



## Construction Services

City of Negaunee  
2023 Distribution Line Modifications

**Prepared by:**

Power System Engineering, Inc.

June 6, 2023

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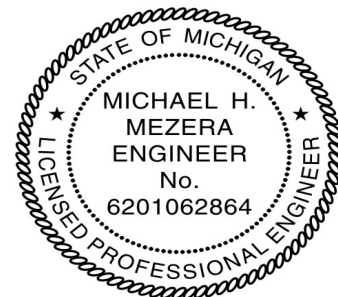
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**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

Furnish and Deliver Construction Services  
For City of Negaunee, Negaunee, Michigan

City of Negaunee, Negaunee, Michigan will receive sealed bids to furnish and deliver, including any necessary labor, materials, and equipment for the 2023 Distribution Line Modifications.

Sealed Bids will be received at City of Negaunee City Hall, 319 West Case Street, P.O. Box 70, Negaunee, MI 49866, until July 6<sup>th</sup>, 2023 at 11:00 a.m. EST at which time the bids will be opened and publicly read aloud.

Bids shall be addressed to City of Negaunee, Attn: City Clerk, 319 West Case Street, P.O. Box 70, Negaunee, MI 49866 and shall be marked "SEALED BID – 2023 DISTRIBUTION LINE MODIFICATIONS CONSTRUCTION SERVICES - Submitted by (Bidder's name)".

A pre-bid meeting will be held via conference call on Tuesday June 27<sup>th</sup>, 2023 at 2:00pm. The meeting is optional, but all prospective bidders are encouraged to attend.

The enclosed bid packet includes a Contractor's Proposal, Unit Bid Tables, Unit Bid Price Summary Table, General Project Requirements, Unit Specifications, Engineering and Construction Drawings.

Specifications and bid documents may be examined at or obtained from the Consulting Engineering Firm: Power System Engineering, Inc., Attn: Jill Igl, 2424 Rimrock Road, Suite 300, Madison, WI 53713. Ph# 608-268-3574 or by email at [iglj@powersystem.org](mailto:iglj@powersystem.org). The bidding documents will be issued electronically.

No proposal will be accepted unless accompanied by a certified check or bid bond for at least five percent (5%) of the amount of the proposal, payable to the Owner.

The Owner reserves the right to reject any or all bids, to waive any informalities in a bid, and to make awards in the interest of the Owner.

Published by authority of City of Negaunee City Clerk, and duly authorized agent for City of Negaunee Public Works.

## SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS

### CITY OF NEGAUNEE

#### 2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES

##### PART 1 - GENERAL

##### 1.1 INDEX

- A. Part 1 - General
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##### 1.2 CONTRACT TIME

- A. Identify the Contract Time in the Bid Form. The completion date in the Agreement shall be the Contract Time added to the commencement date.
- B. The Owner requires the work of this Contract be completed as quickly as possible. Consideration may be given to time of completion when reviewing submitted Bids.

##### 1.3 DEFINITIONS

- A. Bidding Documents: Contract Documents supplemented with Advertisement to Bid, Instructions to Bidders, Bid Form, bid securities, and other documents identified on the Table of Contents (Section 000110).
- B. Bid: Executed Bid Form and required attachments submitted in accordance with these Instructions to Bidders.
- C. Bid Price: Monetary sum identified by the Bidder in the Bid Form.
- D. The term "BIDDER" means one who submits a Bid directly to the Owner, as distinct from a Sub-bidder, who submits a Bid to a Bidder. The term "Bidding Documents" includes the Advertisement or Invitation to Bid, Instructions to Bidders, the Proposal

Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Proposals).

- E. The OWNER of this project is City of Negaunee and may also be referred to as the Purchaser or Buyer.
- F. The term "CONTRACTOR" or "SUPPLIER" shall be held to mean the firm which is given a Purchase Order and/or Contract for material purchase.
- G. The ENGINEER for this project is Power System Engineering, 2424 Rimrock Road, Madison, WI.
- H. The terms "Bid" and "Proposal" have the same meaning.

#### 1.4 CONTRACT DOCUMENTS IDENTIFICATION

- A. The Contract Documents are identified as the 2023 Distribution Line Modifications Construction Services specifications for City of Negaunee as prepared by Power System Engineering, Inc., located at 2424 Rimrock Road, Madison WI, 53713.

#### 1.5 AVAILABILITY OF DOCUMENTS

- A. Bidding Documents may be obtained from the Engineer as stated in Advertisement to Bid.
- B. Complete sets of Bidding Documents must 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.
- C. Bidding Documents are made available only for the purpose of obtaining offers for this Project. Their use does not grant a license for other purposes.

#### 1.6 EXAMINATION OF DOCUMENTS

- A. Bidding Documents may be viewed at the office of Power System Engineering, 2424 Rimrock Road, Madison WI, 53713. The Bidding Documents will be issued electronically.
- B. Upon receipt of Bidding Documents, verify that documents are complete. Notify the Engineer if documents are incomplete.
- C. Immediately notify the Engineer upon finding discrepancies or omissions in Bidding Documents.
- D. The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of this Section, that without exception the Bid is premised upon performing and furnishing the equipment required by the Contract Documents as may be indicated in or required by the Contract

Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the services.

#### 1.7 INQUIRIES AND ADDENDA

- A. Direct questions in writing or via e-mail to the Engineer, at the office of the Engineer.
- B. Verbal answers are not binding on any party.
- C. It is the Bidder's responsibility to verify with the Engineer that all Addenda have been received prior to submitting a Bid.
- D. Submit questions not less than eight days before the date set for receipt of Bids. Replies will be made by Addenda.
- E. Addenda may be issued during the bidding period. Addenda will be sent to known Bidders. Addenda become part of the Contract Documents. Oral and other interpretations or clarifications will be without legal effect. Include resultant costs in the Bid Price.

#### 1.8 BIDDER QUALIFICATIONS

- A. The Bidder shall include evidence of having satisfactorily provided similar services to similar users for at least five installations during the past five years.

#### 1.9 SUBMISSION PROCEDURE

- A. Bidders shall be solely responsible for delivery of Bids in the manner and time prescribed in the Advertisement.
- B. Submit one copy of the executed offer on the Bid Forms provided, signed and sealed with the required security deposit in a closed opaque envelope, clearly identified with the Bidder's name, Project name, and Owner's name on the outside.
- C. Improperly completed information, irregularities in security deposit or Bid Bond, will be cause not to open the Bid Form envelope and declare the Bid invalid or informal.
- D. An abstract summary of submitted Bids will be made available to all Bidders following the Bid Opening.

