of Substantial Completion is \_\_\_\_\_, and the date of readiness for final payment is \_\_\_\_\_.

Before starting any Work at the Site, Contractor must comply with the following:

- 1. Attend Preconstruction Meeting**
- 2. Provide Shop Drawings for Engineer Review**

---

Owner:

Authorized Signature:

Sign: \_\_\_\_\_

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

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

Date Issued: \_\_\_\_\_

Copy: **DGR Engineering**

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

Owner: _____	Owner's Contract No.: _____
Contractor: _____	Contractor's Project No.: _____
Engineer: <u>DGR Engineering</u>	Engineer's Project No.: _____
Project: _____	

**This [preliminary] [final] Certificate of Substantial Completion applies to:**

All Work  The following specified portions of the Work:

**Date of Substantial Completion**

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's Responsibilities:  None  
 As follows:

Amendments to Contractor's Responsibilities:  None  
 As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

<b>EXECUTED BY ENGINEER:</b>	<b>RECEIVED:</b>	<b>RECEIVED:</b>
By: _____ Engineer (Authorized Signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Print: _____	Print: _____	Print: _____
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Project: \_\_\_\_\_  
 Owner: \_\_\_\_\_ Owner's Contract No.: \_\_\_\_\_  
 Engineer: DGR Engineering Engineer's Project No.: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Contractor's Project No.: \_\_\_\_\_

**Contractor is directed to proceed promptly with the following change(s):**

Description: \_\_\_\_\_

Attachments (list documents supporting change): \_\_\_\_\_

**Purpose for Work Change Directive:**

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to (check one or both of the following):

- Non-agreement on pricing of proposed change.
- Necessity to proceed for schedule or other project reasons.

**Estimated Change in Contract Price and Contract Times (non-binding, preliminary):**

Contract Price: \$ \_\_\_\_\_ [increase] [decrease].

Contract Time: \_\_\_\_\_ days [increase] [decrease].

**Basis of estimated change in Contract Price:**

- Lump Sum
- Unit Price
- Cost of Work
- Other

<p><b>RECOMMENDED:</b></p> <p>By: _____  <small>Engineer (Authorized Signature)</small></p> <p>Print: _____        Title: _____        Date: _____</p>	<p><b>AUTHORIZED BY:</b></p> <p>By: _____  <small>Owner (Authorized Signature)</small></p> <p>Print: _____        Title: _____        Date: _____</p>	<p><b>RECEIVED:</b></p> <p>By: _____  <small>Contractor (Authorized Signature)</small></p> <p>Print: _____        Title: _____        Date: _____</p>
--	---	---

Approved by Funding Agency (if applicable):

By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print: \_\_\_\_\_ Title: \_\_\_\_\_

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Project: \_\_\_\_\_  
 Owner: \_\_\_\_\_ Owner's Contract No.: \_\_\_\_\_  
 Engineer: DGR Engineering Date of Contract: \_\_\_\_\_  
 Contractor: \_\_\_\_\_ Engineer's Project No.: \_\_\_\_\_

**The Contract Documents are modified as follows upon execution of this Change Order:**

Description: \_\_\_\_\_

Attachments (list documents supporting change): \_\_\_\_\_

**CHANGE IN CONTRACT PRICE:**

Original Contract Price:  
 \$ \_\_\_\_\_

[Increase] [Decrease] from Previously Approved  
 Change Orders No. \_\_\_\_\_ to No. \_\_\_\_\_:

\$ \_\_\_\_\_

Contract Price Prior to this Change Order:

\$ \_\_\_\_\_

[Increase] [Decrease] of this Change Order:

\$ \_\_\_\_\_

Contract Price Incorporating this Change Order:

\$ \_\_\_\_\_

**CHANGE IN CONTRACT TIMES:**

Original Contract Times:  Working Days  Calendar Days

Substantial Completion (days or date): \_\_\_\_\_

Ready for Final Payment (days or date): \_\_\_\_\_

[Increase] [Decrease] from Previously Approved Change Orders  
 No. \_\_\_\_\_ to No. \_\_\_\_\_:

Substantial Completion (days or date): \_\_\_\_\_

Ready for Final Payment (days or date): \_\_\_\_\_

Contract Times Prior to this Change Order:

Substantial Completion (days or date): \_\_\_\_\_

Ready for Final Payment (days or date): \_\_\_\_\_

[Increase] [Decrease] of this Change Order:

Substantial Completion (days or date): \_\_\_\_\_

Ready for Final Payment (days or date): \_\_\_\_\_

Contract Times with all Approved Change Orders:

Substantial Completion (days or date): \_\_\_\_\_

Ready for Final Payment (days or date): \_\_\_\_\_

**RECOMMENDED:**

By: \_\_\_\_\_  
Engineer (Authorized Signature)

Print: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

**ACCEPTED:**

By: \_\_\_\_\_  
Owner (Authorized Signature)

Print: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

**ACCEPTED:**

By: \_\_\_\_\_  
Contractor (Authorized Signature)

Print: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Approved by Funding Agency (if applicable):

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

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

Date of Issuance: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Project: \_\_\_\_\_

Owner: \_\_\_\_\_ Owner's Contract No.: \_\_\_\_\_

Engineer: DGR Engineering Engineer's Project No.: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contractor's Project No.: \_\_\_\_\_

Contractor is hereby directed to promptly execute this Field Order, issued in accordance with General Conditions Paragraph 11.01, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference: \_\_\_\_\_  
Specification(s) Drawing(s) / Detail(s)

Description: \_\_\_\_\_

Attachments (list documents supporting change): \_\_\_\_\_

ISSUED:		RECEIVED:	
By: _____	By: _____	By: _____	By: _____
Engineer (Authorized Signature)		Contractor (Authorized Signature)	
Print: _____	Print: _____	Print: _____	Print: _____
Title: _____	Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____	Date: _____

**Copy to: Owner**

# WAIVER AND RELEASE OF LIEN

WHEREAS, the undersigned, \_\_\_\_\_  
NAME OF MANUFACTURER, MATERIALMAN OR SUBCONTRACTOR

has furnished to \_\_\_\_\_ the following:

\_\_\_\_\_ for use in the construction of a  
KIND OF MATERIAL AND SERVICES FURNISHED

project belonging to \_\_\_\_\_, and designated as, \_\_\_\_\_.

NOW, THEREFORE, the undersigned, \_\_\_\_\_  
NAME OF MANUFACTURER, MATERIALMAN OR SUBCONTRACTOR

for and in consideration of \$ \_\_\_\_\_, and other good and valuable consideration, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all liens, or right to or claim of lien, on the above described project and premises, under any law, common or statutory, on account of labor or materials, or both, heretofore or hereafter furnished by the undersigned to or for the account of said \_\_\_\_\_ for said project.

Given under my (our) hand(s) and seal(s) this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
NAME OF MANUFACTURER, MATERIALMAN OR SUBCONTRACTOR

Sign: \_\_\_\_\_

PRESIDENT, VICE PRESIDENT, PARTNER OR OWNER, OR, IF SIGNED BY  
OTHER THAN ONE OF FOREGOING, ACCOMPANIED BY POWER OF  
ATTORNEY SIGNED BY ONE OF THE FOREGOING IN FAVOR OF THE  
SIGNER (USE DESIGNATION APPLICABLE)

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

## CERTIFICATE OF CONTRACTOR AND INDEMNITY AGREEMENT

\_\_\_\_\_, certifies that he/she is the \* \_\_\_\_\_  
REPRESENTATIVE NAME TITLE OR DESIGNATION  
 of \_\_\_\_\_, the Contractor, in a contract No. \_\_\_\_\_ dated  
 \_\_\_\_\_, 20 \_\_, entered into between the Contractor and \_\_\_\_\_  
 the Owner, for the construction of \_\_\_\_\_: and that he/she is authorized to and  
 does make this Certificate and Indemnity Agreement on behalf of the Contractor in order to induce the  
 Owner to make payment to the Contractor, in accordance with the provisions of the Contract.

Undersigned further certifies that:

1. The Project has been completed in accordance with provisions of the Construction Contract; provided however, that acceptance by the Owner shall not be deemed to relieve the Contractor of his obligations contained in the Construction Contract with respect to defective workmanship and materials. The Contractor shall provide a warranty of materials and workmanship as outlined and provided in the Contract Documents.
2. All persons who have finished labor in connection with the Project have been paid in full at hourly wage rates not less than those, if any, set forth in the Construction Contract; that all manufacturers, materialmen and subcontractors which furnished any materials or services, or both, for the Project have been paid in full; that no lien has been filed against the Project and no person has any right to claim any lien against the Project.
3. That the Contractor has delivered to the Owner duplicate releases of liens executed by all manufacturers, materialmen and subcontractors that furnished materials or services for the project as follows:

Name	Kind of Material and Services
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



If the Owner pays the Contractor the total amount due under the Contract, which the Contractor agrees is \$\_\_\_\_\_, including \$\_\_\_\_\_ for \*\* state sales and use taxes paid by the Contractor, the Contractor will indemnify and hold harmless and does hereby undertake and agree to indemnify and hold harmless the Owner, including the defense of any suit, from any claim, demand or lien arising out of the acts of the Contractor in the performance of the Contract for which the Contractor is liable and which may have been or may be filed against the Owner.

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINT

- \* President, Vice President, Partner or Owner, or, if undersigned is other than one of the foregoing, Power of Attorney signed by one of the foregoing in favor of the undersigned should be attached. Indicate applicable designation.
  
- \*\* In addition, Contractor shall submit a detailed statement of sales and use taxes paid in accordance with requirements of statute in state having jurisdiction.

**ENGINEER'S STATEMENT OF FINAL COMPLETION  
AND  
OWNER'S ACCEPTANCE OF CONTRACT CONSTRUCTION**

TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
PROJECT DESIGNATION

I, the undersigned Engineer of the above designated project, do hereby state that:

1. The construction provided for pursuant to Construction Contract No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_, including all approved amendments and change orders, (hereinafter called the "Project") between \_\_\_\_\_ ("Owner") and \_\_\_\_\_ ("Contractor") has been completed as of \_\_\_\_\_, 20\_\_ and to the best of my knowledge, information and belief, based on observations made during the period of construction, is in substantial compliance with the provisions of the Construction Contract, including all plans, specifications and drawings, and modifications thereof.

To the best of my knowledge, information, and belief,

2. Defects in workmanship and materials reported during the period of construction of the Project have been corrected.
3. The total cost of the project as completed is \_\_\_\_\_ dollars (\$\_\_\_\_\_).
4. The Final Inventory attached hereto and made a part hereof is a complete and accurate summary of the work performed in accordance with the Construction Contract.

Accepted:

_____ Owner	<b>DGR Engineering</b> _____ Engineer
Sign _____	Sign _____
Print _____	Print _____
Title _____	Title _____
Date _____	Date _____

## CONTRACTOR'S RECEIPT FOR FINAL PAYMENT

Name of Project: \_\_\_\_\_

Previous Contract Payment      \$ \_\_\_\_\_

Final Contract Payment        \$ \_\_\_\_\_

Total Contract Payment        \$ \_\_\_\_\_

The undersigned acknowledges receipt of the final contract payment shown above as satisfaction in full or all claims of the undersigned under the Construction Contract between the undersigned and \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_ as amended, and as complete performance by the Owner of all obligations to be performed by him pursuant thereto. The total amount received under this contract is shown above.

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

Sign: \_\_\_\_\_

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

Date: \_\_\_\_\_

Contractor's name: \_\_\_\_\_

Is your contract written? No  Yes  Date signed \_\_\_\_/\_\_\_\_/\_\_\_\_

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

Name of designated exempt entity: \_\_\_\_\_

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

\_\_\_\_\_

Iowa sales or use tax permit number (if any): \_\_\_\_\_

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

SSN or FEIN: \_\_\_\_\_

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

Project description: \_\_\_\_\_

If contract is not directly with the above name, who is your contract directly with? \_\_\_\_\_

A Name, city, and state of supplier	B Type of building material, supply, equipment, or service	C Purchase price	D Amount of Iowa sales/use tax	E Name, tax period, and Iowa permit number under which the tax was remitted to the state of Iowa	F Amount of Iowa local option tax	G County number where Iowa local option was paid
<b>Total (provide the totals for columns C, D and F)</b>						

I, the undersigned, declare under penalties of perjury or false certificate, that I have examined this statement, and, to the best of my knowledge and belief, it is true, correct, and complete.

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

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

## Instructions

This Contractor's Statement must be prepared and sworn to by each general contractor, special contractor, or subcontractor who fulfills a contract or subcontract pertaining to a project that is sponsored by agencies or instrumentalities of the tribal, federal, state, county, municipal governments, private nonprofit educational institutions, nonprofit museums, businesses in economic development areas, rural water districts, or Habitat for Humanity. Upon completion of the contract, this form must be presented to that sponsor so they may file for a tax refund in accordance with Iowa Code section 423.4.

The Iowa Department of Revenue may require additional information.

### Contractor:

Forward this statement to the sponsor (governmental unit, private nonprofit educational institution, nonprofit museum, business in economic development area, rural water district, or Habitat for Humanity). Do not send it to the Iowa Department of Revenue.

### Sponsor:

This statement must be attached to the Construction Contract Claim for Refund (35-003). Both forms must be filed before the Department can process your claim. **File using this form.** Substitutes or photocopies will not be accepted. The claim for refund must be filed within one year of the final settlement date of the contract.

**Columns A through E must be completed. If local option sales tax was paid on the purchase price, complete columns A through G.**

### A. Name, city, and state of supplier

Enter "out of stock" or "inventory" in column A for materials that the contractor has manufactured or has in inventory, making the contractor the material supplier.

### B. Type of building material, supply, equipment, or service

Only list building materials, supplies, equipment, or services that are completely consumed in the performance of the contract. The property must become public property or the property of an exempt entity upon completion of the project. Be specific. See Iowa Administrative Code rule 701—219.3 for information on building materials, supplies, and equipment.

### C. Purchase price

Enter the cost of materials shown in column B. Do not include transportation charges, delivery charges, or hauling charges. Do not include sales and use or local option sales tax in column C.

### D. Amount of Iowa sales / use tax

Compute on the purchase price recorded in column C. Do not include local option sales tax in column D. Invoices may be requested to verify amounts.

### E. Who remitted the tax?

Enter the name, tax period, and Iowa permit number under which the tax was remitted to the State of Iowa. If no Iowa tax was paid, explain why. If tax was paid to another state, provide the name of state.

### F. Amount of Iowa local option tax

In addition to Iowa sales and use tax in column D, purchases may be subject to Iowa local option sales tax. Enter the amount of Iowa local option sales tax in column F. Do not include local option sales tax in column D.

### G. County number where Iowa local option was paid

Enter the number of the county for which local option sales tax was paid. See the list below.

#### IOWA COUNTIES AND COUNTY NUMBERS

01-Adair	26-Davis	51-Jefferson	76-Pocahontas
02-Adams	27-Decatur	52-Johnson	77-Polk
03-Allamakee	28-Delaware	53-Jones	78-Pottawattamie
04-Appanoose	29-Des Moines	54-Keokuk	79-Poweshiek
05-Audubon	30-Dickinson	55-Kossuth	80-Ringgold
06-Benton	31-Dubuque	56-Lee	81-Sac
07-Black Hawk	32-Emmet	57-Linn	82-Scott
08-Boone	33-Fayette	58-Louisa	83-Shelby
09-Bremer	34-Floyd	59-Lucas	84-Sioux
10-Buchanan	35-Franklin	60-Lyon	85-Story
11-Buena Vista	36-Fremont	61-Madison	86-Tama
12-Butler	37-Greene	62-Mahaska	87-Taylor
13-Calhoun	38-Grundy	63-Marion	88-Union
14-Carroll	39-Guthrie	64-Mahaska	89-Van Buren
15-Cass	40-Hamilton	65-Mills	90-Wapello
16-Cedar	41-Hancock	66-Mitchell	91-Warren
17-Cerro Gordo	42-Hardin	67-Monona	92-Washington
18-Cherokee	43-Harrison	68-Monroe	93-Wayne
19-Chickasaw	44-Henry	69-Montgomery	94-Webster
20-Clarke	45-Howard	70-Muscatine	95-Winnebago
21-Clay	46-Humboldt	71-O'Brien	96-Winneshiek
22-Clayton	47-Ida	72-Osceola	97-Woodbury
23-Clinton	48-Iowa	73-Page	98-Worth
24-Crawford	49-Jackson	74-Palo Alto	99-Wright
25-Dallas	50-Jasper	75-Plymouth	

## **Category II**

### **Contract Conditions**

- General Conditions
- Supplementary Conditions

## **General Conditions**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

## STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by





These General Conditions have been prepared for use with the Agreement Between Owner and Contractor for Construction Contract (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other.

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(703) 684-2882  
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1015 15th Street N.W., Washington, DC 20005  
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# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  5. *Bidder*—An individual or entity that submits a Bid to Owner.
  6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
  7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
  8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
  9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
  10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision

regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.
33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
35. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.



37. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
39. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
40. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.
41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
43. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
45. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
46. *Unit Price Work*—Work to be paid for on the basis of unit prices.
47. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment

into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

## 1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
    - a. does not conform to the Contract Documents; or
    - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
    - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
  2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## **ARTICLE 2 – PRELIMINARY MATTERS**

### **2.01 *Delivery of Bonds and Evidence of Insurance***

- A. *Bonds*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.
- C. *Evidence of Owner’s Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

### **2.02 *Copies of Documents***

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

### **2.03 *Before Starting Construction***

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
  1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
  2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

#### 2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

#### 2.05 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.03.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
  2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

#### 2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

### **ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE**

#### **3.01 *Intent***

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

#### **3.02 *Reference Standards***

- A. Standards Specifications, Codes, Laws and Regulations
  - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
  - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

#### **3.03 *Reporting and Resolving Discrepancies***

- A. *Reporting Discrepancies:*
  - 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
  - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
  - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If

Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
  - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
  - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

**ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK**

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
  2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

#### 4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
  2. abnormal weather conditions;
  3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
  4. acts of war or terrorism.
- D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.
- E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.



- F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.
- G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

**ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS**

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable,

brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

### 5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
  - 1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;
  - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
  - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
  - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
  - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
  - 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

#### 5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
  2. is of such a nature as to require a change in the Drawings or Specifications; or
  3. differs materially from that shown or indicated in the Contract Documents; or
  4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Possible Price and Times Adjustments:*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
    - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
  - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
  - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

#### 5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
  2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
    - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
    - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
    - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
    - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:*
  - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
    - a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;
    - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
    - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times; and
    - d. Contractor gave the notice required in Paragraph 5.05.B.
  - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
  - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings*: The Supplementary Conditions identify:
1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
  2. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous

Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

## ARTICLE 6 – BONDS AND INSURANCE

### 6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

### 6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or



any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

### 6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
  - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.
  - 2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).

3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
  4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
  2. claims for damages insured by reasonably available personal injury liability coverage.
  3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
    - a. Such insurance shall be maintained for three years after final payment.
    - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
  2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
  3. Broad form property damage coverage.
  4. Severability of interest.
  5. Underground, explosion, and collapse coverage.
  6. Personal injury coverage.
  7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
  8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

- F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:
1. include at least the specific coverages provided in this Article.
  2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
  3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
  4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
  5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

- J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

#### 6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

#### 6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
  - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
  - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
  - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
  5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
  6. extend to cover damage or loss to insured property while in transit.
  7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
  8. allow for the waiver of the insurer's subrogation rights, as set forth below.
  9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
  10. not include a co-insurance clause.
  11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
  12. include performance/hot testing and start-up.
  13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

## 6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
  2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

#### 6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

### **ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES**

#### 7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

#### 7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

#### 7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

#### 7.04 "Or Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.
  - 1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
    - a. in the exercise of reasonable judgment Engineer determines that:
      - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
      - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
      - 3) it has a proven record of performance and availability of responsive service; and
      - 4) it is not objectionable to Owner.
    - b. Contractor certifies that, if approved and incorporated into the Work:
      - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
      - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
  - B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
  - C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be



evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the proposed item as a substitute pursuant to Paragraph 7.05.

#### 7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
  - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
  - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
  - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
    - a. shall certify that the proposed substitute item will:
      - 1) perform adequately the functions and achieve the results called for by the general design,
      - 2) be similar in substance to that specified, and
      - 3) be suited to the same use as that specified.
    - b. will state:
      - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
      - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and

- 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
  - c. will identify:
    - 1) all variations of the proposed substitute item from that specified, and
    - 2) available engineering, sales, maintenance, repair, and replacement services.
  - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

#### 7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.

- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- L. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

- N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- O. Nothing in the Contract Documents:
  - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
  - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

#### 7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

#### 7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

#### 7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

#### 7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

#### 7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

#### 7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
  - C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
  - D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
  - E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
  - F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
  - G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

#### 7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

## 7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

## 7.16 *Shop Drawings, Samples, and Other Submittals*

### A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
  - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
  - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
  - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
  - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

### B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

#### 1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

#### 2. *Samples:*

- a. Contractor shall submit the number of Samples required in the Specifications.

- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
  3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
  1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
  3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
  4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
  5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
  6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
  7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.



8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
  1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
  2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
  1. observations by Engineer;
  2. recommendation by Engineer or payment by Owner of any progress or final payment;
  3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
  4. use or occupancy of the Work or any part thereof by Owner;
  5. any review and approval of a Shop Drawing or Sample submittal;
  6. the issuance of a notice of acceptability by Engineer;
  7. any inspection, test, or approval by others; or
  8. any correction of defective Work by Owner.

- D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

#### 7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
  - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

#### 7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop

Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

## **ARTICLE 8 – OTHER WORK AT THE SITE**

### **8.01 *Other Work***

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

## 8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
  - 1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
  - 2. an itemization of the specific matters to be covered by such authority and responsibility; and
  - 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

## 8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

## **ARTICLE 9 – OWNER'S RESPONSIBILITIES**

### **9.01 *Communications to Contractor***

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### **9.02 *Replacement of Engineer***

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

### **9.03 *Furnish Data***

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

### **9.04 *Pay When Due***

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

### **9.05 *Lands and Easements; Reports, Tests, and Drawings***

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

### **9.06 *Insurance***

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

### **9.07 *Change Orders***

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

**ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION**

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means,

methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

#### 10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

### **ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK**

#### 11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
  - 1. *Change Orders:*
    - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
    - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
  - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the



completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

#### 11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

#### 11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

#### 11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
  1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
  2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
  3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
  2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
    - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
    - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
    - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

#### 11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

#### 11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
  2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
  3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

#### 11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
  3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

#### 11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

### **ARTICLE 12 – CLAIMS**

#### 12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
  - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
  - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
  - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
  - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
  - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal

and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

## **ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### **13.01 *Cost of the Work***

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
  1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
  2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
  1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing

Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
  - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
  - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

## 13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

- B. *Cash Allowances*: Contractor agrees that:
  - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
  - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

### 13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
  - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
  - 2. there is no corresponding adjustment with respect to any other item of Work; and
  - 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.



## ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

### 14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

### 14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
  - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
  - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
  - 3. by manufacturers of equipment furnished under the Contract Documents;
  - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
  - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

#### 14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

#### 14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

#### 14.05 *Uncovering Work*

- A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
  - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
  - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

#### 14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include

but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

## **ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD**

### **15.01 Progress Payments**

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
  2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
  3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
  2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
  - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
  - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
  - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
  - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
  - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
  - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
  - b. the Contract Price has been reduced by Change Orders;
  - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due:*

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
  - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
  - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
  - c. Contractor has failed to provide and maintain required bonds or insurance;
  - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
  - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
  - f. the Work is defective, requiring correction or replacement;
  - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
  - h. the Contract Price has been reduced by Change Orders;
  - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
  - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
  - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - l. there are other items entitling Owner to a set off against the amount recommended.
- 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the

amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

#### 15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

#### 15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

#### 15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
  - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
  - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
  - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

#### 15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 15.06 *Final Payment*

- A. *Application for Payment:*
  - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record



documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents;
  - b. consent of the surety, if any, to final payment;
  - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
  - d. a list of all disputes that Contractor believes are unsettled; and
  - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

**B. *Engineer's Review of Application and Acceptance:***

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

**C. *Completion of Work:*** The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

**D. *Payment Becomes Due:*** Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions

above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

#### 15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

#### 15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
  - 1. correct the defective repairs to the Site or such other adjacent areas;
  - 2. correct such defective Work;
  - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

## **ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION**

### **16.01 *Owner May Suspend Work***

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

### **16.02 *Owner May Terminate for Cause***

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
  - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
  - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
  - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
  - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
  - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
  - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and

damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

#### 16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
  - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

#### 16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

## **ARTICLE 17 – FINAL RESOLUTION OF DISPUTES**

### **17.01 *Methods and Procedures***

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
  - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
  - 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
  - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
  - 2. agree with the other party to submit the dispute to another dispute resolution process; or
  - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

## **ARTICLE 18 – MISCELLANEOUS**

### **18.01 *Giving Notice***

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
  - 1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
  - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

### **18.02 *Computation of Times***

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### **18.03 *Cumulative Remedies***

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

## **Supplementary Conditions**

## SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the **Standard General Conditions of the Construction Contract, EJCDC No. C-700 (2013 Edition)**. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

**SC-1.01.A.8.** Add the following language to the end of Paragraph 1.01.A.8:

The Change Order form to be used on this Project is bound in the Miscellaneous Forms section.

**SC-1.01.A.40.** Add the following new subparagraph to the end of Paragraph 1.01.A.40:

- a. Substantial Completion shall include, but not be limited to, installation, testing, and initial cleanup. Final Acceptance will not be made until the entire project has been completed including final cleanup.

**SC-2.05.A.** Add the following language at the end of the last sentence of Paragraph 2.05.A:

Said conference may be canceled at the request of the Owner.

**SC-4.01.A.** Delete Paragraph 4.01.A in its entirety and insert the following in its place:

- A. The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

**SC-5.03.** Delete Paragraphs 5.03.A and 5.03.B in their entirety and insert the following:

- A. No reports of explorations or tests of subsurface conditions at or contiguous to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner.

**SC-5.05.** Delete Paragraph 5.05 in its entirety including subparagraphs and insert the following in its place:

- 5.05. The location of the Underground Facilities is not shown on the Drawings. The cost of all of the following will be included in the Contract price and Contractor shall have full responsibility for: (i) reviewing and checking all available information and data, (ii) locating all Underground Facilities affected by construction, (iii) coordination of the Work with the owners of such Underground Facilities during



construction, and (iv) the safety and protection of all such Underground Facilities as provided in Paragraph 7.12 and repairing any damage thereto resulting from the Work.

**SC-5.06.** Delete Paragraph 5.06.A in its entirety including subparagraphs and insert the following in its place:

- A. Engineer or Engineer's Consultants obtained, used or reviewed no specific information regarding Hazardous Environmental Conditions at the site.

**SC-5.06.F.** Add the following to Paragraph 5.06.F:

Contractor shall not be allowed any adjustment to Contract Price or Contract Times if such condition was caused by Contractor or anyone for whom Contractor is responsible.

**SC-5.06.G.** Add the following to Paragraph 5.06.G:

Contractor shall not be allowed any adjustment to Contract Price or Contract Times if such condition was caused by Contractor or anyone for whom Contractor is responsible.

**SC-5.06.I.** Delete Paragraph 5.06.I. and replace with the following:

If the introduction onto the Project Site of a Hazardous Substation is identified or exacerbation of unknown Hazardous or Special Environmental Conditions was not caused by the Contractor or any of its subcontractors or suppliers of any tier, or any person or entity under the control of the Contractor or any of its subcontractors or suppliers, of any tier, the Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work in any area affected by Hazardous Substance. Nothing in this Paragraph 5.06.I. shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

**SC-5.06.J.** Delete, "To the fullest extent permitted by laws and regulations" from Paragraph 5.06.J.

**SC-5.06.K.** Add the following new paragraphs immediately following Paragraph 5.06.K:

- L. Regardless of fault and regardless of any other clause in this Agreement, the Contractor shall not, as a result of the Hazardous Substance encountered on Site, be entitled to any compensatory damages, including without limitation, damages for the delay, disruption, liquidated damages or consequential damages or any type, including lost profits. If the Hazardous Substance introduction is caused by the Owner or was located at the Project Site before Work commenced on the Project,

the Contractor shall only be entitled to an extension of the Contract Time and the Owner shall assume responsibility for the remediation of such substances.

- M. If the Contractor, or any of its subcontractors or suppliers of any tier, or any person or entity under the control of the Contractor or any of its subcontractors or suppliers of any tier, is responsible for (i) introducing and discharging Hazardous Substance onto the Site which was not otherwise specified by the Contract Documents; and/or (ii) disturbing Hazardous Substance clearly identified in the Contract Documents, the Contractor shall hire a qualified remediation contractor at Contractor's sole cost to eliminate the condition as soon as possible. Under no circumstances shall the Contractor perform Work for which it is not qualified. Owner, in its sole discretion, may require the Contractor to retain at its cost an independent testing laboratory.
- N. The Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges or engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from (a) use, disturbance or storage of Hazardous Substance or execution of the Work; and (b) disturbing any Hazardous Substance found on the Site, provided that the Contractor had prior notice of the existence and general location of the Hazardous Substance.
- O. When the Contractor notifies the Owner of Hazardous Substance at the Project Site, the Contractor shall include with its notice a written and pictorial delineation of the affected area where the Contractor claims that the Work must stop. If the Owner objects to the delineation of the affected area, the Owner shall respond to the Contractor in writing within one business day explaining the objections and providing the Owner's delineation, if any, of the affected area.

**SC – 6.03.I.3** Replace the number “10” with the number “30”, in reference to the number of days notice to the Owner prior to cancellation of the insurance policies.

**SC-6.03.** Add the following new paragraphs immediately after Paragraph 6.03.J:

- K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
  - 1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:
    - a. State: Statutory
    - b. Applicable Federal (e.g., Longshoreman's): Statutory
    - c. Employer's Liability:  
Bodily injury, each accident \$ 500,000

Bodily injury by disease, each employee	\$ 500,000
Bodily injury/disease aggregate	\$ 500,000

The Workers' Compensation policy shall include a waiver of subrogation clause in favor of the Owner.

2. Contractor's General Liability under Paragraphs 6.03.B through 6.03.C of the General Conditions.

- |   |              |
|---|--------------|
| a. General Aggregate  | \$ 2,000,000 |
| b. Products - Completed Operations Aggregate  | \$ 2,000,000 |
| c. Personal and Advertising Injury  | \$ 1,000,000 |
| d. Each Occurrence (Bodily Injury and Property Damage)  | \$ 1,000,000 |
| e. If applicable to the project, Contractor shall maintain a separate Certificate of Insurance on behalf of the applicable railroad authority, as named insured. Insurance limits will be based on the requirements set forth by the applicable railroad authority. Said coverage(s) shall be in effect whenever Work on this project is underway within the Railroad right-of-way. |              |

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions:

- |                             |              |
|-----------------------------|--------------|
| a. Combined Single Limit of | \$ 1,000,000 |
|-----------------------------|--------------|

4. Excess or Umbrella Liability:

- |                      |              |
|----------------------|--------------|
| a. Per Occurrence    | \$ 5,000,000 |
| b. General Aggregate | \$ 5,000,000 |

5. Contractor's Pollution Liability

- |                      |              |
|----------------------|--------------|
| a. Each Occurrence   | \$ 1,000,000 |
| b. General Aggregate | \$ 1,000,000 |

6. The following shall be included as additional insureds and certificate holders in addition to any other individuals or entities identified in the contract documents.

Engineer:

DeWild Grant Reckert and Associates Company d/b/a DGR Engineering  
1302 South Union Street  
Rock Rapids, Iowa, 51246

Owner:

Waverly Utilities  
1002 Adams Parkway  
Waverly, IA 56077

7. Builder's Risk: See General Conditions Section 6.05. The value of the Builder's Risk policy shall equal the amount of the Owner-furnished materials plus the total value of the Contractor's bid price.

L. The following clauses shall be added to all liability coverages:

- a. The company and the insured expressly agree and state that the purchase of this policy of insurance by the insured does not waive any of the defenses of governmental immunity available to the insured under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
- b. The company and the insured further agree that this policy of insurance shall cover only those claims not subject to the defense of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.

M. Subrogation, To the extent that such insurance is in force and collectible and to the extent permitted by law, the City or Utility and Contractor each hereby releases and waives all right of recovery against the other or anyone claiming through or under each of them by way of subrogation or otherwise. The forgoing release and waiver shall apply to damage to contractor's equipment, tools and other personal property as well as automobiles.

**SC-7.02.** Add the following new paragraphs immediately after Paragraph 7.02.B:

- C. It shall be specifically understood that any work relating to this contract shall not be performed on Sunday unless an emergency arises and special permission is given by the Owner.
- D. Work will be permitted on Saturday; however, involvement of the Owner's personnel will not be allowed. Saturday work must be approved by the Owner.

**SC-7.06.** Add the following new paragraphs immediately after Paragraph 7.06.O:

- P. The Contractor shall not award work valued at more than fifty percent (50%) of the Contract Price to Subcontractor(s), without prior written approval of the Owner.

**SC-7.09.** Add the following new subparagraph to the end of Paragraph 7.09.A:

- 1 CONTRACTOR shall pay all sales, use and excise taxes, and such taxes shall be incidental to the Work and included in the Contract Prices.

**SC-7.15.** Add a new paragraph immediately after Paragraph 7.15A.:

- B. Contractor shall immediately notify Owner and Engineer of all emergency situations associated with Contractor's Work.

**SC-7.15.A.** Add the following paragraphs immediately after Paragraph 7.17.A:

1. The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be new, merchantable, or good quality, and that the Work will be free from defects, and that the Work will conform to the Contract Documents.
2. The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the workmanship will be free from defects not inherent in the quality required or permitted, that the workmanship will comply with all applicable laws, building codes, rules and regulations, and that the workmanship will conform to the requirements of the Contract Documents.

**SC-7.18.A.** Delete Paragraph 7.18.A. in its entirety and replace it as follows:

To the fullest extent permitted by law, Contractor shall defend, indemnify and hold harmless Owner, Engineer, their agents, representatives, and employees ("Indemnitees") from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from or in connection with the performance of the Work, provided that any such claim, damage, loss or expense is caused in whole or in part by any act or omission of Contractor, anyone directly or indirectly employed by it or anyone for whose acts any of them may be liable. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity or contribution which would otherwise exist as to any party or person described in the Contract Documents.

In addition, Contractor shall indemnify, hold harmless, and pay for the defense of Owner, Engineer, and Engineer's subconsultants from and against claims, losses, or damages in regard to any act or failure to act by Owner or Engineer in connection with general supervision, inspection and/or coordination of Contractor's operations.

Contractor shall, at its own expense, appear, defend, and pay all fees of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith; and, if any judgments shall be rendered against any individual or entity indemnified hereunder in any such action, Contractor shall, at its own expense, satisfy and discharge same. Contractor expressly understands and agrees that any Letter of Credit or insurance protection required by the Contract, or otherwise provided by Contractor, shall in no way limit the

responsibility to indemnify, keep and save harmless, and defend any individual or entity indemnified hereunder as herein provided.

**SC-9.11.** Add the following new paragraph immediately after Paragraph 9.11.A:

- B. On request of Contractor prior to the execution of any Change Order involving a significant increase in the Contract Price, Owner shall furnish to Contractor reasonable evidence that adequate financial arrangements have been made by Owner to enable Owner to fulfill the increased financial obligations to be undertaken by Owner as a result of such Change Order.

**SC-9.13.** Add the following new paragraph immediately after Paragraph 9.12:

- 9.13. Owner will furnish an “Owner’s Site Representative” to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner’s Site Representative is not Engineer’s consultant, agent, or employee. Owner’s Site Representative will be an employee of Owner. The authority and responsibilities of Owner’s Site Representative will be as defined and described at the Preconstruction Conference (Paragraph 2.04).

**SC-10.03.** Add the following new paragraph immediately after Paragraph 10.03.A:

- B. On this Project, by agreement with the Owner, Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work. The authority and responsibilities of the Resident Project Representative (RPR) will be as defined and described at the Preconstruction Conference (paragraph 2.04).

**SC-13.03.E.** Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
  - 1. if the Bid price of a particular item of Unit Price Work amounts to 20 percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 20 percent from the estimated quantity of such item indicated in the Agreement; and
  - 2. if there is no corresponding adjustment with respect to any other item of Work; and
  - 3. if Contractor believes that Contractor has incurred additional expense as a result thereof or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

**SC-15.01.B.3.** Add the following language at the end of Paragraph 15.01.B.3.:

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage, or invest the retainage for the benefit of the Contractor.

**SC-15.01.D.1.** Delete Paragraph 15.01.D.1 in its entirety and insert the following in its place:

1. The Application for Payment with Engineer's recommendations will be presented to the Owner for consideration. If the Owner finds the Application for Payment acceptable, the recommended amount less any reduction under the provisions of Paragraph 15.01.E will become due ten days after the Application for Payment is approved by the Owner, and when due will be paid by Owner to Contractor.

**SC-15.01.E.1.k.** Delete "Liens" and insert "claims pursuant to Iowa Code Chapter 573".

**SC-15.06.E.** Delete Paragraph 15.06.E. and replace it with the following:

- E. Final Payment Becomes Due: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor in accordance with Iowa law.

**SC-15.08.F.** Add the following subparagraph to paragraph 15.08:

- F. Contractor shall provide a correction period (warranty) of two (2) years from date of substantial completion for the following items:
  1. All work.

**SC-17.01.** Add the following subparagraphs to Paragraph 17.01.B.3:

- C. If Owner or Contractor have a disputed matter per Paragraph 17.01.A, the following process shall apply:
  1. Within 30 days of the submittal of such claim, Owner and Contractor shall meet and confer regarding the Claim. A good-faith effort to negotiate resolution shall be made by both parties.
  2. If the negotiations contemplated by Paragraph SC-17.01.C.1 are unsuccessful, management representatives of Owner and Contractor at least one tier above the individuals who met under SC 17.01.C.1 shall meet, confer, and negotiate within 30 days of the closure of the unsuccessful negotiations.

3. If the Claim is not resolved by negotiation, Engineer's decision regarding Change Proposals or other requests for decisions shall become final and binding 30 days after termination of the negotiations unless, within that time period, Owner or Contractor:
  - a. gives to the other party written notice of intent to submit the Claim to a court of competent jurisdiction, or
  - b. agrees with the other party to submit the Claim to another dispute resolution process.
4. Notwithstanding any applicable statute of limitations, a party giving notice under Paragraph SC 17.01.C.3.a shall commence an action on the Claim within one year of giving such notice. Failure to do so shall result in the Claim being time-barred and Engineer's action or denial shall become final and binding.

**SC-17-03.** Add the following new paragraphs immediately after Paragraph 17.02:

3. **Attorneys' Fees:** In the event the Owner should prevail in any legal action arising out of the performance or non-performance of the Contract, the Contractor shall pay, in addition to any damages, all expenses of such action including reasonable attorney's fees, all expert witness fees, costs, and litigation expenses incurred by the Owner, including those incurred on appeal. The term "legal action" shall be deemed to include any arbitration, administrative proceedings, and all actions at law or in equity, including appeals.



## **Category III**

### **Technical Specifications**

- Division 1 – General Requirements
- Division 33 – Utilities

**Division 1**  
**General Requirements**

SECTION 01 1100

SUMMARY OF WORK

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section presents a summary of the intended Work and the Contractor's duties and use of premises relating to the Owner's transmission line construction project.
- C. Site Locations:
  - 1. The project is located in Waverly, Iowa. See the Drawings for more detail.

1.02 AWARD OF CONTRACTS:

- A. One contract will be awarded for the entire project.

1.03 CONTRACTORS' DUTIES:

- A. Except as specifically noted, provide and pay:
  - 1. Labor, materials and equipment.
  - 2. Tools, construction equipment and machinery.
  - 3. Water, heat and utilities required for construction.
  - 4. Other facilities and services necessary for proper execution and completion of Work.
  - 5. All applicable taxes and fees including sales and use taxes.
- B. Secure and pay for, as necessary for proper execution and completion of Work, and as applicable at time of receipt of bids:
  - 1. Permits, including building permits.
  - 2. Government fees.
  - 3. Licenses.
- C. Give required notices.

## SECTION 01 1100

- D. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities that relate to performance of Work.
  - 1. Promptly submit written notice to Engineer of observed variance of Contract Documents from legal requirements.
  - 2. Assume responsibility for Work known to be contrary to legal requirements if notice is not submitted.
  - 3. Necessary changes to the Contract Documents will be accomplished by Change Order if the Contract price or completion time is affected.
- E. Enforce strict discipline and good order among employees. Do not employ on Work:
  - 1. Unfit persons.
  - 2. Persons not skilled in assigned task.

### 1.04 CONTRACTOR USE OF PREMISES:

- A. Confine operations at site to areas permitted by:
  - 1. Law.
  - 2. Ordinances.
  - 3. Permits.
  - 4. Contract Documents.
- B. Do not unreasonably encumber site with materials or equipment.
- C. Do not load any structures with weight that will endanger structure.
- D. Assume full responsibility for protection and safekeeping of products stored on premises.
- E. Move any stored products that interfere with operations of Owner or other Contractor.
- F. Obtain and pay for use of additional storage or work areas needed for operations.

### 1.05 ITEMS BY OTHERS:

- A. Related items include those in the Drawings or elsewhere specified as “By Others” or “By Owner”. Specific items are as follows:

## SECTION 01 1100

1. Switching to de-energize and re-energize the transmission line as required:  
Completed by the Owner.

### 1.06 RIGHT-OF-WAY/EASEMENTS:

- A. All easements and rights-of-way necessary for the construction of the Project have been or will be obtained by the Owner in such a manner that the construction of the Project may rapidly progress.
- B. The Contractor shall restore the public and private properties to their original condition. Any damages to the public and private rights-of-ways will be at the Contractor's expense. See Part 3.01 (Property Damages) in Section 01 4500 for more detail.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 2000

### PRICE AND PAYMENT PROCEDURES

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section presents the Price and Payment Procedures that will be utilized for the project.

##### 1.02 UNIT PRICES:

- A. The proposal is to be made on a unit basis so that the Engineer may specify any combination of construction units that he/she may deem necessary.
- B. The various construction units that are included in this quote and upon which quotations are required are defined by symbols and descriptions set forth in this part.
- C. Separate assembly units are designed for each different arrangement that may be used in the construction of the project. The proposal is based on a consideration of each unit in place and includes only the materials listed on the corresponding construction drawings or as spelled out herein.
- D. The quote prices stated in the proposal shall include all labor, materials, freight, drayage, loading, protection from weather, fabrication, and installation to assure the Owner that the equipment will operate as specified.

##### 1.03 MEASUREMENT:

- A. Measurement for work completed is to be made on a monthly basis or as deemed necessary by the Engineer.
  - 1. All items will be computed in the units of the Quote Form.
    - a. Periodic payments for lump sum items will be on an estimated percentage of completion basis.
- B. The Contractor shall participate in the measurement of completed Work unless agreed otherwise.
  - 1. Specific differences are to be resolved at the time of measurement.
  - 2. Unresolved differences shall be directed to the Engineer.

## SECTION 01 2000

### 1.04 PAYMENT:

- A. All Work required to complete construction shall be deemed to be included in the unit price or lump sum price items listed in the Contractor's Quote Form.
- B. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective Work or material.
- C. Payment will be for installed units only.

### 1.05 PAYMENTS TO BE WITHHELD:

- A. Applicable retainage, as defined in the Contract Conditions, shall apply to all payments due the Contractor including payment for stored material.
- B. Amounts equal to maximum potential liquidated damages may be withheld from payments due Contractor when Work is not completed within the specified time. Such amounts shall be in addition to other payments withheld.
- C. Payments withheld will be paid as follows:
  - 1. Normal retainage will be paid as required by the General Conditions.
  - 2. Potential liquidated damages withheld will be retained until final resolution of Liquidated Damages is made by the Owner.

### 1.06 UNIT PRICES:

- A. Payment items shall be as listed on the Quote Form. Measurement of completed work shall be the number of units installed for each unit price item and percentage of completion of the entire item for each lump sum item. (No separate payment will be made for mobilization, engineering, or related project initiation expenses, unless specifically identified as a quote unit.) Payment will be at respective unit or lump sum prices as per the Quote Form.
- B. Unit and lump sum prices as listed on the Quote Form shall be the full payment for each item as described by the applicable sections of the Technical Specifications and the Drawings.
- C. The Description of Assembly Units are as follows:
  - 1. Engineered Laminated Wood Structures (Drawing): Consists of receiving, offloading, sorting, moving, hauling an **Owner-furnished** laminated wood pole as indicated by unit description, with connection points, arms, anchor bolts and templates as shown on the drawing. Unit includes any field drilling of holes required for crossarms, braces, and insulator assemblies. Unit does not include the pole top assembly, ground rods, concrete footing, or foundation. Unit does include setting and plumbing pole. Also includes

SECTION 01 2000

supplying, filling, and tamping the selected backfill gravel for the direct-buried steel poles. Specific unit as follows:

LWP-AA (B) Laminated Wood Pole, Length AA', Class B (ea.)  
["AA" represents the pole height and "B" the pole class.]

2. Wood Poles (No Drawing): Consists of furnishing, loading, offloading, transporting, sorting, moving, hauling, and installing one **Owner-furnished** wood pole in place. Unit includes digging, pumping, filling and tamping selected backfill gravel, and field drilling to install the pole. It does not include pole top assembly unit or other parts attached to the pole. The first two digits indicate the length of the pole; the third and fourth digits shows the classification per ASA standard (example: 70-1 means pole 70 feet long, class 1).

AA (B) Wood Pole, Length AA', Class B (ea.)  
["AA" represents the pole height and "B" the pole class.]