#### 1.10 BID INELIGIBILITY

- A. Bids that are unsigned, improperly signed or sealed, conditional, illegible, obscure, or that contain arithmetical errors, erasures, alterations, or irregularities of any kind, will be declared unacceptable at the Owner's discretion.
- B. Bid Forms, Appendices, and enclosures which are improperly prepared will be declared unacceptable at the Owner's discretion.

- C. Failure to provide the security deposit, bonds, or insurance requirements will invalidate the Bid at the discretion of the Owner.

#### 1.11 BID SECURITY

- A. Each Bid must be accompanied by Bid Security made payable to the Owner in an amount and in the form as defined in the Advertisement. If the amount of Bid Security is not defined in the Advertisement, the Bid security shall be five percent (5%) of the Bidder's maximum Bid Price and in the form of a certified or bank check or a Bid Bond (on form attached, if a form is prescribed) issued by a surety meeting the requirements. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act. If the surety on any Bond furnished by the Bidder is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the above requirements, the Bidder shall within five days thereafter substitute another Bond and Surety, both of which must be acceptable to the Owner. The security deposit of the accepted Bidder will be returned after delivery to the Engineer of the required Performance Bond by the accepted Bidder.
- B. Bid, Performance, and Payment Bonds shall be issued by a surety company licensed to do business in the state of the Owner and Owner's project. The Performance Bond shall be equal to 100% of the contract price.
- C. The Bid Security is used as a guarantee that if the Proposal is accepted, the Bidder will execute and file three (3) completed copies of the required proper Contract and Performance Bond within fifteen (15) days after award of the Contract.
- D. The Bid Security of the successful Bidder will be retained until such Bidder has executed the Agreement or accepted the Purchase Order and furnished the required Contract Security, whereupon the Bid Security will be returned. If the Successful Bidder fails to execute and deliver the Agreement or accept the Purchase Order within fifteen days after the Notice of Award or issuance of Purchase Order, the Owner may annul the Notice of Award or Purchase Order and the Bid Security of that Bidder will be forfeited. The Bid Security of other Bidders whom the Owner believes to have a reasonable chance of receiving the award may be retained by the Owner until the earlier of the seventh day after the Effective Date of the Agreement or the forty-sixth day after the Bid Opening, whereupon Bid Security furnished by such Bidders will be returned. Bid Security with Bids which are not competitive will be returned on acceptance of the Contract.
- E. If no Contract is awarded, security deposits will be returned.

#### 1.12 BID FORM REQUIREMENTS

- A. Complete requested information in the Proposal Form and Bidding Documents.
- B. Complete the bid unit spreadsheet provided, print out, and return with bid.
- C. Provide additional Bid data as outlined in the technical specification.

#### 1.13 SELECTION AND AWARD OF BIDS

- A. Bids will be evaluated and selected based on the lowest evaluated, responsible, acceptable total base Bid price with full consideration of alternates.

#### 1.14 BID OPENING

- A. Bids will be opened publicly immediately after the time for receipt of Bids noted in the Advertisement or any Addendums adjusting the timeframe.

#### 1.15 DURATION OF OFFER

- A. Bids shall remain open to acceptance for a period of 60 days after the bid closing date.
- B. No Bid shall be withdrawn after the opening of Bids without written consent of the Owner for a period of sixty (60) days after the scheduled time of receiving the Bids.

#### 1.16 ACCEPTANCE OF OFFER

- A. The Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the work and to negotiate Contract terms with the successful Bidder and the right to disregard all nonconforming, non-responsive, unbalanced or conditional Bids. Also, the Owner reserves the right to reject the Bid of any Bidder if the Owner believes that it would not be in the best interest of the project to make an award to that Bidder, whether because the Bid is not responsive, or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the Owner.
- B. After acceptance by the Owner, the Engineer, on behalf of the Owner, will issue to the accepted Bidder a written Notice of Award.
- C. The Owner may conduct such investigations as the Owner deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of Bidders, Suppliers and other persons and organizations to perform and furnish the equipment in accordance with the Contract Documents to the Owner's satisfaction within the prescribed time.
- D. If the Contract is to be awarded, it will be awarded to the Bidder whose Bid offer, as evaluated by the Owner, indicates to the Owner that the award will result in the lowest



overall project cost at completion and be in the best interests of the project and the Owner.

- E. Notwithstanding delay in the preparation and execution of the Agreement, the accepted Bidder shall be prepared, upon written Notice of Award, to commence work immediately following receipt of official written order of the Owner to proceed, or on a date stipulated in such order.
- F. The accepted Bidder shall assist and cooperate with the Owner to prepare the Agreement, and within fifteen days following its presentation shall execute the Agreement and return it to the Owner.

**END OF SECTION**

**SECTION 00 41 13 - PROPOSAL**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

\* All bids shall be in U.S. Dollars in lawful money of the United States of America.

TO: City of Negaunee (Hereinafter called the “Owner”)

1. Unit Bid Price – 2023 Distribution Line Modifications:

Quoted Price - Total Unit Bid Price Summary to furnish and deliver the distribution line construction as specified.

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

\$ \_\_\_\_\_ dollars, and \_\_\_\_\_ cents.

2. Anticipated Schedule (by calendar days or date) After Notice of Bid Acceptance:

A. Approximate start of construction: \_\_\_\_\_

B. Anticipated lead time for site work to be completed: \_\_\_\_\_

C. Anticipated lead time to complete the installation: \_\_\_\_\_

See Attached Unit Pricing Spreadsheet

3. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents and to furnish all materials, equipment, tools, supplies, transportation, utilities and all other items and facilities necessary to complete the work in accordance with the intent of the contract documents including specifications, drawings and all addenda issued by the OWNER prior to opening of proposals.

4. Bidder further agrees to complete all work required under the contract within the time stipulated in said specifications, and to accept in full payment therefore the prices(s) listed above.

5. The following Addenda have been received. The modifications to the Contract Documents noted therein have been considered and all costs thereto are included in the Bid Price.

Date	Addendum #
_____	_____
_____	_____

- (a) BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, Site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the materials and equipment.
- (b) BIDDER has given ENGINEER written notice of all conflicts, errors, or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to BIDDER.
- (c) BIDDER certifies that this proposal is made and submitted without fraud or collusion with any other firm or corporation whatsoever. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.
- (d) The BIDDER acknowledges the right of the OWNER to reject any or all Bids, waive any irregularities or informalities therein and award the Contract to other than the lowest evaluated Bidder if, in its discretion, the interests of the OWNER would be best served thereby.

6. City of Negaunee is a tax-exempt entity. Tax exempt information can be provided to the successful bidder if required.

7. The following documents are attached to and made a condition of this Bid:

Required bid security in the form of a Certified Check or Bid Bond, being at least five percent (5%) of the amount bid, and made payable to the OWNER.

CONTRACTOR:

\_\_\_\_\_

ADDRESS:

\_\_\_\_\_

AUTHORIZED  
REPRESENTATIVE:

\_\_\_\_\_

SIGNATURE:

\_\_\_\_\_

DATE:

\_\_\_\_\_

TITLE:

\_\_\_\_\_

TELEPHONE NUMBER:

\_\_\_\_\_

Proposal contact person:

\_\_\_\_\_

Email address of proposal contact  
person:

\_\_\_\_\_

Phone number of proposal contact  
person:

\_\_\_\_\_

**END OF SECTION**



City of Negaunee  
2023 Distribution Line Modifications  
Bid Unit Tally Sheets

INSTRUCTIONS

Across the bottom of this screen you will see a Bid Unit tab and a Summary Price tab. The Bid Unit tab will allow you to enter bid prices per unit. The Summary Price page will be automatically tabulated based on the estimated quantity of units and unit pricing supplied in each tab.

After you have completed your entry of unit prices and have reviewed the Summary Price tab, please print off all sheets and include these with your bid packages when submitting.

The Bidder is responsible for verify the correct price tabulations on these sheets.

Insert your company name below. This will "stamp" all subsequent pages.

COMPANY NAME

Bidder			
NEW CONSTRUCTION			
Unit	Estimated Qty	Labor Bid per Unit	Extended Price - Labor
A1.011	16		\$ -
A5.03	8		\$ -
A5.04	5		\$ -
A5.3	9		\$ -
B5.23	3		\$ -
C1.11	21		\$ -
C2.51	1		\$ -
C2.52	1		\$ -
C5.23	13		\$ -
C6.23	4		\$ -
C6.52G	2		\$ -
C6.91	2		\$ -
D1.81	37		\$ -
D2.52	1		\$ -
E1.1	5		\$ -
E1.4	29		\$ -
E2.1	8		\$ -
E3.1	17		\$ -
F2.12	13		\$ -
F2.1010	28		\$ -
F7	4		\$ -
H1.1	68		\$ -
H4.1	4		\$ -
K1.1	50		\$ -
P1.01	20		\$ -
S1.01	53		\$ -
S2.3	4		\$ -
SP.3	2		\$ -
UC6.2	8		\$ -
Set 40' pole	4		\$ -
Set 45' pole	16		\$ -
Set 50' pole	48		\$ -
Set 55' pole	2		\$ -
Set Elam Type Self Supporting pole	1		\$ -
String new 336 ACSR	47620		\$ -
String new 1/0 ACSR	3350		\$ -
String new 1/0 AL Triplex Secondary	50		\$ -
3 Ph. 500 MCM AL URD Ckt Installation*	12570		\$ -
1-6" Duct Bored Installation	1050		\$ -
2-6" Ducts Bored Installation	1390		\$ -
4-6" Ducts Bored Installation	2185		\$ -
1-6" Duct Trenched Installation	As Req'd		
2-6" Ducts Trenched Installation	As Req'd		
4-6" Ducts Trenched Installation	As Req'd		
4'Wx8'Lx4"D Manhole Installation	4		\$ -
3 Ph. UG Circuit Termination in Substation	4		\$ -
500 MCM AL URD Cable Splice/Per Cable	As Req'd		
		Subtotal	\$ -
All overhead conductors are to be bid as per lineal foot			
* Bid unit cost is to install 3 ph. circuit (all three cables) in duct per lineal foot			
MISC. CONSTRUCTION			
Unit	Estimated Qty	Labor Bid per Unit	Extended Price - Labor
Transfer Secondary and Service Drops (Per Pole)	50		\$ -
Secondary/Service Splice (Per Cable)**	As Req'd		
Transfer 1 ph. Transformer	14		\$ -
Transfer 2 ph. Transformer Bank	2		\$ -
Transfer 3 ph. Transformer Bank	1		\$ -
Transfer Streetlight	15		\$ -
Top Existing Pole	4		\$ -
Project Site Restoration	1 Lot		\$ -
Misc. Construction Not Covered In Other Units	1 Lot		\$ -
		Subtotal	\$ -
** Bid unit cost is make all splices per cable (example: two splices for duplex and three for triplex)			
REMOVAL			
Unit	Estimated Qty	Labor Bid per Unit	Extended Price - Labor
Remove Existing Primary OH Conductors	38,700		\$ -
Remove Single Circuit Pole Top Structure	25		\$ -
Remove Double Circuit Pole Top Structure	24		\$ -
Remove Downguy and Anchor	5		\$ -
Remove Existing Pole	69		\$ -
		Subtotal	\$ -
All overhead conductors are to be bid as per lineal foot			
MATERIALS REQUIRED FOR NEW CONSTRUCTION			
Unit	Estimated Qty	Labor Bid per Unit	Extended Price - Labor
Project Materials Supplied by Contractor	1 Lot		\$ -
Total Bid Price			\$ -



**Power System  
Engineering, Inc.**

City of Negaunee  
2023 Distribution Line Modifications

**BID SUMMARY**

<b>Total Overhead and Underground Estimated Bid</b>	<b>\$0.00</b>
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<b>Bidder</b>	
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**SECTION 00 42 00 – BID BOND**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

BIDDER  
(Name and Address):

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

\_\_\_\_\_

\_\_\_\_\_

OWNER (Name and Address)

City of Negaunee  
319 West Case Street  
P.O. Box 70  
Negaunee, MI 49866

BID

BID DUE DATE: July 6<sup>th</sup>, 2023

PROJECT: Distribution Line Modification Construction Services

BOND

BOND NUMBER: \_\_\_\_\_

DATE: (Not later than Bid Due Date): \_\_\_\_\_

PENAL SUM: \_\_\_\_\_

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the following page hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER  
\_\_\_\_\_  
(Seal)  
Bidder's Name and Corporate Seal

SURETY  
\_\_\_\_\_  
(Seal)  
Surety's Name and Corporate Seal

By: \_\_\_\_\_  
Signature and Title

By: \_\_\_\_\_  
Signature and Title (Attach Power of Attorney)

Attest: \_\_\_\_\_  
Signature and Title

Attest: \_\_\_\_\_  
Signature and Title

Note: (1) Above addresses are to be used for giving required notice.  
(2) Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.