3. Transmission Pole Top Assemblies (Drawings): Consists of furnishing all required materials and installing the pole top assemblies, attachments, crossarms, braces, hardware, brackets, **Owner-furnished** insulators, extension links, connectors, jumpers, clamps, deadend tees, etc. required to support and deadend the primary and overhead shield conductors. Unit(s) also include installation of the ground conductor, pole down ground, ground conduit, and grounding attachments as shown on the drawings. These units do not include the pole. Units to be installed on proposed structures are as follows:

TM-1 69 kV Phase Deadend Assembly, Quadrant, 1Ø (ea.)

TM-2 Static, Deadend Assembly, Single (ea.)

TP-69 69 kV Tangent, Horizontal Line Post, 3Ø (ea.)

TP-69B 69 kV Tangent, Stacked, Horizontal Line Post, 3Ø (ea.)

TS-4G 69 kV Vertical, Medium Angle, 3Ø (ea.)

4. Conductor Assemblies (No Drawing): Consists of furnishing equipment, labor, and materials to install one thousand feet of **Owner-furnished** phase conductor and shield wire. Unit includes moving, hauling, stringing, tensioning, and installing splices, connectors, clamps, and ties. Also included in this unit is supplying traffic control, temporary guard structures, and insulating blankets, etc. as required. **The length of the conductor unit payment shall be determined by the span length as measured on the plan and profile stationing at time of construction.** The units represent each type of conductor or wire. Specific units are as follows



SECTION 01 2000

T2-3/0 ACSR Phase Conductor, T2-3/0 ACSR, Pigeon (Mft.)

3/8" EHS Shield Wire, 3/8", EHS (Mft.)

5. Guy and Anchor Assembly Units (Drawing): Consists of furnishing and installing the guy, anchor, rod, guy guard, extension rods, eye assembly and associated connection hardware, including but not limited to guy wire, deadend tees, guy insulators, clevises, shackles, eye assemblies, bonding to down ground and guy insulator, where necessary. Specific units are as follows:

E3-3 Insulated Down Guy, 3/8" EHS, Single (ea.)

E3-3D Insulated Double Down Guy, 3/8" EHS, Single (ea.)

D6 Screw Anchor, Triple Helix (ea.)

E5 5' Anchor Extension (ea.)

6. Removal Construction Units (No Drawing):

All removed materials will become property of the Contractor unless otherwise noted.

RC Remove Conductor: Includes all necessary labor and work to remove 1,000 feet of existing overhead phase conductor or shield wire. (Mft.)

RCL Remove Clamp: Includes all necessary labor and work required to remove a deadend static or phase conductor clamp and associated hardware. (ea.)

RP Remove Pole & Pole Top Assembly: Includes all necessary labor and work required to remove all equipment and assemblies from a pole, remove pole(s), and backfill the pole hole(s). (ea.)

7. Transfer Construction Units (No Drawing):

XC-15-( ) Transfer ( ) 15 kV Spacer Cable Conductor: Includes all necessary labor, material, equipment, and work required to remove and re-install phase and neutral spacer cable conductors from an existing structure to a new structure. Unit includes furnishing and installing new mounting brackets, associated hardware and equipment, as applicable. Number in parenthesis indicates the number of total phase and neutral conductors. (ea.)

## SECTION 01 2000

- XF Transfer Fiber: Includes all necessary labor, material, and work required to remove and re-install a fiber cable and its associated line materials from an existing pole to a new pole. Unit includes pulling extra fiber from overhead storage loops, then re-spanning and resagging the fiber as necessary. (ea.)
- XFDE Transfer Fiber Deadend: Includes all necessary labor, field drilling, material, and work required to remove and re-install a fiber cable deadend and its associated line materials from an existing pole to a new pole. Unit includes pulling extra fiber from overhead and/or underground storage loops, then re-spanning and resagging the fiber as necessary. (ea.)
- XT-( ) Transfer Transformer Bank: Includes all necessary equipment, labor, field drilling, material, and work required to remove and re-install a transformer bank. This unit includes supply and installing new equipment-mounting brackets, arresters, cutouts, hardware (bolts, nuts, washers, etc.) on the new pole. Unit includes making all necessary primary and secondary connections.
- Number in parenthesis indicates either a single-phase or three-phase transformer bank. (ea.)
- XRP-( ) Transfer Primary Riser: Includes all necessary labor, field drilling, material, and work required to remove and re-install a primary riser from an existing pole to a new pole. This unit includes supply and installing new equipment-mounting brackets, arresters, cutouts, hardware (bolts, nuts, washers, etc.) on the new pole. Also included is removing and re-installing all terminators, cable, cable guards, and any other appurtenances relating to the riser. The Contractor shall also make all necessary primary connections. Number in parenthesis indicates either a single-phase or three-phase primary riser. (ea.)
- XRP-SEC Transfer Secondary Riser: Includes all necessary equipment, labor, material, and work required to remove and re-install a secondary riser from an existing pole to a new pole. This unit includes supply and installing new hardware (bolts, nuts, washers, etc.) on the new pole. Also included is removing and re-installing all cables, cable guards, and any other appurtenances relating to the riser. The Contractor shall also make all necessary secondary connections. (ea.)

SECTION 01 2000

8. Miscellaneous Construction Units (Drawing, unless noted):

WPG	Wood Pole Ground: Includes furnishing and installing the pole ground and associated hardware as shown on drawings. (ea.)
LMS	Lighted Marking Sphere: Includes furnishing and installing lighted conductor marking spheres as specified on the drawings. (ea.)
NMS	Non-lighted Marking sphere: Includes furnishing and installing non-lighted conductor marking spheres as specified on the drawings. (ea.)
LC	Line Clearance: Includes all necessary equipment, labor, material and tools required to protect the existing 15 kV underbuild circuits, and any other line or add poles and insulators to provide adequate clearance to install all new construction units. Unit includes installing temporary support structures, leaning poles, removing any installed items, or any other means necessary to provide the required line clearances. (No Drawing) (as req'd)
TC	Traffic Control: This item includes furnishing, installing, maintaining, relocating, and subsequently removing traffic control devices, including flagpersons. (No Drawing) (as req'd)

The schedule for payment of this unit shall be as follows:

- (1) When 5 percent of the Contract amount is earned, 50 percent of the amount bid for traffic control will be paid.
- (2) When 10 percent, or more, of the Contract amount is earned, an additional 25 percent of the amount bid for traffic control will be paid.
- (3) When 50 percent, or more, of the Contract amount is earned, an additional 20 percent of the amount bid for traffic control will be paid.
- (4) The remaining 5 percent bid for traffic control will be paid when all work has been completed and accepted.
- (5) In all items above, the original Contract amount shall be the total value of all Contract Items including the traffic control item, but the percentage earned in each case shall be exclusive of the traffic control item.

## SECTION 01 2000

- U1 Mobilization: This item shall consist of preparatory work and operations, including but not limited to the necessary movement of personnel, equipment, traffic control, and incidentals to the project site; for the establishment of offices, buildings and other facilities necessary for work on the projects; and for work and operations which must be performed, and for cost incurred before starting work on the various contract times on the project site. When an item for Mobilization is included in the proposal, payment will be made at the contract unit lump sum price and be considered full compensation for costs incidental thereto for all construction seasons. Unit to be paid when work on construction site for applicable line section commences. (No Drawing) (as req'd.)
- V1 Construction Allowance: Allowance for payment to Contractor for miscellaneous items and tasks required for completion of construction due to unforeseen project events. Miscellaneous items and tasks may include but are not limited to sub-soil rock, utilities, terrain, structures encountered during foundation excavation or other construction activities required for completion of the work. Payment to contractor for this Bid Item requires Owner and Engineer approval. (No Drawing) (as req'd.)

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 3100

PROJECT MANAGEMENT AND COORDINATION

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the Contractor's project management and coordination responsibilities.

1.02 PROJECT MANAGEMENT AND COORDINATION:

- A. Verify layout information shown on Drawings, in relation to property survey and existing benchmarks, before laying out the Work.
- B. Any Contractor or subcontractor working on a specific portion of the project shall so schedule and conduct his work as not to impede unnecessarily any work being done by others on or adjacent to his work.
- C. The Contractor shall be aware that this project will require a high-level of coordination and scheduling with the Owner, Engineer, and material suppliers.
- D. The Contractor shall have a construction foreman on site at all times during construction, including when subcontractors are working at the site.

1.03 INTERFERENCE WITH SYSTEM OPERATION:

- A. All work by the Contractor in connection with this contract shall be planned with the consent of the Owner and the Engineer, and shall not in any way interfere with electric service other than specified herein unless consent is given by authorized representatives of the Owner.

1.04 WEEKEND WORK:

- A. See Supplementary Conditions section.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 3119

PROJECT MEETINGS

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the intended project meetings required of the Contractor.

1.02 PAYMENT:

- A. Project meetings are considered incidental Work with no separate measurement and payment to be made.

PART 2 - PRODUCTS – Not Applicable.

PART 3 - EXECUTION

3.01 GENERAL:

- A. Project meetings shall be coordinated among the respective Contractors, Owner, and Engineer.
- B. The individual requesting the meeting shall contact those to be in attendance in writing providing the following:
  - 1. Purpose of meeting.
  - 2. Date, time and place.
  - 3. Names of others to be in attendance.
  - 4. Additional information as necessary.

3.02 SCHEDULE:

- A. A preconstruction conference will be scheduled by the Engineer to review the following:
  - 1. Contract-Legal Documents and Specifications.
  - 2. Drawings.

SECTION 01 3119

3. General construction requirements.
  4. Coordination of different contractors.
  5. Pay request procedure.
  6. Shop drawing submittal.
  7. Project observation and inspection.
  8. Coordination with affected agencies and utility companies.
- B. Progress meetings shall be scheduled and held as the need arises throughout the Work.

\* \* \* END OF SECTION \* \* \*

SECTION 01 3213

CONSTRUCTION SCHEDULE

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the Contractor's project management and coordination responsibilities.

1.02 CONSTRUCTION SCHEDULE:

- A. Prepare a horizontal bar-chart-type, construction schedule. Provide a separate time bar for each activity and a vertical line to identify the first workday of each week. As Work progresses, mark each bar to indicate actual completion.
  - 1. Submit within 20 days after the notification of award of contract.
  - 2. Prepare the schedule on reproducible media, of width sufficient to show data for the entire construction period.
  - 3. Coordinate each element with other activities. Show each activity in proper sequence. Indicate sequences necessary for completion of related Work.
  - 4. Indicate Substantial Completion and allow time for Engineer's procedures necessary for certifying Substantial Completion.
  - 5. Schedule Distribution: Distribute copies to Owner, Engineer, subcontractors, and parties required to comply with dates.
  - 6. Updating: Revise the schedule after each meeting or activity where revisions have been made.

The following is a list of the required timeframes for this project. The dates marked with an asterisk are critical in nature and are subject to the liquidated damages clause of the Contract.

<u>Task</u>	<u>Required Completion Date</u>
Bid Opening	November 20, 2024
Contract Award	December 10, 2024 (Assumed)



SECTION 01 3213

<u>Task</u>	<u>Required Completion Date</u>
Construction Start Date (Assumed)	September 8, 2025
Substantial Completion	November 7, 2025 **
Final Completion of All Work	December 31, 2025 **
Ready for Final Payment	December 31, 2025

\*\*Liquidated damages apply to these dates for this Contractor.

- B. Any outages on the existing substations or transmission lines are to be coordinated with Waverly Utilities.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the Contractor's responsibilities regarding the assembly and maintenance of project records.

1.02 PAYMENT:

- A. Project record documents are considered incidental Work with no separate measurement or payment to be made.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION

3.01 GENERAL:

- A. Maintain at office one copy of:
  - 1. Contract-Legal Documents and Specifications.
  - 2. Addenda.
  - 3. Drawings.
  - 4. Staking sheets.
  - 5. Construction schedules and progress reports.
  - 6. Minutes of preconstruction conference and other construction meetings.
  - 7. Shop Drawings.
  - 8. Change Orders.
  - 9. Field Orders.
  - 10. Test reports.

SECTION 01 3236

- B. File documents in an orderly, readily accessible manner.

3.02 RECORDING:

- A. Legibly mark documents to record location of other facilities and changes made by Change Order or Field Order.
- B. Keep project records current.

3.03 SUBMITTAL:

- A. At completion of construction, the Drawings indicating 'as-constructed' and buried facility information shall be delivered to the Engineer.
- B. With completion of record Drawings, the Contractor's Drawings will be returned.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 3300

### SUBMITTAL PROCEDURES

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the submittal procedures the Contractor shall follow for the project.

##### 1.02 SHOP DRAWINGS, PROJECT DATA AND SAMPLES:

- A. SHOP DRAWINGS: Original drawings, prepared by Contractor, subcontractor, supplier or distributor, which illustrate some portion of the Work; showing fabrication, layout, setting or erection details.
  - 1. Prepared by a qualified detailer.
  - 2. Identify details by reference to specification section or detail number from the Drawings.
  - 3. Minimum sheet size: 8-1/2" x 11".
  - 4. Maximum sheet size: 11" x 17".
- B. PROJECT DATA:
  - 1. Manufacturer's standard schematic drawings:
    - a. Modify drawing to delete information that is not applicable to the Work.
    - b. Supplement standard information to provide additional information applicable to the Work.
  - 2. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
    - a. Clearly mark each copy to identify pertinent materials, products or models.
    - b. Show dimensions and clearances required.
    - c. Show performance characteristics and capacities.

## SECTION 01 3300

- d. Show wiring diagrams and controls.

### C. CONTRACTOR RESPONSIBILITIES:

1. Review Shop Drawings, Project Data and Samples prior to submission to Engineer for review.
2. Verify:
  - a. Performance criteria.
  - b. Field measurements and field construction criteria.
  - c. Catalog numbers and similar data.
3. Coordinate the timing of each submittal with requirements of the Work.
4. Contractor's responsibility for errors and omissions in submittals is not relieved by Engineer's review of submittals.
5. Notify Engineer, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
6. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by Engineer's review of submittals, unless Engineer gives written acceptance of specific deviations.
7. Begin no work that requires submittals until return of submittals with Engineer's stamp and initials or signature indicating review.
8. After Engineer's review, distribute copies.

### D. SUBMISSION REQUIREMENTS:

1. Schedule submissions at least fourteen (14) days before date reviewed submittals will be needed.
2. Accompany submittals with transmittal letter or email containing:
  - a. Date.
  - b. Project title and number.
  - c. Contractor's name and address.
  - d. An electronic .pdf file of each shop drawing.

## SECTION 01 3300

- e. Notification of deviations from Contract Legal Documents, Specifications and Drawings.
3. Submittals shall include:
- a. Date and revision dates.
  - b. The names of:
    - (1) Subcontractor.
    - (2) Supplier.
    - (3) Manufacturer.
    - (4) Separate detailer when pertinent.
  - c. Identification of product or material.
  - d. Relation to adjacent structure or materials.
  - e. Field dimensions, clearly identified as such.
  - f. Specification section number.
  - g. Applicable standards, such as ASTM number or Federal Specification.
  - h. A statement signed by the Contractor that the submittal has been reviewed and meets the requirements except as noted.

### E. ENGINEER'S DUTIES:

- 1. Review and return within fourteen (14) days of receipt.
- 2. Review of separate item does not constitute review of an assembly in which item functions.
- 3. Affix stamp and initials or signature certifying review of submittal noting one of the following:
  - a. No exception taken.
  - b. Make corrections noted – No resubmittal required.
  - c. Revise and resubmit.
  - d. Submit specified item.

SECTION 01 3300

- e. Rejected.
- 4. Return submittals to Contractor.
- F. RESUBMISSION REQUIREMENTS:
  - 1. Shop Drawings:
    - a. Revise initial drawings as required and resubmit as specified for initial submittal.
    - b. Indicate on drawings any changes which have been made other than those requested by Engineer.
- G. DISTRIBUTION OF SUBMITTALS AFTER REVIEW:
  - 1. Contractor shall distribute reviewed copies of Shop Drawings and Project Data that carries the Engineer's stamp, to:
    - a. Contractor's file.
    - b. Job site file.
    - c. Supplier, as appropriate.
  - 2. Engineer will distribute reviewed copies of Shop Drawings and Project Data to:
    - a. Engineer's file.
    - b. Resident Project Representative, if applicable.
    - c. Owner.

PART 2 - PRODUCTS – Not Applicable.

PART 3 - EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 3523

SAFETY REQUIREMENTS

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. The Contractor shall be responsible for maintaining and enforcing their own safety program and procedures.

1.02 OCCUPATIONAL SAFETY AND HEALTH STANDARDS:

- A. The Contractor shall be responsible for the proper application of the Occupational Safety and Health Standards (OSHS) with regard to construction of the project. The Owner will not be responsible for enforcing any part of the OSHS with respect to the Contractor's equipment or labor practices.

1.03 WORK ON OR NEAR ENERGIZED LINES:

- A. Work is anticipated near or adjacent to energized underground distribution lines. The Contractor shall be responsible for providing expertise and experience necessary for working near these energized lines. All extra costs associated with working adjacent to energized lines shall be included in the construction units and assemblies of the project.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*



## SECTION 01 4113

### APPLICABLE CODES AND STANDARDS

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the Contractor's responsibilities to adhere to applicable codes and standards.

##### 1.02 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

##### 1.03 CODES AND STANDARDS:

- A. Design and workmanship of installation and material shall be judged by tests and requirements set forth in the latest revisions of the following codes and standards:
  - 1. American Society for Testing Materials (ASTM).
  - 2. American National Standards Institute (ANSI).
  - 3. American Institute of Steel Construction (AISC).
  - 4. American Concrete Institute (ACI)
  - 5. National Electrical Manufacturer's Association (NEMA).
  - 6. National Electrical Code (NEC).
  - 7. National Electric Safety Code (NESC).
  - 8. Uniform Building Code (UBC).
  - 9. Insulated Cable Engineers Association (ICEA).
  - 10. Institute of Electronic and Electrical Engineers (IEEE).
- B. Where these specifications specifically reference codes or standards and make changes or interpretations of codes or standards, the unchanged provisions of said codes or standards shall remain in effect.

SECTION 01 4113

- C. Where these specifications provide more stringent requirements than referenced standards, the specifications shall prevail.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 4126

PERMITS, LAWS AND ORDINANCES

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the Contractor's responsibilities pertaining to permits, laws and ordinances.

1.02 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION

3.01 GENERAL:

- A. The Contractor shall comply with all Federal, State, County and local laws, ordinances and rules and regulations relating to the performance of the Work.

3.02 PERMITS/APPROVALS:

- A. The Contractor shall, at his expense, procure all permits, certificates, and licenses required of him by law for the execution of his Work.
- B. The Owner has or will be obtaining approval and/or permits from State, Department of Transportation authorities, and Railroad Owners. Copies of these permits will be provided to the Contractor prior to commencement of the line construction.
- C. The Contractor shall notify all State authorities as necessary prior to commencing construction in order to coordinate proper traffic control and project staging according to requirements of the transportation authorities.
- D. Where pipeline crossings occur, the Contractor shall notify the applicable pipeline companies before working in these areas.

SECTION 01 4126

3.03 TRAFFIC CONTROL:

- A. Barricades, signs, flashing lights and flares shall be properly placed adjacent to all excavations which are subject to pedestrian and vehicular traffic. The Contractor shall furnish and be responsible for the proper placement and operation of the above devices.
- B. Where performing work near or in State, City, County, or railroad right-of-ways, the Contractor shall conform to that particular entity's traffic control and notification requirements.
- C. Contractor shall coordinate traffic control requirements with the Iowa Department of Transportation office.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 4500

### QUALITY CONTROL

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the quality control items pertaining to the project.

##### 1.02 QUALITY CONTROL:

- A. Quality-control services include inspection, tests, and related actions including reports, performed by Contractor, by independent agencies, and by governing authorities.
- B. Contractor shall employ and pay a qualified independent testing agency to perform tests and inspections specified in other Sections, and those required by authorities having jurisdiction.
  - 1. Contractor is responsible for scheduling inspections and tests.
- C. Retesting: Contractor shall pay for retesting where results of inspections and tests prove unsatisfactory and indicate noncompliance with requirements.
- D. Auxiliary Services: Cooperate with agencies performing inspections and tests. Provide auxiliary serves as requested. Notify agency in advance of operations requiring tests or inspections, to permit assignment of personnel. Auxiliary services include the following:
  - 1. Access to the Work.
  - 2. Incidental labor and facilities to assist inspections and tests.
  - 3. Adequate quantities of samples of materials that require testing and assisting in taking samples.
  - 4. Facilities for storage and curing of test samples.
- E. Duties of Testing Agency: Testing agency shall cooperate with Engineer and Contractor in performing its duties. Agency shall provide qualified personnel to perform inspections and tests.
  - 1. Agency shall notify Engineer and Contractor of irregularities or deficiencies observed in the Work during performance of its services.

## SECTION 01 4500

2. Agency shall not release, revoke, alter, or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
  3. Agency shall not perform duties of Contractor.
- F. Submittals: Testing agency shall submit a certified written report of each inspection and test to the following:
1. Owner.
  2. Engineer.
  3. Contractor.
  4. Authorities having jurisdiction, when authorities so direct.
- G. Report Data: Reports of each inspection, test, or similar service shall include at least the following:
1. Date of issue.
  2. Project title and number.
  3. Name, address, and telephone number of testing agency.
  4. Dates and locations of samples and tests or inspections.
  5. Names of individuals making the inspection or test.
  6. Designation of the Work and test method.
  7. Identification of product.
  8. Complete inspection or test data.
  9. Test results and an interpretation of test results.
  10. Ambient conditions at the time of sample taking and testing.
  11. Comments or professional opinion on whether inspected or tested Work complies with requirements.
  12. Name and signature of laboratory inspector.
  13. Recommendations on retesting or reinspection.

## SECTION 01 4500

- H. Qualifications for Service Agencies: Engage inspection and testing service agencies that are prequalified as complying with the American Council of Independent Laboratories' "Quality Assurance Manual" and that specialize in the types of inspections and tests to be performed.
1. Each agency shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.

### PART 2 – PRODUCTS – Not Applicable.

### PART 3 – EXECUTION

#### 3.01 PROPERTY DAMAGES:

- A. The Contractor shall limit the movement of its crews and equipment so as to cause as little damage as possible to lawns, gardens, crops, orchards, or property and shall endeavor to avoid marring the lands. All fences and facilities that are damaged shall be replaced in as good condition as they were found, and precautions shall be taken to prevent the escape of livestock. **The Contractor shall be responsible for all loss of or damage to any property, including crop or lawn damage, whether on or off the right-of-way caused by his operations during the construction of the project.**
- B. **If private right-of-way, outside the Owner's acquired/existing easements or public right-of-way, is required by the Contractor, that right-of-way shall be negotiated, purchased, and subsequent damages paid by the Contractor. Any time the Contractor accesses the private right-of-way (whether an existing easement or one obtained by the Contractor), the Contractor will be required to furnish the Owner with a written release signed by the property owner and/or tenant indicating that all damages caused by the Contractor have been settled. The written release form is included in the Miscellaneous Forms section.**
- C. The Contractor shall be responsible for all damage to any existing city, state, county, or private streets, roads, parks, or other property by reason of its operation, or those of its subcontractors. The Contractor shall take all necessary precautions to avoid damages to all roads and comply with all load limits. The Contractor shall repair all roads damaged by their crews in a timely fashion.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 5000

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the temporary facilities and controls the Contractor needs to adhere to for the project.