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.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents and Contract Documents.
3. This obligation shall be null and void if:
  - a. 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 and Contract Documents, or
  - b. All Bids are rejected by Owner, or
  - c. Owner fails to issue a notice of award to Bidder within the time specified in the Bidding Documents (or any extensions 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 and 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 time for issuing notice of award including extensions shall not in the aggregate exceed 120 days from 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 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. Notice 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 the Bond conflicts with any applicable provision of 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 included a bid, offer or proposal as applicable.

**END OF SECTION**

**SECTION 00 42 20 - PROPOSED SUBCONTRACTORS**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

List the name and address of all subcontractors who will perform work in relation to this contract:

Subcontractor

Work

NOTE: Failure to complete this list may result in rejection of bid. Statements such as “to be determined” are not acceptable.

SECTION 00 52 00 – CONTRACT

CITY OF NEGAUNEE

2023 DISTRIBUTION LINE MODIFICATIONS –  
CONSTRUCTION SERVICES

THIS CONTRACT, made this \_\_\_\_ day of \_\_\_\_\_, by and between \_\_\_\_\_ hereinafter called the "CONTRACTOR", and City of Negaunee, 319 West Case Street, P.O. Box 70, Negaunee, MI 49866 hereinafter called the "OWNER".

WITNESSETH: That the Contractor and the Owner for the consideration stated herein agree as follows:

**ARTICLE I, SCOPE OF WORK:** The Contractor shall perform everything required to be performed and shall provide and furnish the labor, and/or equipment, materials, necessary tools, expendable equipment and all utility and transportation services required to:

furnish and deliver the construction of the Distribution Line Modifications as defined in the specifications and drawings.

all in accordance with the drawings and specifications, including any and all addenda, prepared by POWER SYSTEM ENGINEERING, INC., "ENGINEER", which drawings and specifications are made part of this Contract; and in strict compliance with the Contractor's proposal and other component parts of the Contract Documents herein mentioned, which are a part of this Contract. The Contractor shall do everything required by this Contract including all the component parts of the Contract Documents constituting a part hereof.

**ARTICLE II, CONTRACT PRICE:** The Owner shall pay to the Contractor for the performance of this Contract, subject to any addition or deduction provided therein, in current United States funds, the amount of \_\_\_\_\_ Dollars and \_\_\_\_\_ Cents (\$\_\_\_\_\_). This said amount includes

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

Payments are to be made to the Contractor in accordance with and subject to the provisions embodied in the Contract Documents made a part of this Contract.

**ARTICLE III, CONTRACT DOCUMENTS:** The Contract Documents consist of the following component parts, all of which are as fully a part of this Contract as if herein set out verbatim or, if not attached, as if hereto attached:

1. All documents as outlined in the Table of Contents.
2. Agreed upon clarifications between the Owner and Contractor after receipt of proposal.
3. The Contractor’s proposal.
4. All other documents affixed to this Contract.

In the event that any of the provisions in any of the above component parts of this Contract conflict with any provision in any other of the component parts, the provision in the component part first enumerated above shall govern over any other component part which follows it numerically, except as may be otherwise specifically stated.

**ARTICLE IV, CONTRACT EXECUTION:** This Contract is executed in triplicate.

IN WITNESS WHEREOF: The parties hereto have caused this instrument to be executed the day and year first above written.

CONTRACTOR:

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

Attest:

By \_\_\_\_\_

By \_\_\_\_\_

(CORPORATE SEAL)

(CORPORATE SEAL)

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

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

Title \_\_\_\_\_

Title \_\_\_\_\_

OWNER:

City of Negaunee  
600 Cherry Street  
Negaunee, MI 49866

Attest:

By \_\_\_\_\_

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

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

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

Title \_\_\_\_\_

Title \_\_\_\_\_

## INSTRUCTIONS FOR EXECUTING THE CONTRACT

The full name and business address of the Contractor shall be inserted and the Contract shall be signed with an official signature. The name of the signing party or parties shall be printed legibly under all signatures to the Contract.

If the Contractor be a corporation the following certificate shall be executed:

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_ secretary of the corporation named as

Contractor herein; that \_\_\_\_\_ who signed the foregoing Contract on behalf of the

Contractor was then \_\_\_\_\_ of said Corporation; that said Contract was duly signed for and in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

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

Title \_\_\_\_\_

In lieu of the foregoing certificate there may be attached to the Contract, a certified copy of the resolution of the board of directors of the corporation evidencing the authority of such official to sign the Contract.

The Contract shall also bear the attesting signature of the secretary or the assistant secretary of the corporation, and impressions of the corporate seal where indicated if a seal exists. Contracts which are signed by the secretary of the corporation shall be attested by some other officer of the corporation. If the corporation has no seal, include a statement or notation stating that the corporation has no seal.

If the Contractor be a partnership, the trade name (if the Contractor be operating under a trade name) shall be indicated in the Contract and the Contract shall be signed by each partner. If the Contract is not signed by each partner, there shall be attached to the Contract, a duly authenticated power of attorney executed by the partners evidencing the signer's authority to sign such Contract for and in behalf of the partnership or the partner.

If the Contractor be an individual, the trade name (if the Contractor be operating under a trade name) shall be indicated in the Contract and the Contract shall be signed by such individual. If the Contract is signed by one other than the individual, there shall be attached to the Contract, a duly authenticated power of attorney executed by the individual evidencing the signer's authority to sign such Contract for and in behalf of the individual.

**END OF SECTION**

**SECTION 00 61 13 - PERFORMANCE BOND**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

KNOW ALL MEN BY THESE PRESENTS that

we \_\_\_\_\_

\_\_\_\_\_ as Principal, and \_\_\_\_\_

\_\_\_\_\_ as Surety, are held and firmly

bound unto \_\_\_\_\_ hereinafter

called the Owner, in the penal sum of \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The Condition of the obligation is such that whereas the Principal has executed the attached Contract dated

\_\_\_\_\_, 2023, to:

Provide and furnish labor and equipment for the 2023 Distribution Line Modifications – Construction Services per the plans and specifications.

NOW THEREFORE, if the Principal shall:

well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said Contract during the terms of said Contract and any extensions thereof that may be granted by the Owner, with or without notice to the Surety, and during the life of any guaranty required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; and

promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said Contract, and any and all duly authorized modifications of said Contract that may hereafter be made, notice of which modifications to the Surety being hereby waived;

then this obligation to be void, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above bounden parties have executed this document under their several seals this

\_\_\_\_\_ day of \_\_\_\_\_, 2023, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In the presence of: Witness; \_\_\_\_\_ Individual Principal

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

By \_\_\_\_\_

Corporate Principal

\_\_\_\_\_  
Business Address

(Affix)

By \_\_\_\_\_ (Corporate)  
(Seal)

Attest:

By \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Corporate Surety

\_\_\_\_\_  
Business Address

(Affix)

By \_\_\_\_\_ (Corporate)  
(Seal)

\_\_\_\_\_  
Title

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, \_\_\_\_\_, certify that I am the \_\_\_\_\_ Secretary of the

Corporation named as Principal in the within bond, that \_\_\_\_\_

who signed the said bond on behalf of the Principal was \_\_\_\_\_ of said Corporation; that I know his signature, and his signature thereto is genuine, and that said bond was duly signed, sealed, and attested for in behalf of said Corporation by authority of its governing body.

By \_\_\_\_\_ (Affix)  
(Seal) (Corporate)

**END OF SECTION**



**SECTION 00 61 14 – PAYMENT BOND**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS-CONSTRUCTION SERVICES**

That “the **Contractor**,” \_\_\_\_\_, a corporation\_\_\_\_, individual\_\_\_\_, partnership\_\_\_\_, joint venture\_\_\_\_ of the State of \_\_\_\_\_, qualified to do business in the State of Michigan, as Principal, and “the Surety,” \_\_\_\_\_, of the State of \_\_\_\_\_, as surety, are held bound unto the City of Negaunee, “the **Owner**,” as Obligee, in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment of which the **Contractor** and Surety bind themselves, their respective heirs, successors, legal representatives and assigns, jointly and severally, in compliance with 1963 PA 213, as amended, MCL 129.201 et seq.

The Contractor has entered into “the Contract” with the **Owner** for \_\_\_\_\_ “the Work,” covered by the Contract Document which are incorporated into this Payment Bond by this reference:

If the Contractor promptly pays all claimants supplying labor or materials to the **Contractor** or to the **Contractor's** Subcontractors in the prosecution of the Work, then THIS OBLIGATION IS VOID, OTHERWISE TO REMAIN IN FULL FORCE AND EFFECT.

- A. All rights and remedies on this Payment Bond are solely for the protection of all claimants supplying labor and materials to the **Contractor** or the **Contractor's** Subcontractors in the prosecution of the Work, and must be determined in accordance with Michigan Law.
- B. No change in Contract Price or Contract Time, "or equal" or substitution or modification of the Contract Documents (including addition, deletion or other revision) must release the Surety of its obligations under this Payment Bond. The Surety hereby expressly waives notice of any such change in Contract Price or Contract Time, "or equal" or substitution or modification of the Contract Documents (including addition, deletion or other revision).
- C. It is the intention of the **Contractor** and Surety that they must be bound by all terms and conditions of the Contract Documents (including, but not limited to this Payment Bond). However, this Payment Bond is executed pursuant to 1963 PA 213, as amended, MCL 129.201 et seq., and if any provision(s) of this Payment Bond is/are illegal, invalid or unenforceable, all other provisions of this Payment Bond must nevertheless remain in full force and effect, and the **Owner** must be protected to the full extent provided by 1963 PA 213, as amended, MCL 129.201 et seq.

**IMPORTANT:** The Surety must be authorized to do business in the State of Michigan by the Department of Licensing and Regulatory Affairs - Insurance Bureau, must be listed on the current U.S. Department of the Treasury Circular 570, and, unless otherwise authorized by the Owner in writing, must have at least an A- Best's rating and a Class VII or better financial size category per current A. M. Best Company ratings.

Name, Address, and Telephone of the Surety

Address and Telephone of Agent, who is either a resident of, or whose principal office is maintained in the State of Michigan

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

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

Signed and sealed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

THE **CONTRACTOR**: (Print Full Name and Sign) By: \_\_\_\_\_

WITNESS \_\_\_\_\_

Name & Title: \_\_\_\_\_

Telephone No: \_\_\_\_\_

THE **SURETY**: (Print Full Name and Sign)

Agent: \_\_\_\_\_

WITNESS \_\_\_\_\_

Attorney-in-Fact: \_\_\_\_\_

Telephone No: \_\_\_\_\_

**SECTION 00 65 20 – WAIVER AND RELEASE OF LIEN**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS – CONSTRUCTION SERVICES**

WHEREAS, the undersigned, \_\_\_\_\_ has furnished to  
manufacturer, materialman, contractor or subcontractor  
\_\_\_\_\_ the following: \_\_\_\_\_  
name of contractor kind of material and services furnished  
in the construction of a project belonging to \_\_\_\_\_, known as  
name of owner  
\_\_\_\_\_  
project designation

NOW, THEREFORE, the undersigned, \_\_\_\_\_ (name of manufacturer,  
materialman or subcontractor), for and in consideration \$\_\_\_\_\_, 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. name of contractor

Given under my (our) hand(s) and seal(s) this \_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
name of manufacturer, materialman or subcontractor

By \_\_\_\_\_, president, vice president, partner or owner, or, if signed by other  
than one of the foregoing, accompanied by power of attorney signed by one of the foregoing in  
favor of the signer (use designation applicable).

**SECTION 00 72 00 – GENERAL CONDITIONS**

**CITY OF NEGAUNEE**

**2023 DISTRIBUTION LINE MODIFICATIONS –  
CONSTRUCTION SERVICES**

**PART 1 - GENERAL**

**1.1 INDEX**

- A. Part 1 - General
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  - 2. Intent of the Contract Documents
  - 3. Definitions
  - 4. Performance Bond and Payment Bond
  - 5. Assignment of Contract
  - 6. Chattel Mortgages
  - 7. Liens
  - 8. Contract Completion Date
  - 9. Termination for Breach of Contract
  - 10. Specifications and Submittals
  - 11. Record Data
  - 12. Equipment, Materials, and Workmanship
  - 13. Damages
  - 14. Authority of Engineer
  - 15. Payment to Contractor
  - 16. Delays
  - 17. Owner's Right to Withhold Payment
  - 18. Payment for Additional or Omitted Work
  - 19. Final Payment
  - 20. Deduction for Incorrect Work
  - 21. Correction of Work After Final Payment
  - 22. Royalties and Patents
  - 23. Warranties and Guarantees
  - 24. Compliance with Statutes and Regulations
  - 25. Supplementary Conditions

**1.2 INTENT OF THE CONTRACT DOCUMENTS**

- A. It is the intent of the Contract Documents to describe a functionally complete Project, or a portion thereof, to be furnished in accordance with the Contract Documents.
- B. The costs of equipment, materials, labor, documentation, supplies, and services as may be necessary to furnish the purchased equipment, materials, and/or labor of construction, except as expressly omitted, shall be included as part of the Work in the Contract Documents.