##### 1.02 SECTION REQUIREMENTS:

- A. At the earliest possible time, change over from use of temporary utility services to use of permanent utilities.
- B. Remove temporary facilities and controls before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.

##### 1.03 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

#### PART 2 – PRODUCTS

##### 2.01 MATERIALS AND EQUIPMENT:

- A. Provide new materials and equipment for construction of temporary facilities and controls.

#### PART 3 – EXECUTION

##### 3.01 TEMPORARY UTILITIES:

- A. Provide temporary utilities such as electric power and telephone service(s) to project site for use during construction. Arrange for and coordinate service(s) with local utility companies.
  - 1. Contractor shall pay all use charges for temporary utilities.



## SECTION 01 5000

- B. Provide temporary heat for curing or drying of work, and for protection of new construction from adverse effects of low temperatures. Proper safety controls and devices shall be on all temporary heating and ventilation equipment used. Use of gasoline-burning heaters and open-flame heaters is not permitted.
- C. Provide temporary sanitary facilities. Comply with regulations and health codes for type, number, location, and maintenance of facilities. Temporary toilet facilities shall be removed from the site when no longer necessary.

### 3.02 TEMPORARY CONSTRUCTION FACILITIES:

- A. Provide and maintain field offices, storage trailers, and other support facilities near the project site.
  - 1. Temporary facilities located within the construction area or within 30 feet (9 m) of building lines shall be of noncombustible construction.
- B. Provide temporary enclosures for protection of construction and workers from exposure and inclement weather and for containment of heat.
- C. Install project identification and other signs in locations approved by Owner to inform the public and persons seeking entrance to Project.
- D. Collect waste daily and dispose of waste off-site according with local ordinances when containers are full.
  - 1. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material according to applicable laws and regulations.
- E. Material Storage:
  - 1. The Contractor shall be fully responsible to provide adequate storage for materials that must be housed against weather exposure during entire construction. Materials which may suffer any type of deterioration or damage due to weather exposure shall be covered and/or housed. Housing and protection shall be approved by the Owner or Engineer. The responsible Contractor shall pay for and/or replace any damaged materials caused by their negligence or failure to provide proper protection.
  - 2. The Contractor will be responsible for providing storage and laydown yard locations for the project. It will be the responsibility of the Contractor to secure their materials at these sites, along with restoring them to their original site conditions after all of their equipment is removed.

## SECTION 01 5000

### 3.03 TEMPORARY CONTROLS:

- A. Provide temporary barricades, warning signs, and lights to protect the public and construction personnel from construction hazards.
  - 1. Enclose construction area(s) with fence(s) with lockable entrance gates, to prevent unauthorized access.
  - 2. General Contractor shall build and maintain all such provisions to fully comply with all state and local safety requirements and fully protect the public and all workmen throughout the entire construction. Walkways are to be kept well-maintained, well-lit, free from ice and snow, and reasonably clean at all times.
  - 3. Furnish, install, and maintain for the duration of construction all required scaffolds, tarpaulins, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the work in compliance with all pertinent safety and other regulations.
  - 4. All open trenches and other excavations shall be protected with suitable barriers, signs, and lights to the extent that adequate protection is provided to the public against accident by reason of such open construction. Obstructions such as material piles and equipment shall be provided with similar warning signs and lights.
- B. Provide temporary environmental controls as required by authorities having jurisdiction including, but not limited to, erosion and sediment control, dust control, noise control, and pollution control.

### 3.04 SITE COMMUNICATIONS:

- A. The construction foreman shall be equipped with a cellular phone permitting on-site communications during all times of the construction activity, 24-hours per day.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 6000

### PRODUCT REQUIREMENTS

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the product requirements for the project.

##### 1.02 SECTION REQUIREMENTS:

- A. To fullest extent possible, provide products, materials, and equipment of same kind from a single source.
- B. Equipment manufactured within the continental limits of the United States shall be encouraged.
- C. Deliver, store, and handle products, materials, and equipment according to manufacturer's written instructions, using means and methods that will prevent damage, deterioration, and loss, including theft.
  - 1. Schedule delivery to minimize long-term storage and to prevent overcrowding construction spaces.
  - 2. Deliver in manufacturer's original sealed packaging with labels and written instructions for handling, storing, protecting, and installing.
  - 3. Inspect to ensure compliance with the Contract Documents and to ensure items are undamaged and properly protected.
  - 4. Store heavy items in a manner that will not endanger supporting construction.
  - 5. Store items subject to damage above ground, under cover in a weather tight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required.

#### PART 2 – PRODUCTS

##### 2.01 PRODUCT OPTIONS:

- A. Provide items that comply with the Contract Documents, are undamaged, and are new at the time of installation.

## SECTION 01 6000

- B. Do not attach manufacturer's labels or trademarks, except for required nameplates, on surfaces exposed to view in occupied spaces or on the exterior.
- C. Select products, materials, and equipment as follows:
  - 1. Where these Specifications name only a single product, equipment, or manufacturer, provide the item indicated. No substitutions will be permitted.
  - 2. Where these Specifications name 2 or more products, equipment or manufacturers, provide 1 of the items indicated. No substitutions will be permitted.
  - 3. Where products or equipment are specified by name, accompanied by the term "or equal," comply with provisions concerning "substitutions" to obtain approval for use of an unnamed product or equipment.
  - 4. Where these Specifications describe a product, material, or equipment, listing characteristics required, provide an item that provides the characteristics and complies with requirements.
  - 5. Where these Specifications require compliance with performance requirements, provide products, materials, or equipment that comply and are recommended in writing by the manufacturer for the application.
- D. Unless otherwise indicated, Owner will select color, pattern, and texture of any product, material, or equipment from manufacturer's full range of options.

### 2.02 PRODUCT SUBSTITUTIONS:

- A. Submit four copies of each request for product substitution. Identify product to be replaced, provide complete documentation showing compliance of proposed substitution with all specified requirements, and include the following:
  - 1. A full comparison with the specified product.
  - 2. A list of changes to other Work required to accommodate the substitution.
  - 3. Any proposed changes in the Contract Sum or Contract Time should the substitution be accepted.
- B. Engineer will review the proposed substitution and notify Contractor of its acceptance or rejection.

PART 3 – EXECUTION: – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 6400

OWNER-FURNISHED PRODUCTS

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the products that will be furnished by the Owner and installed by the Contractor.

1.02 OWNER-FURNISHED MATERIAL:

- A. A Builders Risk policy shall be secured by the Contractor to cover the Owner-furnished material that will be handled, worked within or on, and/or installed by the Contractor. The following estimated values shall be used in obtaining insurance coverage for these materials. These prices shall not be included in the unit prices submitted in the Bid.

<u>Owner-Furnished Item</u>	<u>Total Cost</u>
69 kV Suspension Insulators	\$ 3,000
69 kV Horizontal Line Post Insulators	\$ 25,000
T2-3/0 ACSR Conductor	\$ 20,000
3/8" EHS Overhead Shield Wire	\$ 4,000
Wood Poles	\$ 15,000
	<b><u>Total \$ 67,000</u></b>

- B. The Contractor recognizes that substantial value is being placed in his responsibility and shall do all that is necessary to safeguard the Owner's material.
- C. The Owner may change delivery location. If such change results in extra expense to the Contractor, the Contractor may request reimbursement by providing detailed justification of the extra expense.
- D. The Owner intends and has attempted to furnish all materials listed. However, shortages whether by omission, miscount, or loss may be expected. Contractor shall plan his work so that any shortages are identified and the Owner notified a minimum of thirty days in advance of intended use, allowing the Owner to verify the shortage and to purchase the required necessary replacement. The Owner shall

SECTION 01 6400

have no liability what-so-ever for associated costs and delays for material shortages not identified in the above timely manner.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

SECTION 01 6500

PRODUCT DELIVERY REQUIREMENTS

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the requirements that the Contractor shall follow for all products that will be delivered to the project site.

1.02 DELIVERY, STORAGE, AND HANDLING:

- A. Contractor shall make arrangements to load the materials at the storage locations, transport them to the project site and unload them.
- B. Materials furnished by the Contractor shall be addressed and delivered to the Contractor's project facilities.
- C. The Owner will not receive, unload, or store the Contractor's materials.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 7100

### EXAMINATION AND PREPARATION

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the examination and preparation requirements the Contractor shall conform to during construction.

##### 1.02 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

#### PART 2 – PRODUCTS – Not Applicable.

#### PART 3 – EXECUTION

##### 3.01 EXAMINATION:

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, and plumb; substrates within installation tolerances; surfaces that are smooth, clean, and free of deleterious substances; and application conditions within environmental limits. Do not proceed with installation until unsatisfactory conditions have been corrected.

##### 3.02 PROTECTION OF OTHER UTILITIES:

- A. Have all foreign utilities located by contacting the Iowa One-Call. Any other utilities that are not included in the One Call system shall be notified separately by the Contractor.
- B. Give foreign utility management 48-hour notice prior to excavating in a questioned area. After exposing the foreign utility, notification shall again be given the foreign utility management to allow for on-site inspection before the backfilling operation shall begin. The Contractor, from time to time, shall assist the foreign utility in exposing parallel or intersecting lines to ensure that no damage will be done.
- C. Do all things necessary or expedient to properly protect any and all parallel, converging and intersection lines, joint trenches, highways, pipelines, and all



## SECTION 01 7100

property of others from damage. Make minor trench location adjustments, if necessary.

- D. In the event that such parallel, converging and intersection lines, joint lines, poles, highways or other property are damaged in the course of construction of the project, the Contractor shall at his/her own expense restore any or all of such damaged property immediately to as good a state as before such damage occurred.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 7300

### EXECUTION REQUIREMENTS

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the execution requirements that the Contractor shall follow during construction.

##### 1.02 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

#### PART 2 – PRODUCTS – Not Applicable.

#### PART 3 – EXECUTION

##### 3.01 STAKING

- A. The Engineer's representative will stake all new pole locations and the bisect angles for all new direct-buried angle structures and/or self-supporting structures.
- B. The Engineer's representative will provide staking requirements once. Any additional staking will be completed at the Contractor's expense, unless agreed to in writing or electronic mail (e-mail) by the Owner.

##### 3.02 EXCAVATIONS:

- A. When working in trenches or excavations, Contractor shall incorporate required shoring of sidewalls, including trench boxes, braces, or other means of shoring to ensure the safety of all personnel.
- B. Contractor is responsible for all open excavations associated with the Contract. Guard open or unattended trenches, foundations, or pole holes 4 inches or more in width with one of the following methods:
  - 1. 1/2 inch plywood that is weighted to prevent movement during windy conditions.
  - 2. Continuous snow fence and appropriate flashing warning lights.

SECTION 01 7300

3.03 TREE CLEARING:

- A. The Owner or its Representative will be responsible for clearing all trees and shrubs that are located within the transmission line corridor along the line route, as required.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 7400

### CLEANING AND DISPOSAL MANAGEMENT

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the cleaning and disposal management that the Contractor shall conform to during construction.

##### 1.02 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

#### PART 2 – PRODUCTS – Not Applicable.

#### PART 3 – EXECUTION

##### 3.01 DISPOSAL OF SALVAGE MATERIALS:

- A. Contractor to properly dispose all non-salvageable materials. **No removed materials shall be left in any public right-of-ways (i.e. ditches, etc.) or Owner easement areas after being removed by the Contractor.**

##### 3.02 PROTECTION AND CLEANING OF SITE:

- A. Protect all structures within the construction limits.
- B. At all times maintain premises free from accumulations of waste material and rubbish.
  - 1. Upon completion of Work remove all tools and surplus materials from premises.
- C. Where sodded areas were disturbed, restore surface to original elevation, replacing final 6 inches with topsoil, rake smoothly, and reseed.
  - 1. Drainageways disturbed by trenching operations shall be restored as nearly as possible to their original grade and cross section.
- D. At the end of each day's work leave construction area in such a condition so to permit unencumbered access to all private properties in vicinity of Project.

## SECTION 01 7400

- E. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials and clean all sight-exposed surfaces; leave project clean and ready for occupancy.
- F. Hazards Control:
  - 1. Store volatile wastes in covered metal containers and remove from premises daily.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
- G. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.
- H. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- I. At reasonable intervals during progress of work, clean site and public properties, and dispose of waste materials, debris and rubbish. Legally dispose of at public or private dumping areas off Owner's property.
- J. Provide on-site containers for collection of waste materials, debris, and rubbish.
- K. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
- L. Employ experienced workmen, or professional cleaners, for final cleaning.
- M. In preparation for substantial completion or occupancy, conduct final inspection of project site.
- N. Maintain cleaning until project, or portion thereof, is occupied by Owner.

### 3.03 FINAL CLEANING:

- A. Clean each surface or item as follows before requesting inspection for certification of Substantial Completion:
  - 1. Remove labels that are not permanent.
  - 2. Clean transparent materials, including mirrors. Remove excess glazing compounds. Replace chipped or broken glass.

SECTION 01 7400

3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances. Leave concrete floors broom clean.
  4. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean light fixtures and lamps.
  5. Clean the site. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.
- B. All site conditions disturbed by the Contractor shall be restored to their original conditions at the Contractor's expense.

\* \* \* END OF SECTION \* \* \*

## SECTION 01 7800

### CLOSEOUT SUBMITTALS

#### PART 1 – GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the execution requirements that the Contractor shall follow during construction.

##### 1.02 SUBMITTALS:

- A. Record Drawings: Maintain one (1) set of Contract Drawings as Record Drawings. Mark to show installation that varies from the Work originally shown.
- B. Record Specifications: Maintain one (1) copy of the Project Manual, including addenda, as Record Specifications. Mark to show variations in Work performed in comparison with the text of the Specifications and modifications.
- C. Operation and Maintenance Data:
  - 1. The Contractor shall prepare and furnish four (4) manuals of all equipment specified.
  - 2. The Manual shall cover the installation, operation, and maintenance of all equipment and material including:
    - a. Complete catalog data.
    - b. Manufacturer's literature.
    - c. Parts list.
    - d. Maintenance instructions.
    - e. Approved shop drawings.
    - f. Supplier's name, address and telephone number.
  - 3. All such literature shall be bound under hard cover and submitted to the Engineer for review and transmittal to the Owner.
    - a. Should modification be required, the bound literature will be returned to the Contractor for modification and resubmittal to the Engineer.

## SECTION 01 7800

### 1.03 PAYMENT:

- A. The requirements of this Section are considered incidental Work with no separate measurement and payment to be made.

### PART 2 – PRODUCTS – Not Applicable.

### PART 3 – EXECUTION

#### 3.01 CLOSEOUT PROCEDURES:

- A. Request Substantial Completion inspection once the following are complete:
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Submit Record Drawings and Specifications, maintenance manuals, warranties, and similar record information.
  - 3. Deliver spare parts, extra stock, and similar items.
  - 4. Changeover locks and transmit keys to Owner.
  - 5. Complete startup testing of systems.
  - 6. Remove temporary facilities and controls.
  - 7. Complete final cleanup.
  - 8. Touch up, repair, and restore marred, exposed finishes.
  - 9. Obtain final inspections from authorities having jurisdiction.
  - 10. Obtain certificate of occupancy.
- B. Upon notification from the Contractor, the Engineer will proceed with inspection or advise Contractor of unfulfilled requirements. Engineer will prepare the Certificate of Substantial Completion after inspection or advise Contractor of items that must be completed or corrected before the certificate will be issued.
- C. Arrange for each installer of equipment that requires operation and maintenance to provide instruction to Owner's personnel. Include a detailed review of the following:
  - 1. Maintenance manuals.
  - 2. Spare parts, tools, and materials.



SECTION 01 7800

3. Lubricants and fuels.
  4. Identification systems.
  5. Control sequences.
  6. Hazards.
  7. Warranties and bonds.
- D. Final Completion procedures include supplying the following documentation:
1. Waiver and Release of Lien forms from the Contractor and all associated parties that have worked onsite (Subcontractors and any of their Subcontractors) or supplied materials (Suppliers). No partial or conditional lien waivers will be accepted.
  2. Certificate of Contractor and Indemnity Agreement.
  3. Contractor's statement of taxes paid.
  4. Other final documentation as required by the Contract.

\* \* \* END OF SECTION \* \* \*

SECTION 01 7839

WARRANTIES

PART 1 – GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL, and other CONDITIONS of the Contract are hereby made part of this Section.
- B. This Section describes the warranty clause that the Contractor shall conform to for the project.

1.02 WARRANTIES:

- A. See Supplementary Conditions.

PART 2 – PRODUCTS – Not Applicable.

PART 3 – EXECUTION – Not Applicable.

\* \* \* END OF SECTION \* \* \*

**Division 33**  
**Utilities**

SECTION 33 7116.30

LAMINATED WOOD POLES

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes furnishing the laminated wood poles as herein specified and shown on the Drawings.

1.02 SUBMITTALS:

- A. See Section 01 3300 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Section 010001 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS

2.01 SELECT BACKFILL MATERIAL:

- A. Backfill shall be a crushed rock aggregate meeting IDOT standard specification for highway and bridge construction. Aggregate shall contain enough natural or artificial moisture to assure a sufficient binding action between the particles at the time of backfilling and tamping.
- B. An aggregate equivalent to IDOT Section 4109 for Gradation No. 3 and Section 4120.04 for quality of the stone. The following specification is desired:

<u>Sieve Size</u>	<u>Percent Passing</u>
1.5 inch	100
1 inch	95-100
0.5 inch	25-60
No. 4	0-10
No. 8	0-5
No. 200	0-6

## SECTION 33 7116.30

- C. Larger aggregate may be acceptable upon approval by the Engineer.

### 2.02 GROUNDING MATERIALS:

- A. See Drawings for acceptable manufacturers for grounding materials.
- B. The down ground on tangent laminated wood poles shall be bonded to each insulator attachment point on the pole via a bonding clip as shown on the drawings.
- C. Connectors for connection between copper and copperweld-copper to galvanized conductor or hardware shall be bronze.
- D. Ground wire shall be #4 soft-drawn, stranded copper or Copperweld® wire (40% conductivity).
- E. Provide bonding clips for applications shown on the Drawings.
- F. Staples for securing down ground to pole shall be copper coated, 2" x ½", minimum.
- G. Ground rods shall be one (1) section of 5/8" Dia. x 10'-0" L with ground sized to accept bare copper conductor. Ground rod shall be copper bonded to rigid steel core. Ground rod clamp to be bolted type for underground use.
  - 1. Acceptable Manufacturers:
    - a. Ground rod: Erico 615803, or equal.
    - b. Ground rod clamp: Erico CP58, or equal.

### 1.02 OBSTRUCTION LIGHTING:

- A. Obstruction lights shall be installed on pole tops of all poles adjacent to the Waverly Health Center.
- B. Furnish and install dual fixture RTO infrared LED obstruction lights where noted on the drawings according to manufacturer recommendations.
- C. Acceptable Manufacturers:
  - 1. P&R Tech Vigilant L-810 RTO IR LED, Cat. No. RTOCR07002.

### 1.03 STRUCTURE NUMBERING:

- A. Every fifth wood pole shall be numbered. Each pole being numbered shall have a structure number installed on two sides of the pole.

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- B. The tags shall have a clear-baked enamel top-coating with UV inhibitors. Tag finish to be embossed black letters on yellow background. Numbers to be 4" in height and designed on a .040" thick aluminum plate. Supply Almetek, Electromark, or equal.
- C. Provide stainless steel screws to mount the holders to the structures.

### PART 3 - EXECUTION

#### 3.01 POLE INSTALLATION:

- A. Poles shall be handled with care so as not to damage the wood fibers or the preservative treatment.
- B. Set the poles in the location staked by the Engineer, perpendicular and in alignment unless rake is specified in which case the hole shall be dug out-of-line by the amount of the rake so the pole top will be in line with those of adjacent structures and angles on adjacent structures avoided.
- C. Holes shall be approximately 12-14 inches larger than the butt diameter of the pole, and shall be at least as large at the bottom as at the top unless otherwise specified.
- D. Excavate the hole one additional foot if water is encountered in the hole.
- E. Set the poles within 3 inches of the specified depth in sufficiently large holes to admit a tamping bar all around the pole.
- F. The laminated wood poles shall be direct-buried structures with the minimum setting depths as shown by the manufacturer. On sloping ground, the depth of the hole shall be measured from the low side of the hole.
- G. Install foundation reinforcement as per manufacturer's specifications.
- H. Care shall be taken during pole setting to avoid damage to pole, ground wires, bearing strips and bearing plates.
- I. Bearing strips and plates shall be installed on all wood poles as shown on the Drawings. Where bearing plates are used, holes shall be a minimum of 8 inches greater in diameter than the combined total of the pole diameter and two bearing plate widths.
- J. Backfill all pole holes with select backfill as described in the products specifications.
- K. Backfill of holes shall be machine tamped, using not more than one shoveler for each machine tamp. Backfill shall be well banked and tamped around the base of the pole to a height of 6 inches above the ground line. Any surplus excavation

## SECTION 33 7116.30

material shall be leveled neatly and to the satisfaction of the Owner's Representative.

- L. Excavated material from the pole and foundation holes shall be removed from the site and disposed of by the Contractor. All areas shall be repaired to surrounding area conditions. Lawn seeding or sodding shall be performed where construction is called for in those areas.
- M. Where poles are removed as a result of retirement or temporary use, the holes shall be filled and thoroughly backtamped.
- N. All construction practices must be such as to minimize the amount of work that must be done after the pole or structure is erected. Pole climbing must be held to a minimum. Any pole that is badly spurred must be brushed with an approved preservative at Contractor's expense.

### 3.02 GROUNDING:

- A. Ground overhead ground wire(s) at each structure unless otherwise noted.
- B. Effectively ground all poles as shown on the Drawings.

\* \* \* END OF SECTION \* \* \*

SECTION 33 7116.33

WOOD POLES

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes installing the Owner-furnished wood poles as herein specified and shown on the Drawings.

1.02 SUBMITTALS:

- A. See Section 01 0001 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS

2.01 SELECT BACKFILL MATERIAL:

- A. Backfill shall be a crushed rock aggregate. Aggregate shall contain enough natural or artificial moisture to assure a good binding action between the particles at the time of backfilling and tamping. The following specification is desired:

<u>Sieve Size</u>	<u>Percent Passing</u>
2 inch	100
1.5 inch	60-90
1 inch	40-60
1/2 inch	25-50
No. 4	20-40
No. 8	15-30

- B. Larger aggregate may be acceptable upon approval by the Engineer.