- C. Any equipment, materials, labor, documentation, supplies, and services that may reasonably be inferred from the Contract Documents, or from prevailing custom or trade usage as being required to produce the intended result, shall be furnished whether or not specifically called for at no additional cost to the Owner.
- D. The Contract Documents are complimentary; what is called for by one is as binding as if called for by all.
- E. In interpreting the Contract Documents, words describing the Work that have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with such well-known meaning recognized by architects, engineers, or the trade.
- F. These General Conditions will be included in the Contract Documents to furnish equipment, materials, labor of construction, or any combination thereof.

### 1.3 DEFINITIONS

- A. Definitions are described in the Instructions to Bidders.

### 1.4 PERFORMANCE BOND AND PAYMENT BOND

- A. The Performance and Payment Bonds shall be provided as described in the Instructions to Bidders.

### 1.5 ASSIGNMENT OF CONTRACT

- A. The Contractor may not assign the Work, or any portion thereof, without the Owner's written consent. No assignment will be valid unless it contains a provision indicating that funds to be paid to the assignee are subject to a prior lien for equipment, materials, and/or labor of construction furnished in performance of the Work, in favor of all persons, firms, or corporations furnishing such equipment, materials, and/or labor of construction.

### 1.6 CHATTEL MORTGAGES

- A. No equipment or material items may be purchased by the Contractor or a Subcontractor subject to a chattel mortgage or under conditional sale or agreement by which an interest is retained by the Seller. The Contractor warrants he will have good title to equipment and/or material items used in the Work.

### 1.7 LIENS

- A. If within thirty (30) days after the Work herein has been completed and accepted by the Owner any person claiming to have furnished equipment, materials, and/or labor of construction in completion of the Work has filed a lien or claim against the Contractor for said equipment, materials, and/or labor of construction, the Owner shall retain from monies under its control then due, or to become due under this Contract, such monies

sufficient to pay off, satisfy, and discharge such lien or claim, together with the reasonable cost of any such action or actions brought, or that may be brought, to enforce such claim or lien.

#### 1.8 CONTRACT COMPLETION DATE

- A. Neither a time extension beyond the date affixed herein for completion of the Work, nor delivery of articles called for in the Work after the time herein specified for completion, shall be deemed to be a waiver of abandonment or delay in the manner herein provided and/or of the right to abrogate this Contract or to enforce other provisions of this Contract.

#### 1.9 TERMINATION FOR BREACH OF CONTRACT

- A. In the event the Contractor or his Subcontractor violates a provision of the Contract Documents, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate such contract within ten (10) days after serving such notice. Such notice shall contain the reasons for intent to terminate the contract. In the event of termination, the Owner shall immediately serve notice thereof upon the Contractor and the Surety, and if the Surety does not commence performance thereof within thirty (30) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the Work and prosecute the same to completion by contract for the account and at the expense of the Contractor, and the Contractor and his Surety shall be liable to the Owner for excess costs occasioned the Owner thereby, and in such event the Owner may take possessions of and utilize in completing the Work such materials, appliances, and plant as may be on the site of the Work and necessary therefore.

#### 1.10 SPECIFICATIONS AND SUBMITTALS

- A. The Work shall be executed in conformance with the specifications, drawings, and issued addenda that are included in the Contract Documents.
- B. The Contractor shall perform no Work prior to obtaining Engineer-approved submittals as specifically described in the Project Requirements and technical sections of the Contract Documents or as requested by the Engineer. Equipment, materials, and/or installation methods used without the Engineer's prior approval may be subject to rejection.

#### 1.11 RECORD DATA

- A. The Contractor shall provide record data as specifically described in the General Requirements and technical sections of the Contract Documents or as requested by the Engineer.

#### 1.12 EQUIPMENT, MATERIALS, AND WORKMANSHIP

- A. Unless otherwise stipulated in the Contract Documents, the equipment, materials, and Workmanship incorporated in the Work covered by this Contract shall be new and of

the best grade of their respective types for the purpose. The Contractor will, if required, furnish such evidence as to the type and quality of equipment, materials, and/or Workmanship.

- B. The equipment, materials, and Workmanship furnished under this Contract shall be furnished and performed in accordance with well known, established practices and standards recognized by architects, engineers, and the trade.

#### 1.13 DAMAGES

- A. The Contractor shall pay all damages for injury to real or personal property, for any injury sustained by any person growing out of any act or deed of said Contractor, his Subcontractors, or of his or their employees, that is in the nature of a legal liability, and shall indemnify and save the Owner harmless against suits or actions of every name and description brought against said Owner for, or on account of, any such injuries to real or personal property, injuries received or sustained by any person or persons caused by said Contractor, his servants, agents or employees, in the execution of said Work or by or in consequence of any negligence in guarding his agents or employees, and the said Contractor further agrees that so much of the money due to him under and by virtue of this contract, as shall be considered necessary by the Owner, may be retained by the Owner to protect itself against loss until such suit or claim for damage shall have been settled, and evidence to that effect shall have been furnished to the satisfaction of the Owner.

#### 1.14 AUTHORITY OF ENGINEER

- A. The Work contemplated and described in this Contract, and in the specifications, plans, profiles, and drawings, shall be done under the direction and supervision of and to the satisfaction of the Engineer, who shall be the sole judge as to the fitness of materials, and shall have the right of correcting errors or omissions in the Contract Documents when such corrections are necessary for proper completion of the Work herein stipulated and for the proper fulfillment of their intention, the action of such correction to date from the time the Engineer gives due notice not increase the respective prices herein set forth in the Owner Contractor Agreement.

#### 1.15 PAYMENT TO CONTRACTOR

- A. For equipment and/or material contracts, the Contractor shall submit an invoice to the Owner after the equipment and/or material item(s) have been shipped as instructed with the record data as specified in the General Requirements and technical sections of the Contract Documents. The Engineer will review each invoice and make a recommendation regarding payment.
  - 1. Ninety percent (90%) of the prorated Contract amount on each item of equipment and/or group of materials will be paid within thirty (30) days after receipt of the equipment and/or materials or in the next scheduled monthly payment review period.