## SECTION 33 7116.33

### 2.02 GROUNDING MATERIALS:

- A. See Drawings for acceptable manufacturers for grounding materials.
- B. The down ground on tangent wood poles shall be bonded to each insulator attachment point on the pole via a bonding clip as shown on the drawings.
- C. Connectors for connection between copper and copperweld-copper to galvanized conductor or hardware shall be bronze.
- D. Ground wire shall be #4 soft-drawn, stranded copper or Copperweld® wire (40% conductivity).
- E. Provide bonding clips for applications shown on the Drawings.
- F. Staples for securing down ground to pole shall be copper coated, 2" x ½", minimum.
- G. Ground rods shall be one (1) section of 5/8" Dia. x 10'-0" L with ground sized to accept bare copper conductor. Ground rod shall be copper bonded to rigid steel core. Ground rod clamp to be bolted type for underground use.
  - 1. Acceptable Manufacturers:
    - a. Ground rod: Erico 615803, or equal.
    - b. Ground rod clamp: Erico CP58, or equal.

### 2.03 STRUCTURE NUMBERING:

- D. Every fifth wood pole shall be numbered. Each pole being numbered shall have a structure number installed on two sides of the pole.
- E. The tags shall have a clear-baked enamel top-coating with UV inhibitors. Tag finish to be embossed black letters on yellow background. Numbers to be 4" in height and designed on a .040" thick aluminum plate. Supply Almetek, Electromark, or equal.
- F. Provide stainless steel screws to mount the holders to the structures.

## PART 3 - EXECUTION

### 3.01 POLE INSTALLATION:

- A. Poles shall be handled with care so as not to damage the wood fibers, the preservative treatment, or damage or dent steel.
- B. Set the poles in the location staked by the Engineer, perpendicular and in alignment unless rake is specified in which case the hole shall be dug out-of-line by the

SECTION 33 7116.33

amount of the rake so the pole top will be in line with those of adjacent structures and angles on adjacent structures avoided.

- C. The tops of full length treated poles shall not be cut except under very exceptional conditions and upon approval of the Engineer. If cutting is deemed necessary, the pole top shall be painted with a preservative compound. Under no circumstances shall the butt of any pole be cut.
- D. Holes shall be approximately 12-14 inches larger than the butt diameter of the pole, and shall be at least as large at the bottom as at the top unless otherwise specified.
- E. Excavate the hole one additional foot if water is encountered in the hole.
- F. Set the poles within 3 inches of the specified depth in sufficiently large holes to admit a tamping bar all around the pole.
- G. Care shall be taken during pole setting to avoid damage to pole, ground wires, bearing strips and bearing plates.
- H. All poles shall be set on native soil to ensure proper grounding. After setting each pole, backfill each pole hole around the pole with select backfill as described in the products specifications.
- I. Backfill of holes shall be machine tamped, using not more than one shoveler for each machine tamp. Backfill shall be well banked and tamped around the base of the pole to a height of 6 inches above the ground line. Any surplus excavation material shall be leveled neatly and to the satisfaction of the Owner's Representative.
- J. For direct-buried pole structures the minimum setting depths shall be 10% + 2 feet unless noted otherwise on the drawings. See table below for minimum embedment depths:

<u>Pole Length (in feet)</u>	<u>Setting Depth (in feet)</u>
40	6.0
45	6.5
50	7.0
55	7.5
60	8.0
65	8.5
70	9.0
75	9.5
80	10.0
85	10.5
90	11.0
95	11.5
100	12.0

## SECTION 33 7116.33

- K. On sloping ground, hole depth shall be measured from the low side of the hole.
- L. All areas shall be repaired to surrounding area conditions. Excavated material from the pole and foundation holes shall be removed from the site and disposed of by the Contractor. Contractor shall clean up all construction debris and damaged plantings including grass. Lawn seeding or sodding shall be performed in the disturbed areas. Seed mixes and/or sod specifications shall conform to the right-of-way authority's (DOT, County, etc.) requirements.
- M. Where poles are removed as a result of retirement or temporary use, the holes shall be filled and thoroughly backtamped.
- N. All construction practices must be such as to minimize the amount of work that must be done after the pole or structure is erected. Pole climbing must be held to a minimum. Any pole that is badly spurred must be brushed with an approved preservative at Contractor's expense.
- O. Pole numbers shall be installed on the roadside of the pole 8' above the ground line. Coordinate the directions the numbers face with the Owner if structure is not located along a road.

### 3.02 GROUNDING:

- A. Ground overhead ground wire(s) at each structure unless otherwise noted.
- B. Effectively ground all poles as shown on the Drawings.

\* \* \* END OF SECTION \* \* \*

GUY ASSEMBLIES

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes furnishing and installing the guys and anchors as herein specified and shown on the Drawings.

1.02 SUBMITTALS:

- A. See Section 01 0001 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS

2.01 GUY WIRE:

- A. Guy wire shall be 3/8 inch Extra High Strength (EHS), 7 strand, steel double galvanized (Class B) cable.
- B. Shall conform to all the latest revisions of ASTM Specifications A122-41, A475, A363 or equivalent. Minimum rated breaking strength shall be 15,400 lbs.

2.02 ANCHOR:

- A. All anchors shall be of the power installed screw type.
- B. Number of helixes shall be three: 8”, 10”, and 12”.
- C. For the triple helix anchors, the shafts shall be 1-1/2 inches square and capable of withstanding 5,500 foot-lbs. of torque.

## SECTION 33 7116.36

- D. Anchor rods shall be sized to fit the applicable helix section and shall be provided with a triple thimble-type eye assembly.
- E. For triple helix application, the extension rods with couplings shall be a minimum of 1-1/2 inch in diameter by the length shown on the drawings.
- F. Anchor rods and extensions shall conform to EEI Specification TD-2-1939 or any acceptable revision thereof.
- G. See Drawings for acceptable manufacturers.

### 2.03 FIBERGLASS STRAIN INSULATORS:

- A. Fiberglass strain insulators shall be installed in down guys or overhead guys where specified.
- B. Strain insulator shall be a minimum of 78 inches in length.
- C. End fittings to be clevis-clevis with two rollers.
- D. Unit shall have a minimum breaking strength of 30,000 pounds.
- E. See Drawings for acceptable manufacturers.

### 2.04 GUY GRIP:

- A. Preformed "Guy-Grip" wrap type deadends shall be used on guys.
- B. Grips shall be steel with minimum B-coat galvanizing and suitable for use on 3/8 inch, 7 strand, guy wire.
- C. See Drawings for acceptable manufacturers.

### 2.05 GUY GUARDS:

- A. Guy guards shall be PVC material with high impact resistance and high color retention at all temperatures.
- B. The guards shall have rib reinforcing or equal the entire length to minimize sag, droop and/or twist in service.
- C. Minimum length to be 8 feet, 1.75" in diameter
- D. Color = orange.
- E. Mount using hot dip galvanized bolt clamps.
- F. See Drawings for acceptable manufacturers.

SECTION 33 7116.36

2.06 MISCELLANEOUS GUYING HARDWARE:

- A. See Drawings for miscellaneous hardware details and manufacturers.

PART 3 - EXECUTION

3.01 GUYS and GUARDS:

- A. Guys shall be made up in accordance with the drawings, using the strand and devices indicated.
- B. Guys shall be drawn up to a tension sufficient only to take out all slack in the guy strand.
- C. Guy guards shall be installed on all guys.

3.02 ANCHORS:

- A. Guy anchors shall be of the power installed screw type.
- B. Anchor rods shall be in line with the strain and so installed that approximately 12 inches of the rod shall remain out of the ground.
- C. Under no circumstances shall the eye of the rod be covered.
- D. If holding strength of anchor is in question or if requested by Engineer, a suitable method such as torque indicator or dynamometer to determine the holding power of the installed anchor shall be applied to installed screw anchors by the Contractor.
  - 1. The test shall be done in the presence of the Owner's Representative.
- E. Additional extension rods shall be used where necessary to obtain the required holding strengths.

\* \* \* END OF SECTION \* \* \*

SECTION 33 7123.13

SUSPENSION INSULATORS

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes installing the Owner-furnished suspension insulators as herein specified and shown on the Drawings.
- C. Material furnished by Others:
  - 1. Suspension Insulators.

1.02 SUBMITTALS:

- A. See Section 01 0001 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS – Not Applicable.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Inspect all insulators for chips, cracks, torn sheds or other defects.
- B. Handle insulators with care so as not to damage the units. If any units are damaged, they shall be replaced.
- C. **Cotter keys shall be spread out on all hardware that has them to prevent them from falling out.**

\* \* \* END OF SECTION \* \* \*

SECTION 33 7123.19

LINE POST INSULATORS

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes installing the Owner-furnished line post insulators as herein specified and shown on the Drawings.
- C. Material furnished by Others:
  - 1. Line Post Insulators.

1.02 SUBMITTALS:

- A. See Section 01 0001 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS – Not Applicable.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Inspect all insulators for chips, cracks, torn sheds or other defects.
- B. Handle insulators with care so as not to damage the units. If any units are damaged, they shall be replaced.
- C. **Cotter keys shall be spread out on all hardware that has them to prevent them from falling out.**

\* \* \* END OF SECTION \* \* \*



SECTION 33 7126.01

POLE LINE HARDWARE

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes furnishing and installing the pole line hardware as herein specified and shown on the Drawings.

1.02 SUBMITTALS:

- A. See Section 01 0001 – General Requirements, for submittal procedures.

1.03 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.04 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS

2.01 TRANSMISSION LINE CONDUCTOR ATTACHMENTS:

- A. Phase conductor – tangent (suspension clamp):
  - 1. Support phase conductors at the ends of the line post insulators with Cushion grip suspension clamps with elastomer insert for the T2-3/0 Pigeon ACSR conductor.
  - 2. Furnish y-clevis eye connector to attach the clamp to the insulator. Clamp to have a minimum 20,000 lb. rating and be rotated 90° as required.
  - 3. Acceptable manufacturers:
    - a. Clamp: Preformed CCT2-0004, no equal.
    - b. Y-clevis Eye: Hubbell YCS-05-90, or equal.

SECTION 33 7126.01

B. Phase conductor – deadend:

1. Utilize full tension quadrant/bolted type deadend for the T2-3/0 Pigeon conductor for the deadends as applicable.
  - a. Deadends shall be aluminum with a minimum of four u-bolts.
  - b. Clamp shall include cotter pin and compression springs.
  - c. Provide socket eye fitting with clamp for attachment to insulator.
  - d. Use compression connectors to connect the phase conductors together.
  - e. Ultimate body strength shall be a minimum of 25,000 lbs.
2. Supply compression splice to connect conductors, as shown on the Drawings.
3. Acceptable manufacturers:
  - a. Clamp: Hubbell, SDT2112N, no equal.
  - b. Socket eye: Hubbell, SA-06, or equal.
  - c. Compression splice: Burndy YCS27R, or approved equal.

C. OHGW – tangent and medium angle:

1. Provide a shield wire support bracket, double bolt.
2. Utilize a suspension clamp for the OHGW tangent fitting.
3. Acceptable manufacturers:
  - a. Support Bracket: Hughes 2859, or approved equal.
  - b. Suspension clamp: Hubbell MS-60-N, or approved equal.

D. OHGW deadend:

1. Utilize quadrant style deadend clamp for shield wire deadends.
  - a. Body shall be constructed of galvanized ductile iron.
  - b. Clamp to have a minimum of three U-bolts.
2. Provide 3-bolt connector to connect shield wires.

## SECTION 33 7126.01

3. Provide y-clevis/eye fitting to attach to deadend tee or vang.
4. Acceptable manufacturers:
  - a. Clamp: Hubbell SWDE55N, or approved equal.
  - b. Y-clevis Eye: YCS-04-90, or approved equal.
  - c. 3-Bolt Connector: Maclean J929, or approved equal.
- E. Conductor Splices (Full tension – T2-3/0 ACSR Pigeon):
  1. All splices shall be compression and rated for full tension.
  2. Acceptable Manufacturers:
    - a. Burndy YDS-27RLY, or equal.
- F. Conductor Splices (Jumpers):
  1. All splices shall be compression and rated for full tension.
  2. Acceptable Manufacturers:
    - a. Burndy YCS27R, or equal.

### 2.02 HARDWARE:

- A. Machine bolts, carriage bolts, and double-arm bolts shall conform to E.E.I. Specification TD-1-1937.
- B. Furnish all bolts with nuts and lock nuts.
- C. Accommodate the necessary nuts, washer, etc., without projecting more than 1-1/2 inches at the free end of the bolts.
- D. Bolt projection with an eye nut installed should not project more than 1/4 inch into the eye.
- E. Furnish twin coil type spring washers.
- F. Locknuts shall be free spinning square or hexagonal and galvanized that can be started freely from either end.
- G. Locknuts shall have arched surfaces which will be slightly deflected when tightened with wrench into proper place.
- H. Provide MF No. 1 locknuts.

## SECTION 33 7126.01

- I. Steel parts shall conform to the latest revision of ASTM Specification A7-46.
- J. Malleable iron parts shall be hot-dip galvanized conforming to ASTM Specification A153-47T.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION:

- A. Assemble and install all hardware products including arresters, cutouts, fuse links, brackets, terminators, and all other miscellaneous hardware according to the drawings and the manufacturer's recommendations.
- B. The Contractor shall use extreme care when installing any compression type fitting to ensure the properly sized die is used according to the manufacturer's recommendations.
- C. The Contractor shall furnish all necessary tools, including compressors and die sets, for applying compression splices, repair sleeves, and compression type deadends.
- D. All joints or splices and repair sleeves shall be located at least 10 feet away from structures and no splices or repair sleeves shall be used in spans crossing over or adjoining important highways, railroads, or other public utility lines without approval of the Owner's Representative.
- E. In splicing conductor, it is essential that the connection between the metal surfaces be made clean and bright and that all foreign material is removed from between the strands with a wire scratch brush or emery cloth or both prior to making the compression.
- F. Alcoa No. 2 electrical joint compound is to be used on the bolted connections of compression-type jumper terminals.
- G. Cotter keys shall be spread out on all hardware that has them to prevent them from falling out due to line vibration.
- H. At the substation deadends, install a 2 or 4-hole terminal pad, as required, on the phase conductor and terminate it on the terminal pads of the switch or bus section as applicable.
- I. **Contractor to ensure that all rods are installed and spread evenly in phase and shield wire clamp installations where armor rods are part of the assembly.**

\* \* \* END OF SECTION \* \* \*

OVERHEAD HIGH VOLTAGE CONDUCTOR

PART 1 - GENERAL

1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes installing the Owner-furnished overhead high voltage conductor and shield wire as herein specified and shown on the Drawings.
- C. Materials furnished by Others:
  - 1. T2-3/0 ACSR Pigeon.
  - 2. 3/8" EHS.

1.02 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

1.03 WARRANTY:

- A. See Division 1 – General Requirements, for warranty requirements.

PART 2 - PRODUCTS

2.01 MARKING SPHERES:

- A. Install marking spheres on the shield wire of spans adjacent to the Waverly Health Center.
- B. Furnish and install 24" marking spheres where noted on the drawings according to the manufacturer recommendations with a maximum spacing between marking spheres of 200 feet. Lighted marking spheres shall be installed on the top transmission phase conductors. Non-lighted marking spheres shall be installed on the static wire.
- C. Acceptable Manufacturers:
  - 1. Non-lighted: Furnish P&R Technologies FastBall™ Power Line Markers.

## SECTION 33 7139.13

2. Lighted: Furnish P&R Technologies SpanLite™ Self-Illuminated Power Line Markers.

### PART 3 - EXECUTION

#### 3.01 INSTALLATION:

- A. Contractor will furnish all tools and equipment for stringing, splicing, and installing the conductors.
- B. The equipment and methods used for stringing the conductors shall be subject to the conductor manufacturer's recommended practices.
- C. Conductors or structures will not be damaged or injured.
- D. Reel stands shall be heavily constructed and have provisions for braking the reels.
- E. The minimum diameter of stringing sheaves shall be 12 inches at the bottom of the groove and the size and shape of the groove shall conform to the conductor manufacturer's recommendations.
- F. Sheaves shall be equipped with ball or roller bearings.
- G. The proper size conductor grips shall be used exclusively in the handling of ACSR conductor.
- H. Particular care shall be exercised to ensure that the conductors do not become kinked, twisted or abraded in any manner.
- I. The conductors shall not be dragged over rocks, fence wires or any object which might damage the conductor.
- J. Suitable guards or sheaves shall be used to protect the conductors from damage where it would otherwise be impossible to keep the conductor from coming in contact with objects which might damage it.
- K. Guard structures shall in general be erected at all roads, highways, railroads, power lines, communication lines, etc., in accordance with good construction practice.
- L. Guards shall be constructed of spars or other wooden members having a rounded surface over which the conductor may slide without damage.
- M. Contractor shall furnish guard poles and all other necessary supports and timbers.
- N. Contractor shall install poles and remove them and shall fill and tamp pole holes after removing guard poles.

## SECTION 33 7139.13

- O. If conductors are damaged, the Contractor shall repair or replace the damaged sections in a manner satisfactory to the Owner's Representative and at no additional cost to the Owner.
- P. Conductors shall be allowed to hang freely in the stringing blocks for at least 2 hours before being sagged to permit conductor and air temperatures to equalize.
- Q. The total time which the conductor is allowed to remain at sag in the stringing blocks before being clipped in shall not exceed 72 hours.
- R. Conductors shall be sagged in accordance with sag tables furnished by the Engineer.
- S. The length of conductor sagged in one operation shall be limited to the length that can be sagged satisfactorily.
- T. In sagging one-reel lengths, the sag of two spans shall be checked.
- U. In sagging lengths of more than one reel, the sag of three or more spans near each end and in the middle of the length being sagged shall be checked.
- V. The sag of spans on each side of all horizontal angles of more than 10 degrees shall be checked.
- W. After conductors have been brought up to the required sag, intermediate spans shall be inspected to determine whether the sags are uniform and correct.
- X. The length of spans used for checking sag shall be approximately equal to the ruling span.
- Y. Sagging operations shall not be carried on when, in the opinion of the Engineer, wind prevents satisfactory sagging.
- Z. The Contractor shall record the location, span length, sag, and temperature when conductor is sagged.
- AA. A tolerance of one-half inch of sag per hundred feet of span length will be permitted.
- BB. A limit of 3 inches on the minus side and 6 inches on the plus side provided that all conductors in the span assume the same sag and the necessary ground clearance is obtained.
- CC. Conductor tension between successive sagging operations to be equalized so that the suspension insulator assemblies will assume the proper position when the conductor is clipped in.

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- DD. Contractor shall install the conductor in a manner to minimize the number of splices.

\* \* \* END OF SECTION \* \*



## SECTION 33 9000

### RETIREMENT

#### PART 1 - GENERAL

##### 1.01 SCOPE:

- A. The GENERAL, SUPPLEMENTAL and other CONDITIONS of the Contract and the GENERAL REQUIREMENTS (Division 1) are hereby made part of this Section.
- B. Work under this Section includes the furnishing of all labor and equipment for the removal of existing transmission line, disassembling material units, and all labor and disposal costs.

##### 1.02 PAYMENT:

- A. See Section 01 2000 – Price and Payment Procedures, for description of units.
- B. Payment shall be at the Contract unit prices as shown on the Bid Form.

##### 1.03 DELIVERY, STORAGE, AND HANDLING:

- A. All material will become the property of the Contractor and shall be disposed of properly, except the following:
- B. Contractor shall be responsible for loading and transporting all salvaged and non-salvaged material to the designated areas.
- C. The Contractor shall coordinate delivery items, such as timing, quantity, and weights, with those receiving salvage materials.

#### PART 2 - PRODUCTS

##### 2.01 SELECT BACKFILL MATERIAL:

- A. Backfill shall be topsoil for the top 1'-6". The remaining fill section can be topsoil, clay, or silt material. The material shall contain enough natural or artificial moisture to assure a good binding action between the particles at the time of backfilling and tamping.
- B. Backfill shall not be borrowed from the area around the hole unless prior approval from the landowner is given.

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### PART 3 - EXECUTION

#### 3.01 SALVAGED CONDUCTOR:

- A. The conductor or shield wire shall be placed on wooden reels in a workmanlike manner in such a way that it can be reused and easily transported. Each reel shall contain only one type of conductor (no mixing of types and/or sizes).
- B. The removal includes the unclamping or untying of the conductor or shield wire at all attachment locations.

#### 3.02 POLE TOP ASSEMBLIES:

- A. All pole top assemblies including hardware shall be removed from the pole and disposed of by the Contractor.

#### 3.03 POLE:

- A. The Contractor is not required to remove the ground wire attached to the pole.
- B. Direct-buried pole structures are believed to have a 10% plus 2' burial depths unless noted otherwise on the drawings:
- C. Backfill all pole holes with select backfill as described in the previous products section.
- D. Backfill shall not be borrowed from the area around the hole unless prior approval from the landowner is given.
- E. Backfill of holes shall be machine tamped, using not more than one shoveler for each machine tamp. Topsoil material shall be well banked and tamped around the base of the pole to a height of 6 inches above the ground line and uniformly placed to the satisfaction of the Owner.
- F. **Removed poles (or associated hardware materials) shall not be placed or left in any public rights-of-way.**

#### 3.04 RESTORATION:

- A. After removal, the Contractor shall clean up all construction debris and remove damaged soil and plantings including grass. Excavated material from the foundation holes shall be removed from the site and disposed of by the Contractor.
- B. All areas shall be repaired to surrounding area conditions. Lawn seeding or sodding shall be performed as required.