2. Ten percent (10%) of the Contract amount will be paid within thirty (30) days after final testing is completed, the equipment is accepted by the Owner, and record data as described in these General Conditions, General Requirements, and technical sections is received by the Engineer.
- B. For labor of construction contracts, the Contractor shall submit to the Owner an estimate of Work performed by the Contractor during a calendar month or a time agreed between the Contractor and the Owner. The Engineer will review each invoice and make a recommendation regarding payment.
1. Ninety percent (90%) of each approved monthly billing will be paid within thirty (30) days of receipt or in the next scheduled monthly payment review period.
  2. Ten percent (10%) of each approved monthly billing will be retained until completion of the Work. Final payment will be made to the Contractor within thirty (30) days after the Work is completed to the satisfaction of the Owner and Engineer, and record data as requested in these General Conditions General Requirements and technical sections is received by the Engineer.

#### 1.16 DELAYS

- A. If the Contractor is delayed in Work completion due to an act of neglect by the Owner or another contractor employed by the Owner, or due to strike, fire, unavoidable casualty, or cause beyond the Contractor's control, the time of completion shall be extended for a reasonable time. The Contractor shall, within five (5) days from the beginning of a delay, notify the Owner in writing as to the cause of such delay.

#### 1.17 OWNER'S RIGHT TO WITHHOLD PAYMENT

- A. In addition to payment retained by the Owner under the preceding provisions of these General Conditions, the Owner may withhold payment otherwise due the Contractor as the result of:
1. Payments earned or due for just labor or material legal claims pertaining to Work under this Contract.
  2. Defective Work not remedied.
  3. The Contractor's failure to make proper payment to his Subcontractor.
- B. The Owner may withhold from the Contractor payment due as may be necessary to protect the Owner from loss due to defective Work not remedied, injury to persons, or damage to the Work or property of others caused by an act of neglect by the Contractor or any of his Subcontractors. The Owner shall have the right, as agent for the Contractor, to apply such amounts so withheld as the Owner may deem proper to satisfy such claims or to secure such protection. Such application of money shall be deemed payment for the Contractor's account.

#### 1.18 PAYMENT FOR ADDITIONAL OR OMITTED WORK

- A. Upon proper action, the Owner may authorize changes in, additions to, or deductions from the Work to be performed pursuant to provisions of the Contract Documents.



- B. Adjustment in an amount to be paid to the Contractor by reason of a change, addition, or deduction shall be determined by one or more of the following methods:
  - 1. Unit pricing that was included the Contractor's Proposal form and incorporated into the Contract Documents.
  - 2. A supplemental price schedule that was included with the Contractor's Proposal form and incorporated into the Contract Documents.
  - 3. A proposal from the Contractor that is acceptable to the Owner.
- C. No claim for additional payment to the Contractor shall be valid unless authorized as aforesaid and by a written order of the Owner or the Engineer.

#### 1.19 FINAL PAYMENT

- A. When the Contractor shows to the satisfaction of the Owner and the Engineer that liens, claims, and demands for payment of equipment, materials, and/or labor of construction costs are fully satisfied, that the Work completed is fully released from such liens, claims, and demands, and that the Contractor has completely performed the Work, the Engineer shall certify the same in writing. A lien waiver form is included as part of these Contract Documents and shall be completed for each primary Contractor or Subcontractor used for the Work. Each lien waiver shall be returned before final payment is released.
- B. When said certificate has been filed with the Owner, the Owner will pay to the Contractor the sum due out of the aforementioned fund set aside to meet and defray the expenses of such Work, the whole amount of money accruing to the Contractor for the Work, excepting such sum or sums as shall have been paid to the Contractor under the foregoing provisions of the Contract Documents and such as may be lawfully retained under the provisions of the Contract Documents, provided that no such certificate or payment for the Work shall be held to be an acceptance on the Owner's part of defective Workmanship or improper materials used by the Contractor in performance of the Work, or as waiver on the Owner's part of any claim or demands for, or on account of, such defective Workmanship or improper materials or as a waiver of a breach of the Contract Documents.

#### 1.20 DEDUCTION FOR INCORRECT WORK

- A. If the Owner deems it expedient to accept Work injured or not done in accordance with the Contract Documents, the difference in value, together with a fair allowance for damages, shall be deducted.

#### 1.21 CORRECTION OF WORK AFTER FINAL PAYMENT

- A. Neither final payment, nor a provision in the Contract Documents, shall relieve the Contractor of responsibility for negligence, faulty materials, or faulty Workmanship within the extent and period provided by law. Upon written notice, the Contractor shall remove defects due thereto and shall pay for damage due to other Work resulting

therefrom which shall appear within one (1) year after the date of completion and acceptance.

#### 1.22 ROYALTIES AND PATENTS

- A. The Contractor shall pay for royalties and patents, shall defend suits or claims for infringement on a patent right, and shall save the Owner harmless from loss on account thereof.

#### 1.23 WARRANTIES AND GUARANTEES

- A. The Contractor shall furnish warranties and/or guarantees as specifically described in the General Requirements and technical sections of the Contract Documents.
- B. Delivery of warranties and/or guarantees shall not relieve the Contractor of obligations under the Contract Documents.

#### 1.24 COMPLIANCE WITH STATUTES AND REGULATIONS

- A. The Contractor shall comply with applicable statutes, ordinances, rules, and regulations pertaining to the Work as prescribed by federal, state, or local governmental and administrative authorities.
- B. Each Bidder shall be responsible for consideration and verification of the site conditions, laws, construction methods, etc. that may affect the performance, warranty, or furnishing of the Work.

#### 1.25 SUPPLEMENTARY CONDITIONS

- A. Refer to the Supplementary Conditions section for additional conditions if provided with the Bidding and Contract Documents.

**END OF SECTION**

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DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01 10 00 – INFORMATION AND  
REQUIREMENTS

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SECTION INDEX

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1. Location of Project
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  3. Construction Dates
  4. Interpretation
  5. Design Intent
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  7. Owner Furnished Material
  8. Payment
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  17. Interruption of Service
  18. Existing Facilities
  19. Contaminated Soil
  20. Construction Staking/As-Built Drawings
-

## 1 LOCATION OF THE PROJECT

1.1 All work is located within the City of Negaunee, Michigan.

## 2 WORK INCLUDED

2.1 Unless stated otherwise, the Work covered by this specification includes all materials, labor, equipment, tools, transportation, permits, certificates, and temporary protection required for the complete installation of the electrical facilities to the extent specified below and shown on the plans.

2.2 The following is an abbreviated outline of the Work upon which the Bidder shall base their Proposal. The Work described in the body of the specifications and on the drawings is as follows: A complete and operating distribution line move.

## 3 CONSTRUCTION DATES

3.1 Construction scheduling is to be determined by the Contractor so that all work shall be completed by December 31, 2023.