\* \* \* END OF SECTION \* \* \*

## **Category IV**

### **Appendix**

- Project Drawings (Separate): 15 Sheets

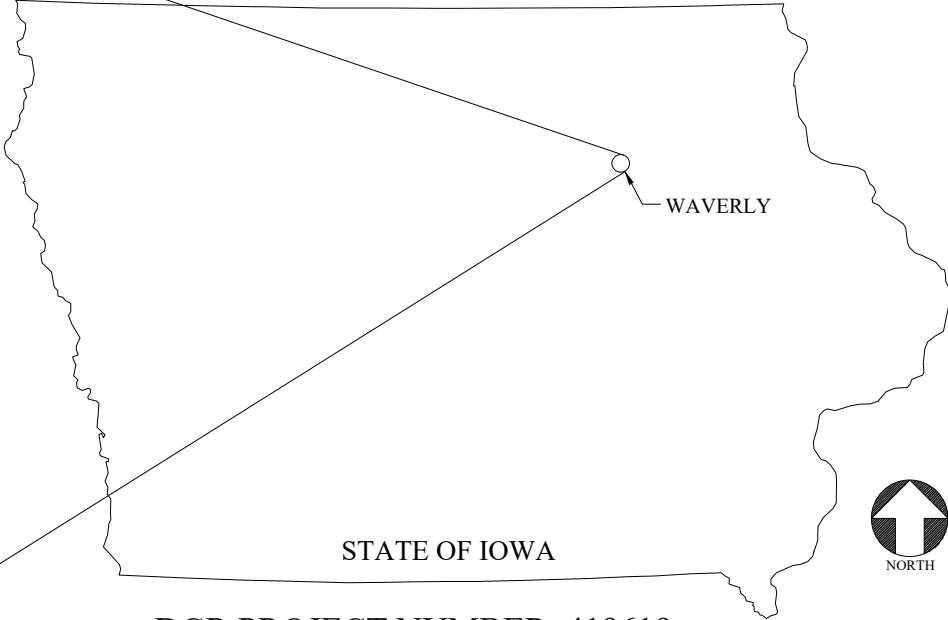
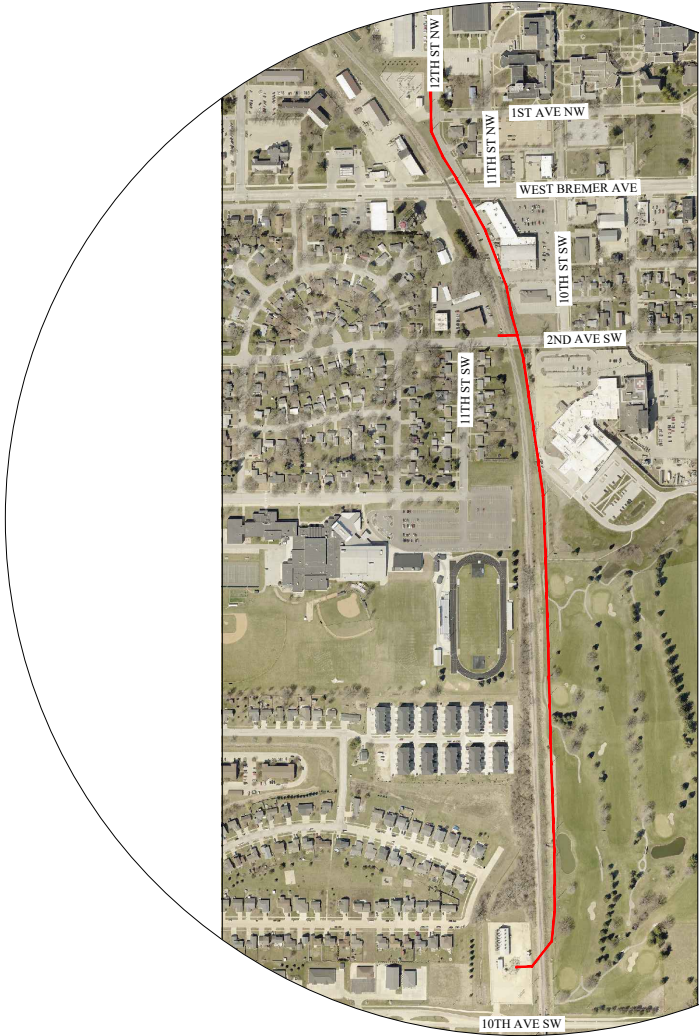
# 69 kV TRANSMISSION LINE RECONSTRUCTION

-2024-

## WAVERLY UTILITIES WAVERLY, IOWA

LIST OF DRAWINGS

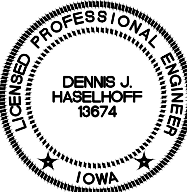
1 SHEET	REMOVAL MAP
1 SHEET	CONSTRUCTION NOTES
2 SHEETS	PLAN & PROFILES
3 SHEETS	STAKING SHEETS
7 SHEETS	CONSTRUCTION UNIT DRAWINGS



DGR PROJECT NUMBER 419619

**ISSUED FOR BIDS**  
**10-18-2024**





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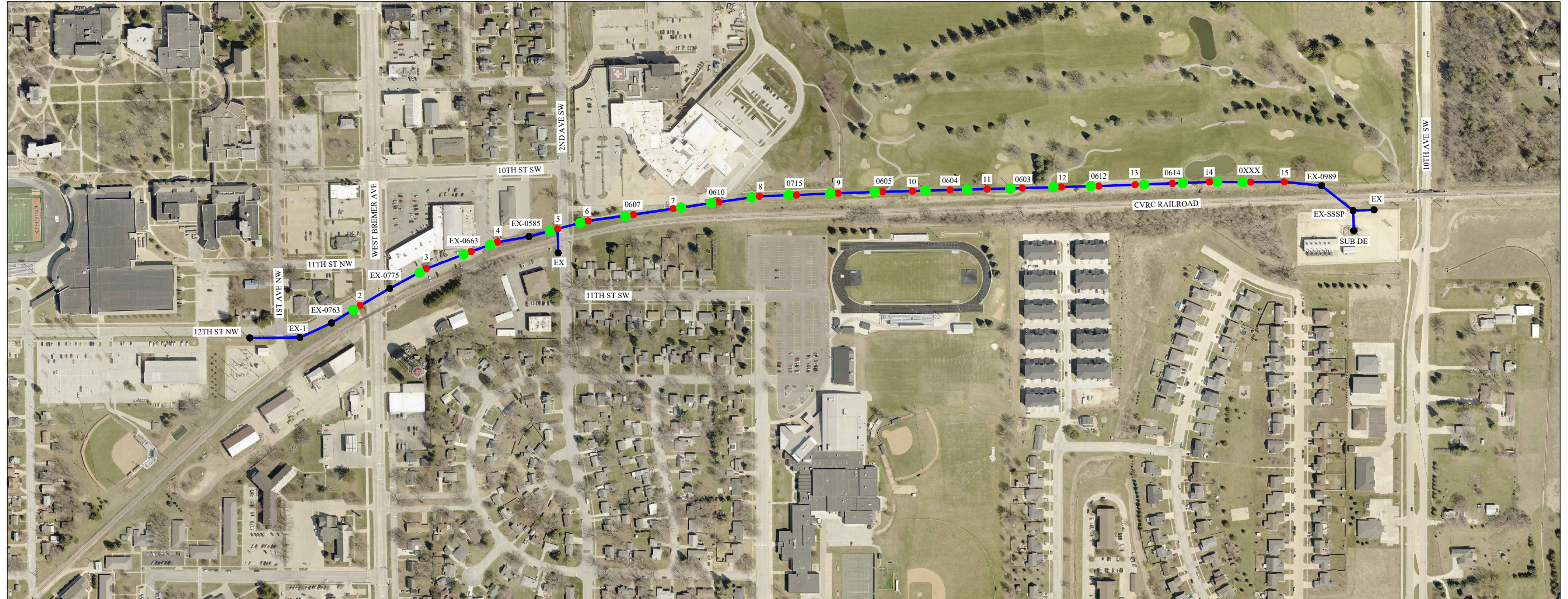
The official copy of this engineering document is on file at the office of the Owner.

Pages or sheets covered by this seal: All drawings.

Legend

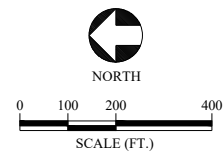
- Proposed 69 kV T-Line
- Existing 69 kV T-Line





**LEGEND**

- Proposed line route
- Existing line route
- Existing structures
- Proposed structure location
- Existing structure to remove



REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS



Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

WAVERLY UTILITIES  
 WAVERLY, IOWA

**EXISTING FACILITY REMOVAL MAP  
 69 kV TRANSMISSION LINE RECONSTRUCTION**



## CONSTRUCTION NOTES

1. The staking of the transmission poles will be done once by the Owner's representative. The Contractor must receive approval from the Engineer if they desire to adjust a staked location.
2. The Contractor shall be responsible for calling locates and exposing all foreign utilities prior to any excavation, including and hand digging or vac work as necessary, cost incidental to the project.
3. Contractor shall install temporary guard structures as necessary at road and line crossings to protect crossing lines, cost incidental to the project.
4. Contractor shall string all transmission conductor according to sag charts provided by the Engineer. Notify Engineer 2 weeks in advance of requiring sag charts for stringing operations.
5. The Contractor shall complete verification of phasing before finalizing deadend connections and energization of all circuits.
6. Coordinate all outages with the Owner. See Specifications for outage, constraints and schedule information.
7. The project is located in private easement. All areas disturbed by the Contractor shall be restored to their original condition. The Contractor shall stay within the easement areas at all times, unless authorized by private landowners or other authorities.
8. Access to the project sites shall be limited to the easement, or as approved by private land owners. The Contractor shall coordinate private property access with property owners if necessary.
9. The Contractor shall install silt fence, straw wattles or other measures as required for the control of erosion, runoff, and spills due to storm water or construction activities to the project site. The Contractor is solely responsible for site controls for environmental, storm water systems, waterways, private property and public ROW.
10. The Contractor shall remove and dispose of all spoils from the site as necessary.
11. After completion of the project, the Contractor shall furnish the Owner with a signed written release form from each property Owner where private lands were encroached, accessed, or utilized by the Contractor during construction. The written release form is included in the Miscellaneous Forms section of the specification documents.
12. Tangent structures with a line angle of 1 degree or greater shall be field raked a minimum of 12" or as shown on the Unit Sheets or Drawings.
13. The Contractor is responsible for the disposal and salvage of all removed or unused materials not expressly specified for use on the project.
14. The Contractor is responsible for the storage of all materials utilized on the project.
15. The Contractor shall procure, set-up, maintain and secure a project laydown yard for storage of all materials as required for the project.
16. The Contractor shall be responsible for offloading and storing all Owner-furnished materials. Contractor shall coordinate with Engineer and Owner for Owner-furnished material delivery schedule and potential storage locations.
17. The Contractor shall furnish and install aviation obstruction lights on the tops of all transmission poles adjacent to the Waverly Health Center. Aviation obstruction lights shall be installed per the manufacturer's recommendations on the following structures: #6, #7, and #8. See specifications for acceptable manufacturers.
18. The contractor shall furnish and install marking spheres on the shield wire and top phase conductor of transmission spans adjacent to the Waverly Health Center. Non-lighted marking spheres shall be installed on the shield wire spans and lighted marking spheres shall be installed on the top phase conductors with a spacing of 200' or less between the following structures: #6 to #7, #7 to #8, and #8 to #9. See specifications for acceptable manufacturers.
19. The existing transmission line has double circuit underbuild. The Owner will remove one of the circuits prior to reconstruction of the transmission line. The Contractor shall transfer the remaining underbuild circuit to the new poles. The Owner will replace the second underbuild circuit after construction of the transmission line is complete.

### GENERAL DESIGN DATA

PHASE CONDUCTOR:	T2-3/0 ACSR Pigeon - 4,634# DTHL U.O.N.
STATIC CONDUCTOR:	3/8" EHS - 3,130# DTHL U.O.N.
STRUCTURES:	LAMINATED WOOD POLES AND ROUND WOOD POLES
INSULATORS:	POLYMER
TOTAL LINE LENGTH:	MILES OF 69 KV = ~ 0.80 MILES OR 4,220 ft.

### PLAN & PROFILE DRAWING LEGEND

	PROFILE SHEET LABEL	EXAMPLE (TYP.)
1ST LINE	STRUCTURE NUMBER	23
2ND LINE	STRUCTURE FRAMING UNIT . LENGTH (CLASS)	TP-69.070(1)
3RD AND/OR 4TH LINES	MISCELLANEOUS NOTES	BURY 1' ADDITIONAL.
LAST LINE	PROJECT STATIONING (FT.)	56+73

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS



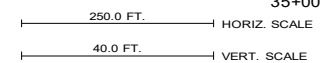
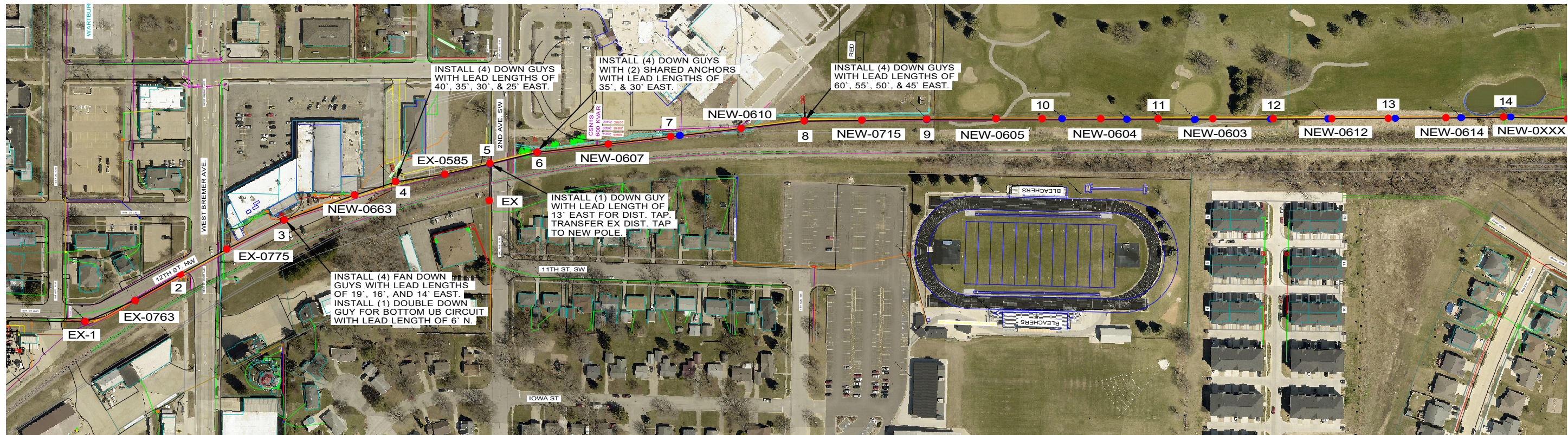
Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

WAVERLY UTILITIES  
WAVERLY, IOWA

CONSTRUCTION NOTES  
69 kV TRANSMISSION LINE RECONSTRUCTION

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1 OF 1





REV	DATE	DESCRIPTION



PROJECT MANAGER: DJH  
 DESIGNER: DYS  
 PROJECT NUMBER: 419619  
 PHONE: (712) 472-2531

WAVERLY UTILITIES  
 WAVERLY, IOWA

PLAN & PROFILE  
 69 KV TRANSMISSION LINE RECONSTRUCTION



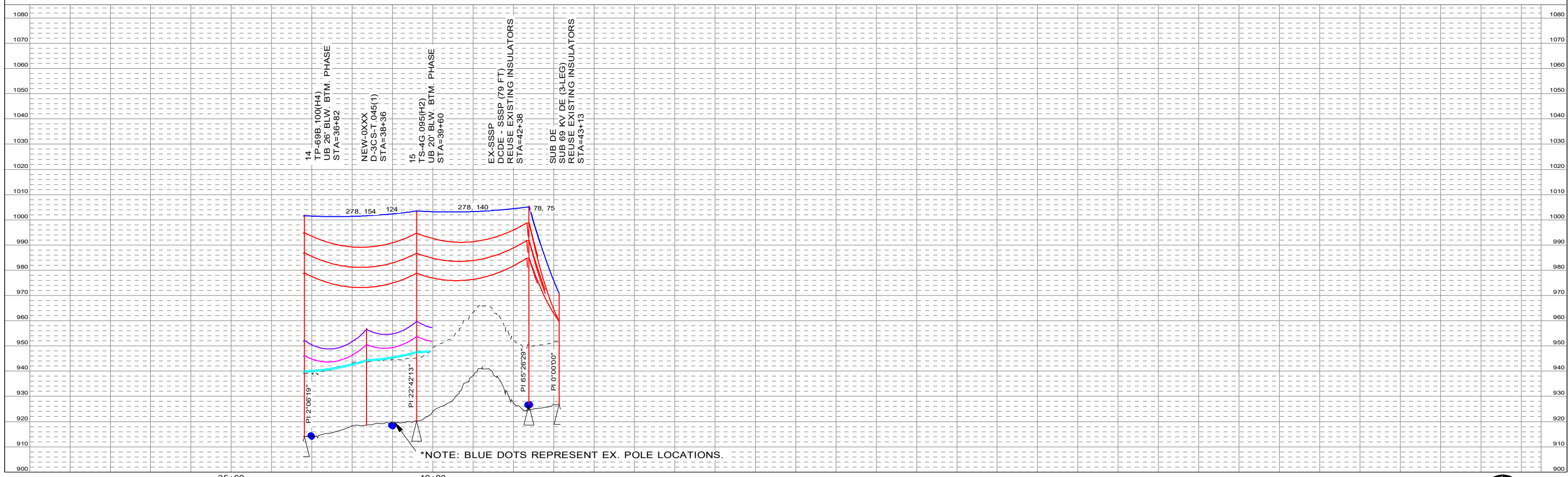
\* C = Construction | X = Transfer | E = Existing | R = Removal

Structure Number	*	QTY	HEIGHT CLASS	QTY	STRUCTURAL	QTY	PRI. POLE TOP	QTY	MISC.	QTY	FIBER	QTY	GUY	QTY	ANCHOR	QTY	GRD	QTY	DISTRIBUTION	QTY	TRANSFERS	QTY	REMOVALS	COMMENTS		
EX-1	E	1	LWP																				4	RCL	REUSE EXISTING POLYMER SUSPENSION INSULATORS. REPLACE DEADEND CLAMPS.	
	C								3	TM-1																
	C								1	TM-2																
EX-0763	E	1	40(4)																							
2	C	1	75(H2)			1	TP-69										1	WPG						1	RP	TRANSFER SPACER CABLE UB CIRCUIT. INSTALL UB 10' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																			1	XC-15-(4)					
	X																			3	XF					
EX-0775	E	1	40(2)																							
3	C	1	80(H2)			1	TP-69B					4	E3-3	5	D6	1	WPG							1	RP	INSTALL (4) FANNED DOWN GUYS WITH LEAD LENGTHS OF 19', 16', AND 14' EAST. INSTALL (1) DBL. DOWN GUY 6' N TO UB. DEADEND. TRANSFER SPACER CABLE UB CIRCUIT, PRIMARY RISER, & FUSE CUTOUTS. INSTALL TOP UB 10' BELOW BTM T-LINE PHASE. INSTALL BOTTOM UB CIRCUIT 6' BELOW TOP CIRCUIT. TRANSFER FIBER, FIBER DEADENDS, & SPLICE CASE.
	C										1	E3-3D	10	E5												
	X																			1	XC-15-(4)					
	X																			1	XRP-(3)					
	X																			1	XF					
NEW-0663	C	1	40(H1)														1	WPG						1	RP	TRANSFER SPACER CABLE UB CIRCUIT, PRIMARY RISER, & FUSE CUTOUTS. TRANSFER FIBER CABLES.
	X																									
	X																									
	X																									
4	C	1	85(H2)			1	TP-69B					4	E3-3	4	D6	1	WPG							1	RP	INSTALL (4) DOWN GUYS WITH LEAD LENGTHS OF 40', 35', 30', AND 25' EAST. TRANSFER SPACER CABLE UB CIRCUIT, SECONDARY RISER, & FUSE CUTOUTS. INSTALL UB 16' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	C																									
	X																									
	X																									
	X																									
EX-0585	E	1	40(4)																							
5	C	1	80(H1)			1	TP-69B					1	E3-3	1	D6	1	WPG							1	RP	INSTALL (1) DOWN GUY WITH LEAD LENGTH OF 13' EAST TO BACK OF UB TAP GOING WEST. BURY POLE 1' ADDITIONAL. TRANSFER SPACER CABLE UB CIRCUITS AND 3Ø UB TAP DEADEND. INSTALL TOP UB CIRCUIT 13' BELOW BTM T-LINE PHASE. MATCH EX. FRAMING SPACING FOR UB TAP DEADEND. TRANSFER FIBER CABLES.
	C																									
	X																						2	XC-15-(4)		
	X																						2	XF		
6	C	1	80(H1)			1	TP-69B					4	E3-3	2	D6	1	WPG							1	RP	INSTALL (4) DOWN GUYS WITH SHARED ANCHORS AND LEAD LENGTHS OF 35' & 30' EAST. TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 12' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES. INSTALL OBSTRUCTION LIGHTS. INSTALL MARKING SPHERES ON SOUTH STATIC AND TOP PHASE CONDUCTOR.
	C																									
	X																									
	X																									
NEW-0607	C	1	40(H1)														1	WPG						1	RP	TRANSFER SPACER CABLE UB CIRCUIT. MATCH EX. FRAMING. TRANSFER FIBER CABLE, FIBER DEADENDS, AND FIBER COIL.
	X																									
	X																									
	X																									
7	C	1	75(H3)			1	TP-69										1	WPG						1	RP	TRANSFER SPACER CABLE UB CIRCUIT. INSTALL UB CIRCUIT 16' BELOW BOTTOM T-LINE PHASE. TRANSFER FIBER CABLE, AND FIBER DEADENDS. INSTALL OBSTRUCTION LIGHTS. INSTALL MARKING SPHERES ON SOUTH STATIC AND TOP PHASE CONDUCTOR.
	X																									
	X																									
	X																									
NEW-0610	C	1	40(H1)														1	WPG						1	RP	BURY POLE 3' ADDITIONAL. TRANSFER SPACER CABLE UB CIRCUIT. MATCH EX. FRAMING. TRANSFER FIBER CABLES.
	X																									
	X																									

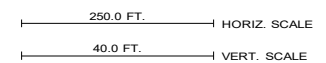


\* C = Construction | X = Transfer | E = Existing | R = Removal

Structure Number	*	QTY	HEIGHT CLASS	QTY	STRUCTURAL	QTY	PRI. POLE TOP	QTY	MISC.	QTY	FIBER	QTY	GUY	QTY	ANCHOR	QTY	GRD	QTY	DISTRIBUTION	QTY	TRANSFERS	QTY	REMOVALS	COMMENTS	
8	C	1	85(H2)			1	TP-69B						4	E3-3	4	D6	1	WPG					1	RP	INSTALL (4) DOWN GUYS WITH LEAD LENGTHS OF 60', 55', 50', AND 45' EAST. TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 16" BELOW BOTTOM T-LINE PHASE. TRANSFER FIBER CABLES. INSTALL OBSTRUCTION LIGHTS. INSTALL MARKING SPHERES ON SOUTH STATIC AND TOP PHASE CONDUCTOR.
	C														8	E5									
	X																				1	XC-15-(4)			
	X																				2	XF			
NEW-0715	C	1	45(1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
9	C	1	85(H3)			1	TP-69										1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS, PRIMARY RISER, & FUSE CUTOUTS. INSTALL TOP UB 20' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					1	XRP-(3)		
	X																					2	XF		
NEW-0605	C	1	40(1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
10	C	1	80(H2)			1	TP-69										1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB 20' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
NEW-0604	C	1	40(1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
11	C	1	90(H3)			1	TP-69										1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB 20' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
NEW-0603	C	1	40(1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
12	C	1	90(H3)			1	TP-69										1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB 26' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
NEW-0612	C	1	45(H1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
13	C	1	100(H4)			1	TP-69										1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB 30' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		
NEW-0614	C	1	45(H1)														1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.
	X																					1	XC-15-(4)		
	X																					2	XF		



DESIGN TENSION:  
 SW: 3/8" EHS = 3,132 LBS NESC HEAVY DISPLAYED @ UPLIFT, INITIAL U.N.O.  
 TØ: T2-3/0 PIGEON ACSR = 4,634 LBS NESC HEAVY, DISPLAYED @ 212°F, MAX SAG U.N.O.  
 UB: 15 KV SPACER CABLE (PURPLE = 795 KCMIL & PINK = 477 KCMIL) = 6,000 LBS NESC HEAVY, DISPLAYED @ 167°F, MAX SAG U.N.O.



REV	DATE	DESCRIPTION



PROJECT MANAGER: DJH  
 DESIGNER: DYS  
 PROJECT NUMBER: 419619  
 PHONE: (712) 472-2531

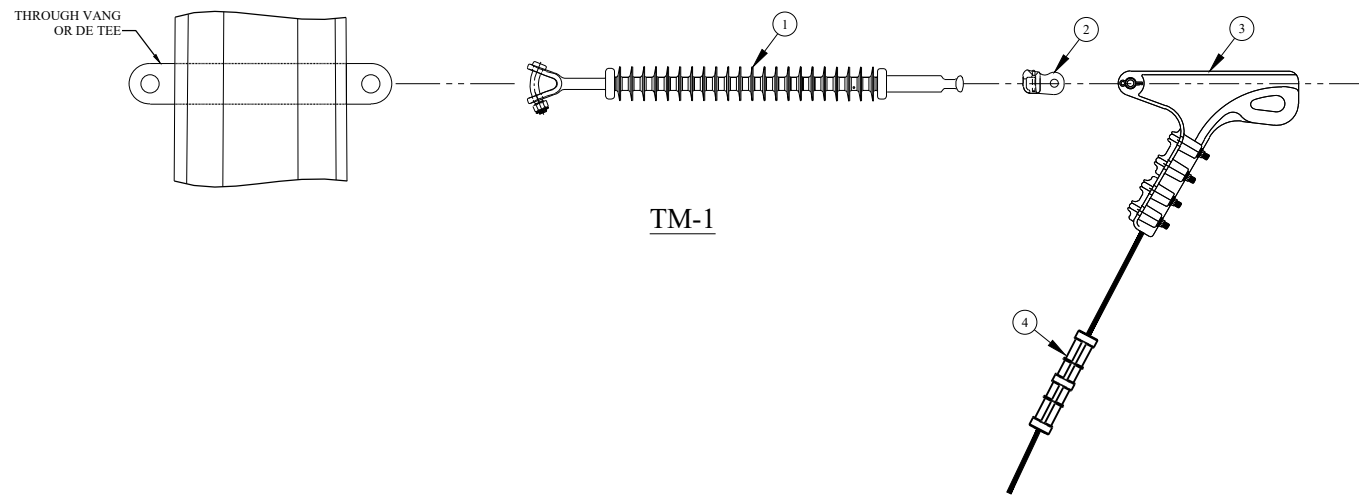
WAVERLY UTILITIES  
 WAVERLY, IOWA

PLAN & PROFILE  
 69 KV TRANSMISSION LINE RECONSTRUCTION

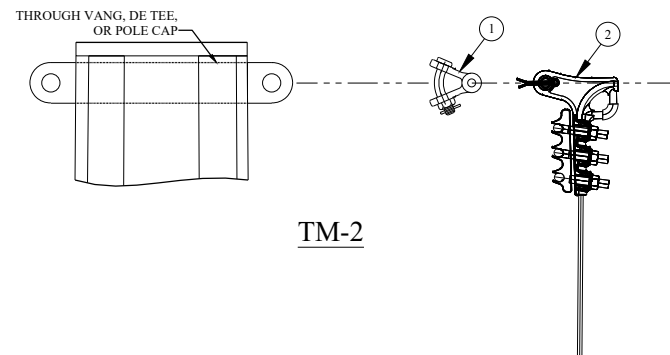
\* C = Construction | X = Transfer | E = Existing | R = Removal

Structure Number	*	QTY	HEIGHT CLASS	QTY	STRUCTURAL	QTY	PRI. POLE TOP	QTY	MISC.	QTY	FIBER	QTY	GUY	QTY	ANCHOR	QTY	GRD	QTY	DISTRIBUTION	QTY	TRANSFERS	QTY	REMOVALS	COMMENTS		
14	C	1	100(H4)			1	TP-69B									1	WPG					1	RP	TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB 26' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.		
	X																				1	XC-15-(4)				
	X																					2	XF			
NEW-0XXX	C	1	45(1)													1	WPG							TRANSFER SPACER CABLE UB CIRCUITS. INSTALL TOP UB CIRCUIT 6" FROM POLE TOP. TRANSFER FIBER CABLES.		
	X																					1	XC-15-(4)			
	X																					2	XF			
15	C	1	95(H2)			1	TS-4G					4	E3-3	4	D6	1	WPG						1	RP	INSTALL (4) DOWN GUYS WITH LEAD LENGTHS OF 60', 55', 50', & 45' E. TRANSFER SPACER CABLE UB CIRCUIT. INSTALL TOP UB 20' BELOW BTM T-LINE PHASE. TRANSFER FIBER CABLES.	
	X																					1	XC-15-(4)			
	X																					2	XF			
EX-SSSP	E	1	SSSP																				9	RCL	REUSE EXISTING POLYMER SUSPENSION INSULATORS. REPLACE DEADEND CLAMPS.	
	C								6	TM-1																
	C								3	TM-2																
SUB DE	E	1	SUB DE																				5	RCL	REUSE EXISTING POLYMER SUSPENSION INSULATORS. REPLACE DEADEND CLAMPS.	
	C								3	TM-1																
	C								2	TM-2																

Plot Date: 10/8/2024 10:54:45 AM



TM-1



TM-2

MATERIAL LIST (TM-1)

ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Deadend Insulator, Polymer, 25 Kip (Owner-Furnished)	MPS	S14080031MXAL019	1
2	Socket Eye, 25 Kip	Hubbell	SA06**	1
3	Deadend Quadrant Clamp, Phase (T2-3/0 Pigeon ACSR)	Hubbell	SDT2112N**	1
4	Compression Connector, Phase (3/0 Pigeon ACSR), Jumper	Burdny	YCS27R**	2

MATERIAL LIST (TM-2)

ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Y-Clevis Eye, 90°, 19 Kip	Hubbell	YCS-04-90**	1
2	Deadend Quadrant Clamp, Static (3/8" EHS)	Hubbell	SWDE55N**	1

\*\* OR ENGINEER APPROVED EQUAL

MISCELLANEOUS  
CONDUCTOR  
ASSEMBLIES

P:\0419619\DWG\UNIT DWG\TM-1\_2.DWG

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS



Project Manager: DJH  
Designer: DYS  
Project Number: 419619  
Phone: (712) 472-2531

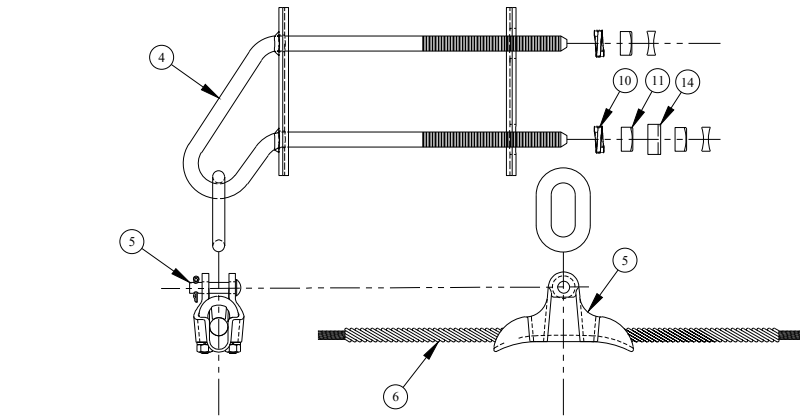
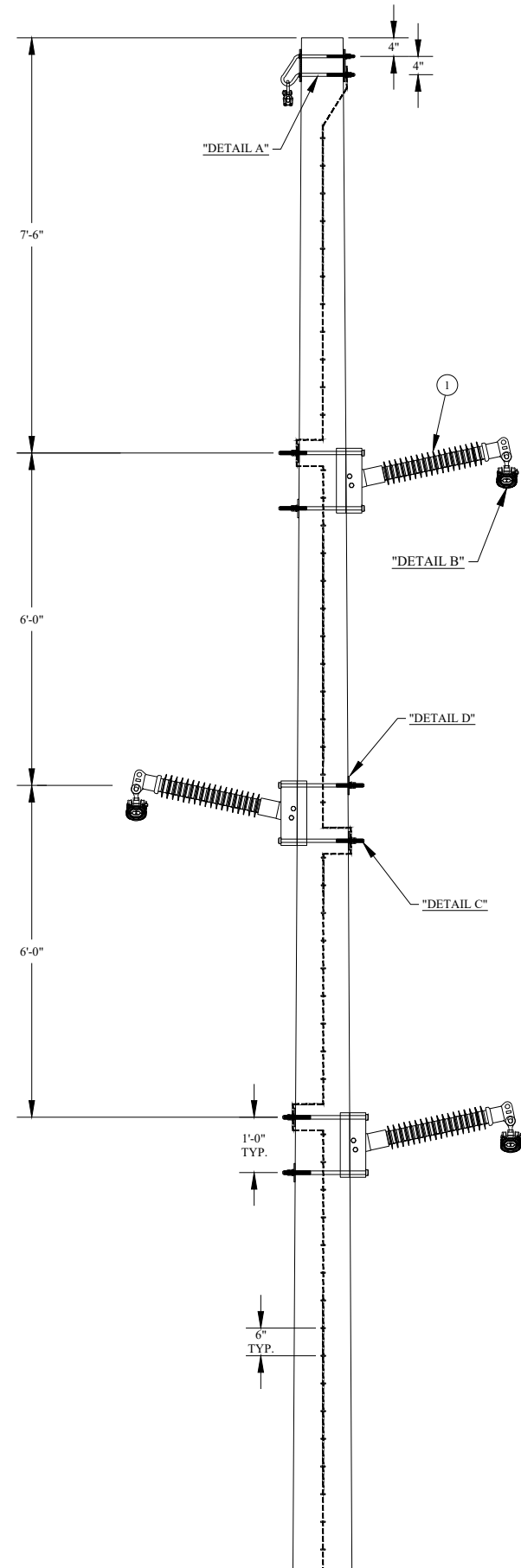
WAVERLY UTILITIES  
WAVERLY, IOWA

UNIT DRAWING  
69 kV TRANSMISSION LINE RE-CONSTRUCTION

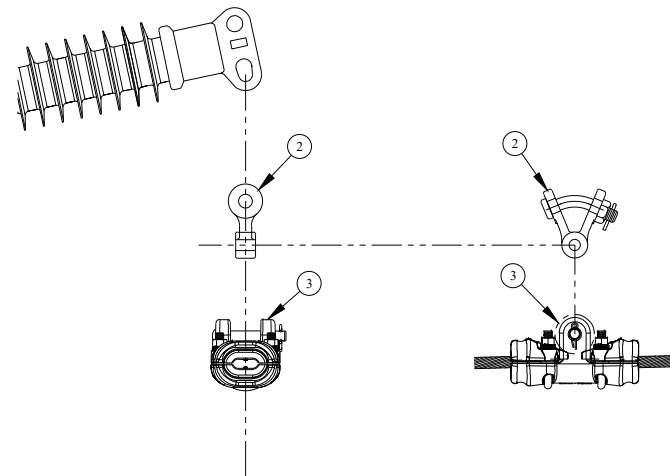
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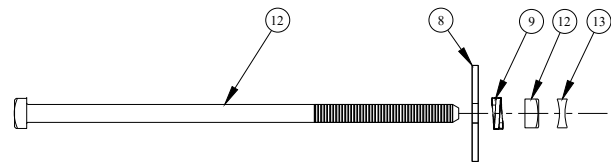
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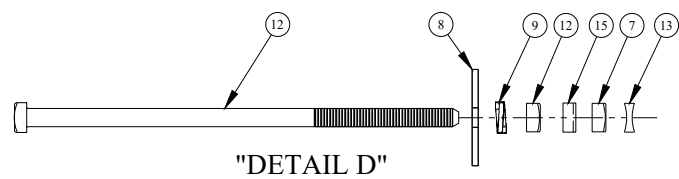
"DETAIL A"



"DETAIL B"



"DETAIL C"



"DETAIL D"

MATERIAL LIST

ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Horizontal Line Post Insulator with Gain Base, 2.5" Rod (Owner-furnished)	Maclean	H29010031MXSS016	3
2	Y-clevis eye, 90°, 20 Kip	Hubbell	YCS-05-90**	3
3	T2 Cushion Grip Suspension Clamp (T2-3/0 Pigeon ACSR)	Preformed	CCT2-0004	3
4	Shield Wire Support Bracket x Required Length	Hughes	2859_**	1
5	Suspension Clamp Static (3/8" EHS)	Hubbell	MS-60-N	1
6	Armor Rod (3/8" EHS)	Preformed	AR-1130	1
7	Sqaure Nut, 3/4"	Hubbell	5505SP**	3
8	Washer, Square Flat, 13/16" Hole, 4" x 4" x 3/16"	Hubbell	6818**	6
9	Washer, Double Coil, 3/4"	Hubbell	C2050187**	6
10	Washer, Double Coil, 5/8"	Hubbell	C2050186**	2
11	Square Nut, 5/8"	Hubbell	55084P**	1
12	Bolt, Machine, 3/4" x Required Length, with Nut	Hubbell	89_**	6
13	Locknut, Type MF, 3/4"	Hubbell	3513**	6
14	Bonding Clip, 5/8"	Hughes	2727.6**	1
15	Bonding Clip, 3/4"	Hughes	2727.7**	3

\* AS REQUIRED  
\*\* OR APPROVED EQUAL

69 kV TANGENT  
HORIZONTAL LINE POST  
WOOD POLE

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS



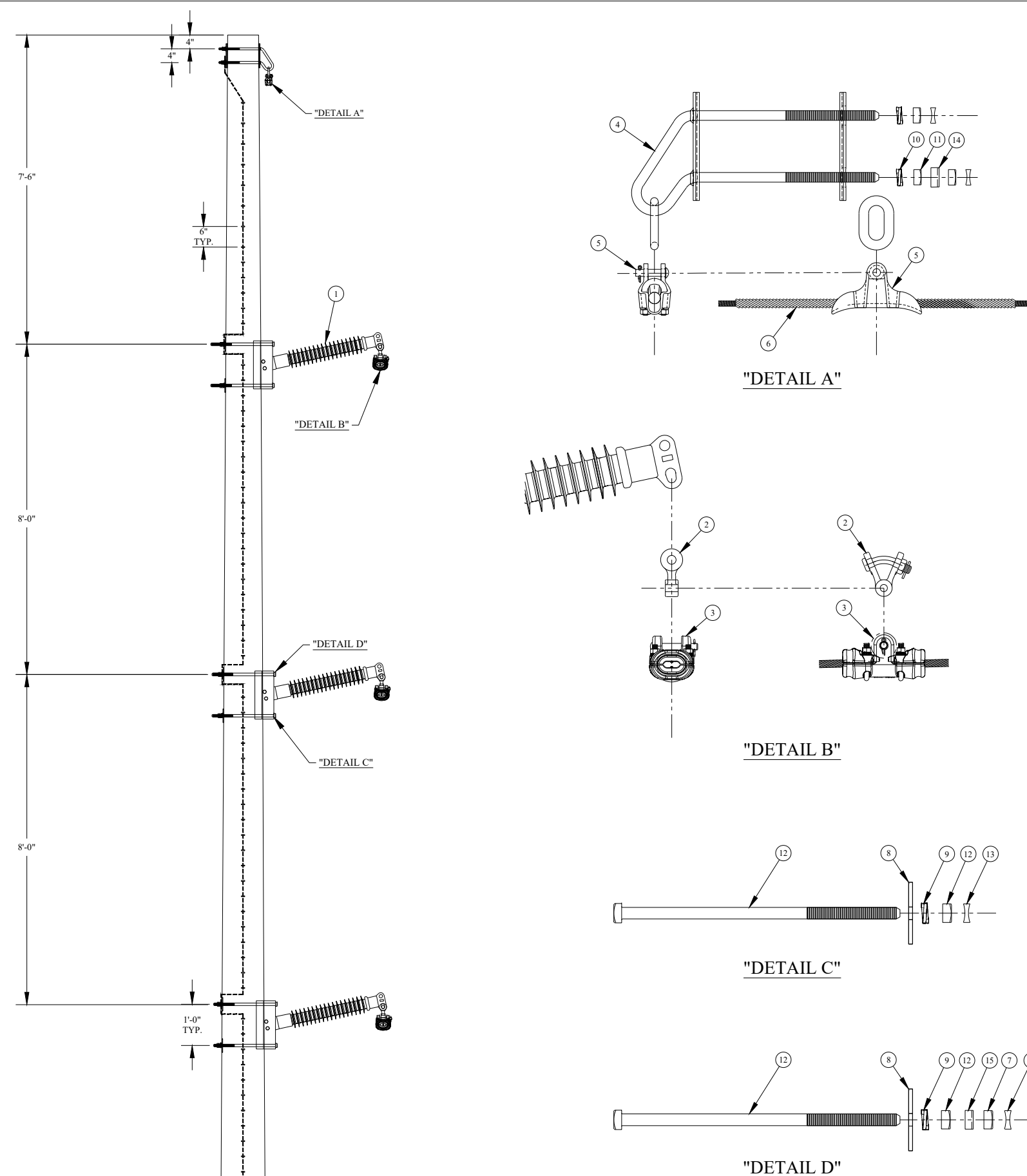
Project Manager: DJH  
Designer: DYS  
Project Number: 419619  
Phone: (712) 472-2531

WAVERLY UTILITIES  
WAVERLY, IOWA

UNIT DRAWING  
69 kV TRANSMISSION LINE RECONSTRUCTION

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TP-69

Plot Date: 10/8/2024 10:58:21 AM



MATERIAL LIST				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Horizontal Line Post Insulator with Gain Base, 2.5" Rod (Owner-furnished)	Maclean	H29010031MXSS016	3
2	Y-clevis eye, 90°, 20 Kip	Hubbell	YCS-05-90**	3
3	T2 Cushion Grip Suspension Clamp (T2-3/0 Pigeon ACSR)	Preformed	CCT2-0004	3
4	Shield Wire Support Bracket x Required Length	Hughes	2859_**	1
5	Suspension Clamp Static (3/8" EHS)	Hubbell	MS-60-N	1
6	Armor Rod (3/8" EHS)	Preformed	AR-1130	1
7	Square Nut, 3/4"	Hubbell	55085P**	3
8	Washer, Square Flat, 13/16" Hole, 4" x 4" x 3/16"	Hubbell	6818**	6
9	Washer, Double Coil, 3/4"	Hubbell	C2050187**	6
10	Washer, Double Coil, 5/8"	Hubbell	C2050186**	2
11	Square Nut, 5/8"	Hubbell	55084P**	1
12	Bolt, Machine, 3/4" x Required Length, with Nut	Hubbell	89_**	6
13	Locknut, Type MF, 3/4"	Hubbell	3513**	6
14	Bonding Clip, 5/8"	Hughes	2727.6**	1
15	Bonding Clip, 3/4"	Hughes	2727.7**	3

\* AS REQUIRED  
 \*\* OR APPROVED EQUAL

69 kV TANGENT STACKED  
 HORIZONTAL LINE POST  
 WOOD POLE

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS

**DGR ENGINEERING**

Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

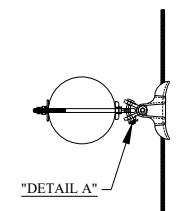
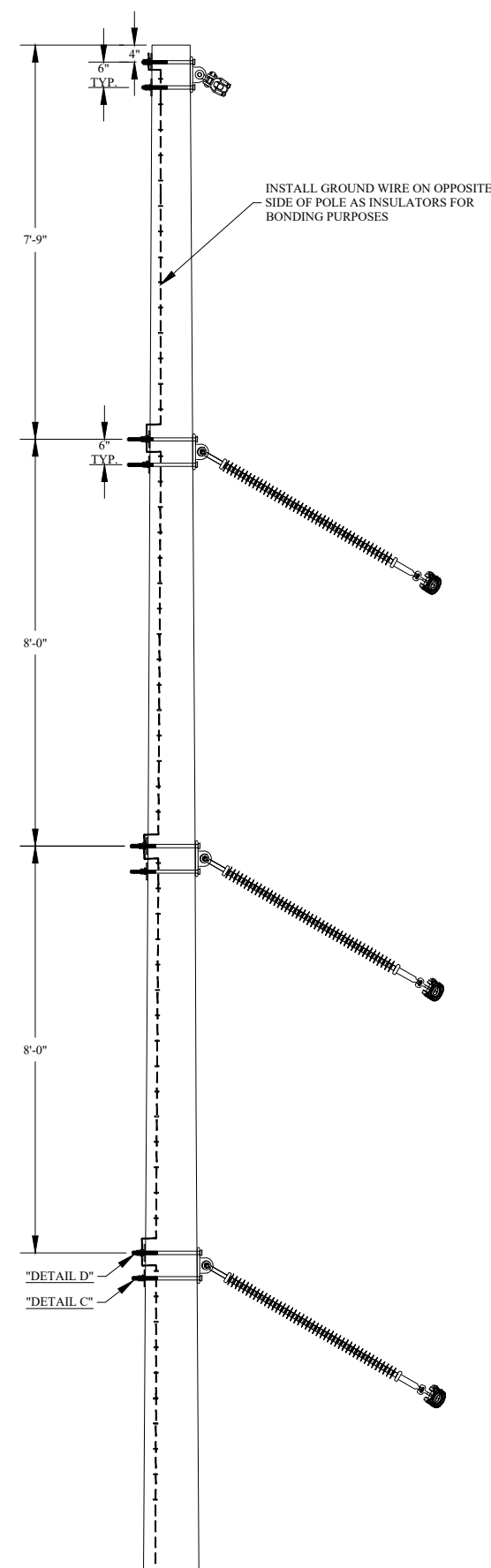
WAVERLY UTILITIES  
 WAVERLY, IOWA

UNIT DRAWING  
 69 kV TRANSMISSION LINE RECONSTRUCTION

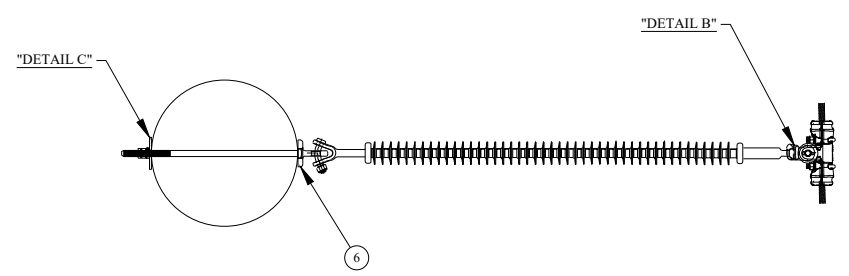
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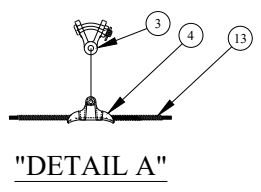
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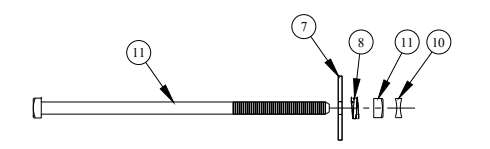


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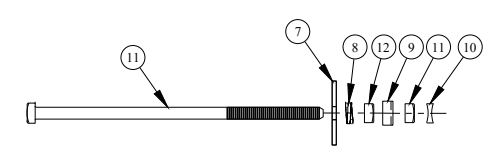


MATERIAL LIST				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Suspension Insulator, Polymer, 25 Kip (Owner-Furnished)	Maclean	S14080031MXAL019	3
2	Socket Eye, 25 Kip	Hubbell	SA06**	3
3	Y-Clevis Eye, 90°, 20 KIP	Hubbell	YCS-05-90**	1
4	Suspension Clamp Static (3/8" EHS)	Hubbell	MS-60-N	1
5	T2 Cushion Grip Suspension Clamp (T2-3/0 Pigeon ACSR)	Preformed	CCT2-0004	3
6	Deadend Tee, 6" Spacing	Hughes	2817-13**	4
7	Washer, Square Flat, 3/16" Hole, 4" x 4" x 1/4"	Hubbell	6818**	8
8	Washer, Double Coil, 3/4" Bolt Size	Hubbell	C2050187**	8
9	Bonding Clip, 3/4" Bolt Size	Hughes	2727.7**	4
10	Locknut, Type MF, 3/4" Bolt Size	Hubbell	3513**	8
11	Bolt, Machine, 3/4" x Required Length, With Nut	Hubbell	89_**	8
12	Square Nut, 3/4"	Hubbell	55085P**	4
13	Armor Rod (3/8" EHS)	Preformed	AR-1130	1

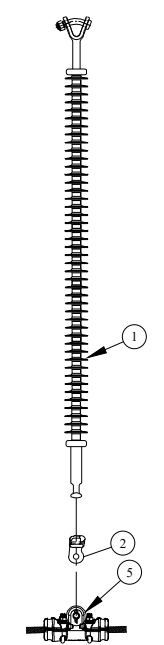
\* AS REQUIRED  
\*\* OR APPROVED EQUAL



"DETAIL C"



"DETAIL D"



"DETAIL B"

69 kV MEDIUM ANGLE  
WOOD POLE

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REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS

**DGR ENGINEERING**

Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

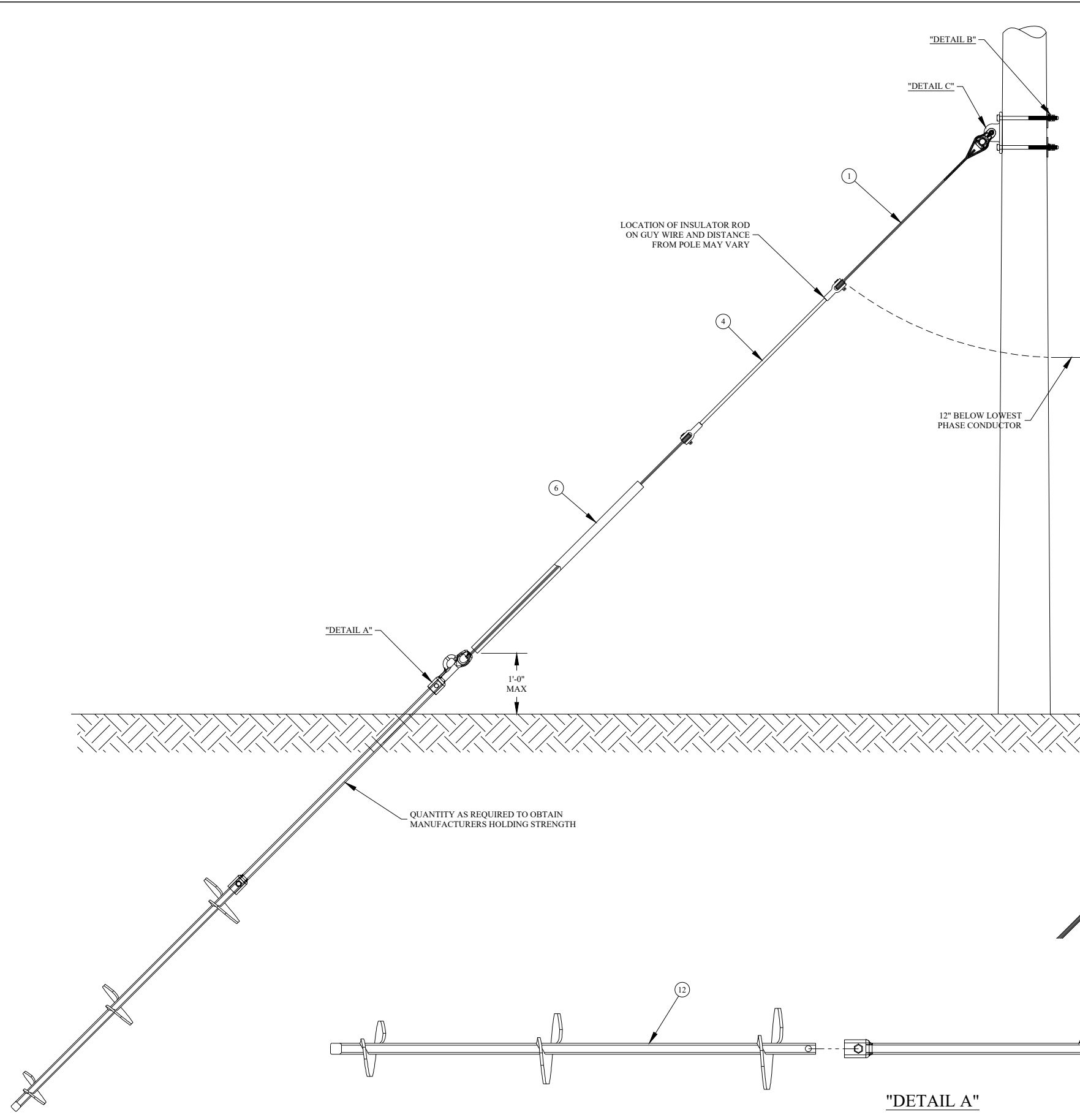
WAVERLY UTILITIES  
WAVERLY, IOWA

UNIT DRAWING  
69 kV TRANSMISSION LINE RECONSTRUCTION

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TS-4G

Plot Date: 10/8/2024 11:01:39 AM

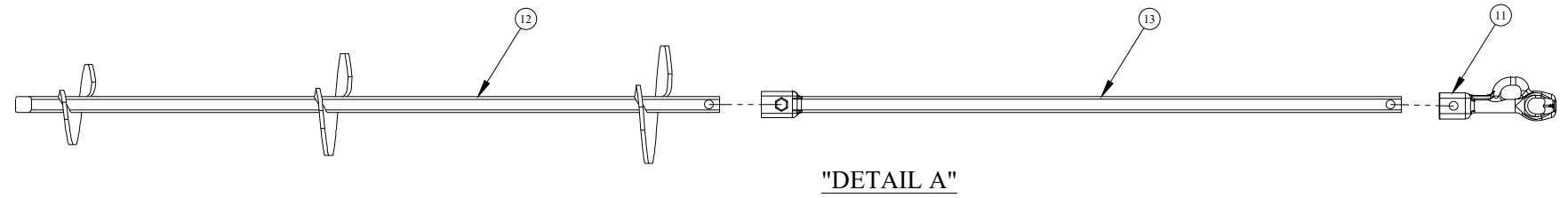
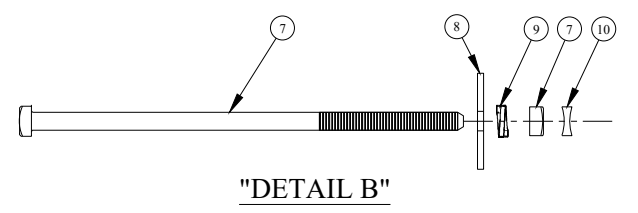
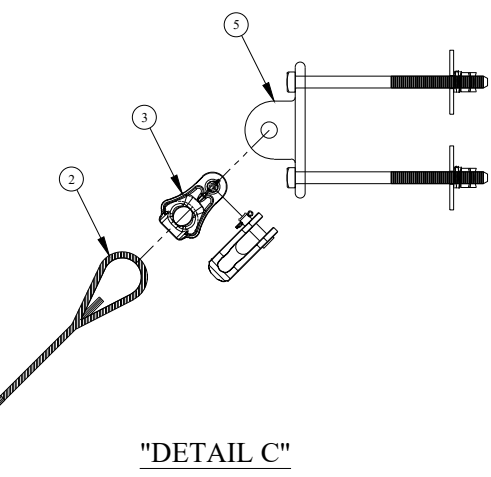


MATERIAL LIST (E3-3)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Wire, 3/8" Extra High-strength Steel, Class B	National Strand	3/8 EHS **	*
2	Guy Grip, Wrap Type (3/8" EHS)	Preformed	GDE-1107	4
3	Thimble-Clevis, 35 Kip	Maclean	CT-88H**	1
4	Guy Strain Insulator, Clevis-Clevis with Rollers, 30 Kip	Hughes	CF695-78R2**	1
5	Deadend Tee, 6" Spacing, 3/4"	Hughes	2817-13**	1
6	Guy Guard, 8', Plastic, Orange	Preformed	PG5738	1
7	Bolt, Machine, 3/4" x Required Length, with Nut	Hubbell	89_**	2
8	Washer, Square, 13/16" Hole, 4" x 4" x 3/16"	Hubbell	6818**	2
9	Washer, Double Coil, 3/4"	Hubbell	C2050187**	2
10	Locknut, Type MF, 3/4"	Hubbell	3513**	2

MATERIAL LIST (D6)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
11	Twin Eye Assembly, 1-1/2" Square Shaft	Maclean	D6604US**	1
12	Triple Helix, 8"-10"-12", 5'-6" Long, 1-1/2" Square Shaft	Maclean	D6636**	1

MATERIAL LIST (E5)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
13	Rod Extension, 5' Long, 1-1/2" Square Shaft	Maclean	D6620U**	1

\* AS REQUIRED  
 \*\* OR APPROVED EQUAL



DOWN GUY  
INSULATED

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS

**DGR ENGINEERING**  
 Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

WAVERLY UTILITIES  
 WAVERLY, IOWA

UNIT DRAWING  
 69 kV TRANSMISSION LINE RE-CONSTRUCTION

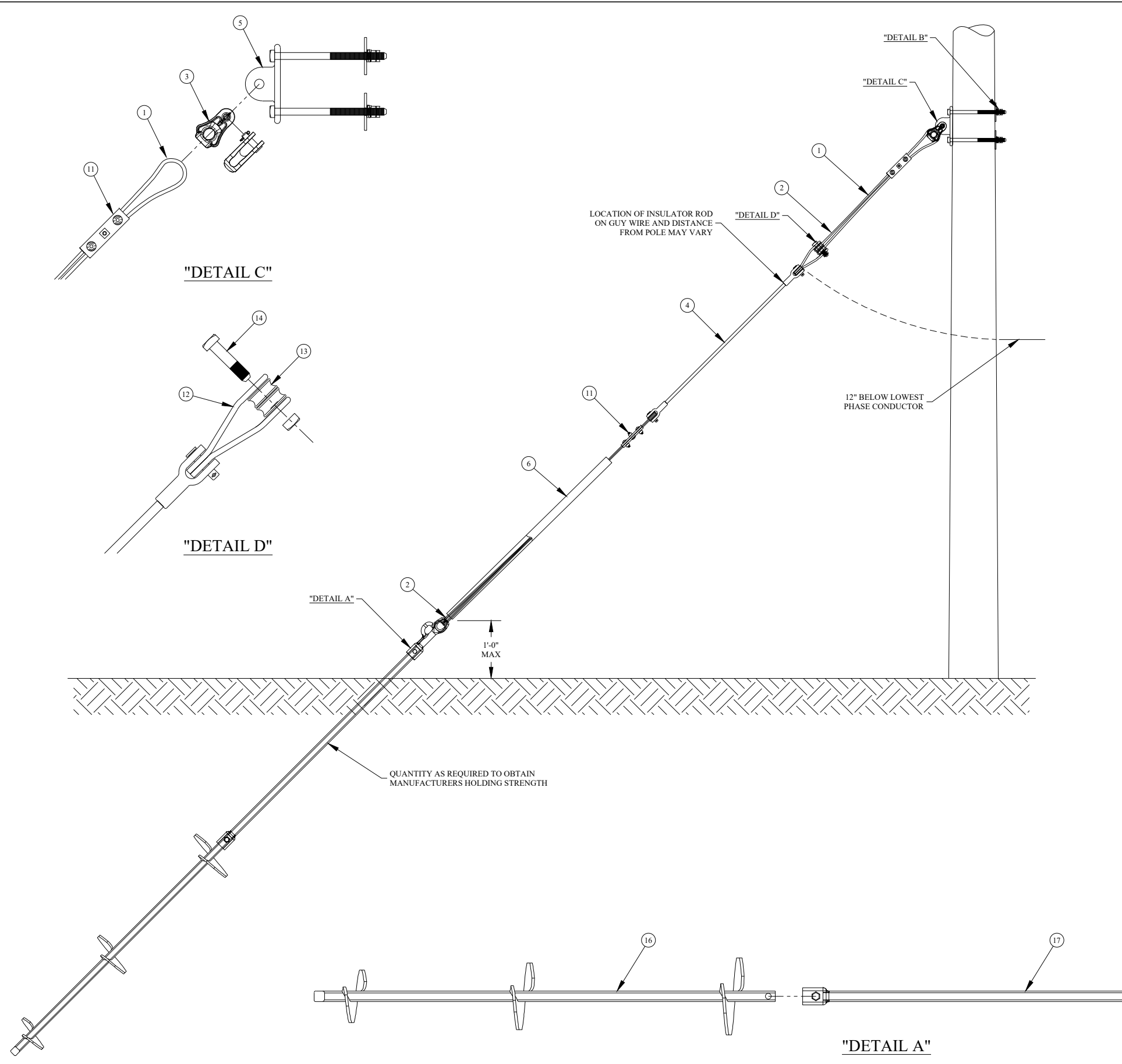
SHEET  
 E3-3  
 E5  
 D6

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Plot Date: 10/8/2024 11:03:56 AM

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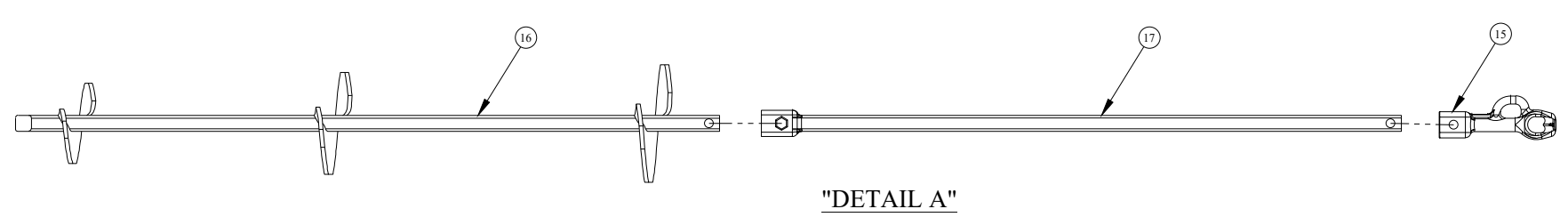
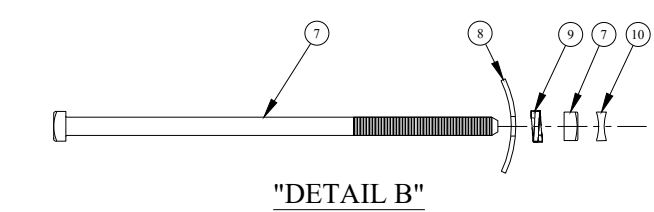


MATERIAL LIST (E3-3D)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Wire, 3/8" Extra High-strength Steel, Class B	National Strand	3/8 EHS **	*
2	Guy Grip, Wrap Type (3/8" EHS)	Preformed	GDE-1107	4
3	Thimble-Clevis, 35 Kip	Maclean	CT-88H**	1
4	Guy Strain Insulator, Clevis-Clevis with Rollers, 30 Kip	Hughes	CF695-78R2**	1
5	Deadend Tee, 6" Spacing	Hughes	2817-13**	1
6	Guy Guard, 8', Plastic, Orange	Preformed	PG5738	1
7	Bolt, Machine, 3/4" x Required Length, with Nut	Hubbell	89_**	2
8	Washer, Square Curved, 13/16" Hole, 4" x 4" x 3/16"	Hubbell	DF4W15**	2
9	Washer, Double Coil, 3/4"	Hubbell	C2050187**	2
10	Locknut, Type MF, 3/4"	Hubbell	3513**	2
11	3-Bolt Connector, Static (3/8" EHS)	Maclean	J929**	2
12	Connecting link, 3/8" x 2" x 9-1/2"	Hughes	3154	2
13	Guy Roller, 7/8" x 2-3/4"	Hughes	28082	2
14	Bolt, Machine, 7/8" x 4", with Nut	Hughes	B84-2	1

MATERIAL LIST (D6)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
15	Twin Eye Assembly, 1-1/2" Square Shaft	Maclean	D6604US**	1
16	Triple Helix, 8"-10"-12", 5'-6" Long, 1-1/2" Square Shaft	Maclean	D6636**	1

MATERIAL LIST (E5)				
ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
17	Rod Extension, 5' Long, 1-1/2" Square Shaft	Maclean	D6620U**	1

\* AS REQUIRED  
\*\* OR APPROVED EQUAL



**DOUBLE  
DOWN GUY  
INSULATED**

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS

**DGR ENGINEERING**

Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

**WAVERLY UTILITIES  
WAVERLY, IOWA**

**UNIT DRAWING  
69 kV TRANSMISSION LINE RECONSTRUCTION**

**SHEET  
E3-3D  
E5  
D6**

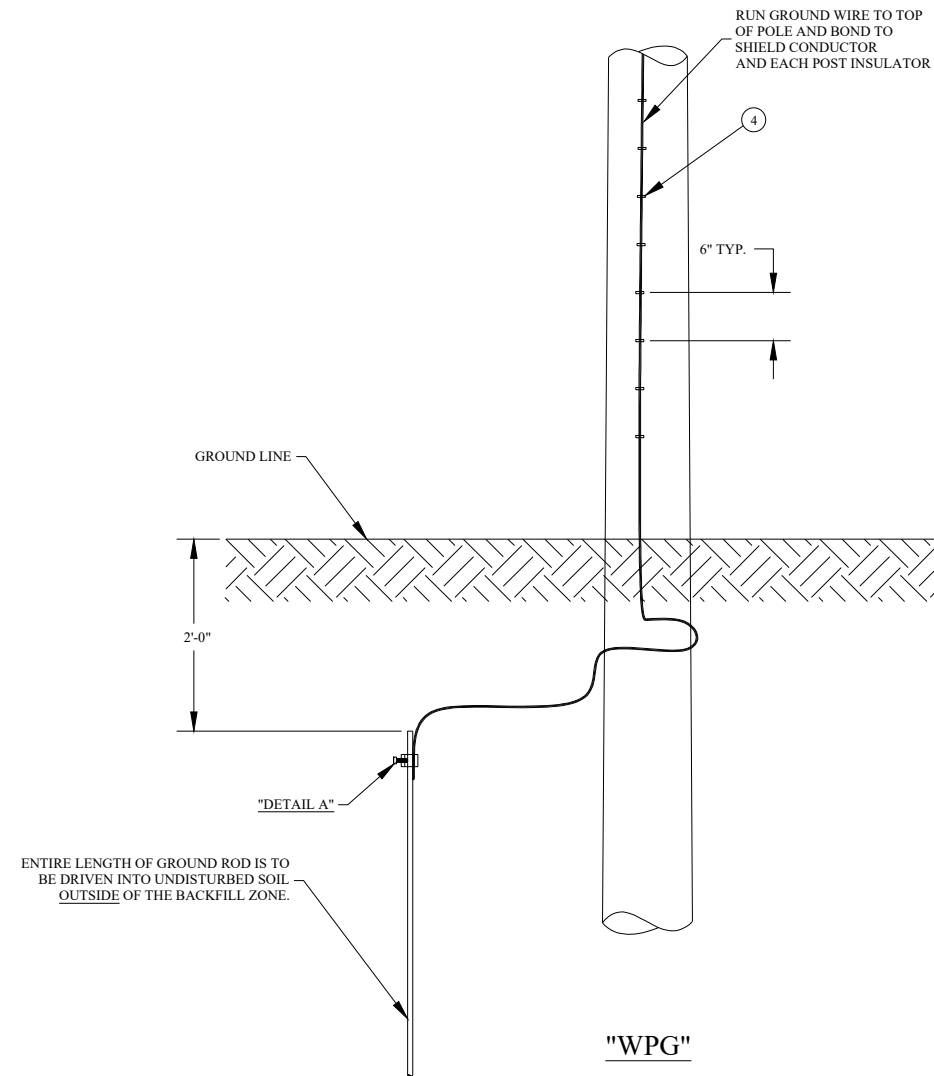
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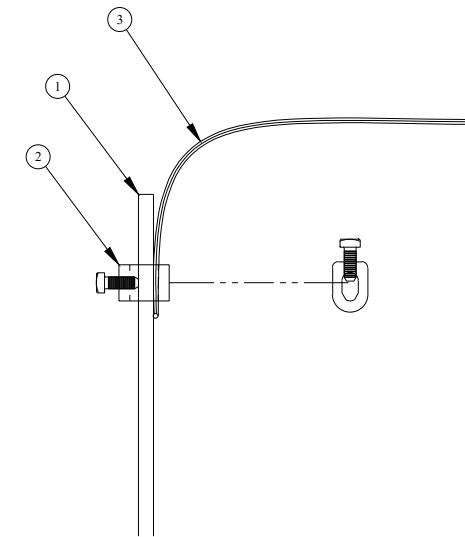
MATERIAL LIST (WPG)

ITEM NO.	DESCRIPTION	MANUF.	CAT. NO.	QTY
1	Ground Rod 5/8" x 10'	Erico	615803	1
2	Ground Rod Clamp	Erico	CP58	1
3	Wire, #4 Bare Copper, Soft-Annealed, Stranded	Southwire	#4 CU.**	*
4	Staple, Copper Coated, Diamond Point 2" x 1/2" (Wood Pole Only)	Hubbell	9154	*

\* AS REQUIRED  
 \*\* OR APPROVED EQUAL



"WPG"



"DETAIL A"

WOOD POLE GROUND

REV	DATE	DESCRIPTION
A	10-18-2024	ISSUED FOR BIDS



Project Manager: DJH  
 Designer: DYS  
 Project Number: 419619  
 Phone: (712) 472-2531

WAVERLY UTILITIES  
 WAVERLY, IOWA

UNIT DRAWING  
 69 kV TRANSMISSION LINE RE-CONSTRUCTION

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