## 4 INTERPRETATION

4.1 Prior to the bid opening, all questions regarding interpretation of the plans and specifications shall be referred to the Owner for clarification. Clarification will be provided to all Bidders. Bids shall be made based on the provisions of this Bidding Packet, the plans provided in Exhibit A – Engineering and Construction Drawings, and any clarifications provided by the Owner. The Owner will address questions raised after bids are opened, and will provide final direction to the Contractor, but additional payments will not be made to the Contractor based on the Contractor's failure to clearly interpret the project requirements prior to bidding. Bids shall account for all work as shown in the plans, and as required to complete the project. Any required work not fully described by a specific unit bid item shall be included as incidental to other bid items.

## 5 DESIGN INTENT

5.1 All dimensions shown on the plans shall be considered minimums for the purpose of this Proposal. All changes to the design intent shall be approved by the Owner prior to performing construction.

## 6 COOPERATION

6.1 The Contractor shall cooperate with the Owner and all other contractors in locating their work and installing it properly. Where field conditions require changes, the Owner inspector shall be notified immediately so the matter can be referred to the Owner for resolution. Prior to starting the Work, the Owner's inspector and other Project representatives will be identified at a pre-construction meeting for the Project.

## 7 OWNER FURNISHED MATERIAL

The owner shall supply all materials other than hardware items. All hardware items are to be supplied by the contractor. Hardware items to include, but not limited to all bolts, washers, eye-nuts, locknuts, staples, and screws.

## 8 PAYMENT

- 8.1 Contractor shall submit to the Owner an estimate of Work performed by the Contractor during a calendar month or a time agreed between the Contractor and the Owner. The Engineer will review each invoice and make a recommendation regarding payment.
- A. Ninety percent (90%) of each approved monthly billing will be paid within thirty (30) days of receipt or in the next scheduled monthly payment review period.
  - B. Ten percent (10%) of each approved monthly billing will be retained until completion of the Work. Final payment will be made to the Contractor within thirty (30) days after the Work is completed to the satisfaction of the Owner and Engineer, and record data as requested in these General Conditions General Requirements and technical sections is received by the Engineer.
- 8.2 No final approval shall be given, including final payments made, until the Owner is satisfied that the entire system is in acceptable condition. In case there are deficiencies in construction or workmanship, the amount associated with deficient construction units or locations shall be retained until the Contractor has repaired such conditions to the satisfaction of the Owner. Any corrections required, including restoration, will be at no additional cost to the Owner.

## 9 INSURANCE

- 9.1 The Bidder shall take out and maintain throughout the construction period insurance in the following minimum requirements:
- A. If the Contractor is providing labor of installing, unloading, or testing, the Contractor shall secure and maintain such insurance from an insurance company authorized to write casualty insurance in the State where the work is located as will protect himself, his Subcontractors and which shall indemnify and save harmless the Owner and the Engineer and their officers, agents, and employees from and against all claims for bodily injury, death or property damage which may arise from the Contractor's operations under this Contract, whether such operations be by himself or any Subcontractor or by anyone directly or indirectly employed by the Contractor or Subcontractor.
  - B. The Contractor shall not commence labor of installation, unloading, or testing under this Contract until he has obtained all insurance required under this section

and shall have filed the certificate of insurance with the Owner and a copy with the Owner's attorney. Each insurance policy shall contain a clause assuring the insurance company will not cancel the insurance without thirty days written notice to the Owner, the Owner's attorney, and the Engineer of intention to cancel.

The amounts of such insurance shall be not less than the following, or greater if required by law:

1. Worker's Compensation:
  - a. State Statutory
  - b. Applicable Federal
  - c. Employer's Liability:
    - 1) \$100,000 Each occurrence
  
2. Commercial General Liability (including Premises-Operations; Independent Contractors' Protective; products and Completed Operations; Broad Form Property Damage):
  - a. Bodily Injury and Property Damage (Name Owner as additional insured):
    - 1) \$1,500,000 Each occurrence
    - 2) \$3,000,000 Annual aggregate
  - b. Products and Completed Operations to be maintained for two years after final payment.
  - c. Property Damage Liability Insurance shall provide X, C, or U coverage as applicable.
  - d. Contractual Liability to be included.
  
3. Comprehensive Carrier Vehicle Liability:
  - a. Bodily Injury:
    - 1) \$1,000,000 CSL Each Person
    - 2) \$(Included) Each Occurrence
  - b. Property Damage:
    - 1) \$(Included) Each Occurrence
    - 2) Note: The State of Minnesota has a no-fault vehicle insurance requirement. The Contractor shall be certain coverage is provided which conforms to any specific stipulation in the law.
  
4. Umbrella Excess Liability: Name Owner as additional insured:
  - a. Excess Liability:
    - 1) \$1,000,000 Over primary insurance
    - 2) \$10,000 Retention for self-insured hazards each occurrence.

## 10 STATE-FUNDED PROJECT PREVAILING WAGE REQUIREMENTS

- 10.1 The Contractor (and its Subcontractors) represents and warrants that it pays all laborers employed directly on the site of the work, unconditionally and at least once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications as prevailing wages based on locality, regardless of any contractual relationship which may be alleged to exist between the Contractor or subcontractor and the laborers.
- 10.2 The Contractor represents and warrants that Contractor will post the scale of wages to be paid in a prominent and easily accessible place at the site of the work.

## 11 PERMITS

- 11.1 The Owner will secure permits, other than those related to traffic control, for the Project. The terms and conditions from each approved permit shall be considered binding requirements of this Contract.
- 11.2 The Contractor is responsible for all traffic control, road and lane closures, and permits required for closures to complete the Project. All traffic control along roadways must meet City of Negaunee standards, regulations, and requirements.

## 12 COORDINATION

- 12.1 The Contractor will be required to coordinate work with the Owner, other contractors, and other utilities. No additional payment will be authorized if resulting from the lack of coordination with other Project stakeholders.
- 12.2 Notifications
  - A. Notify business owners and residents at least 2 days prior to restricting access and 3 days prior to closing access.
  - B. The Contractor is responsible for calling "Diggers Hotline" and meeting with the locators from the various utilities and/or employed by the various utilities. If a utility is not a member of "Diggers Hotline", it is the responsibility of the Contractor to contact the utility to have the facilities marked.

## 13 MAINTENANCE OF TRAFFIC

- 13.1 During the progress of the Work, the Contractor shall keep streets, roads, or highways upon which said construction is performed open to travel unless specified. It shall be the duty and responsibility of the Contractor to become acquainted with all the applicable traffic regulations of the City of Negaunee.

- 13.2 Maintain vehicular access at all times, to all driveways, parking lots, public alleys, and side roads throughout construction; except during utility installation operations occurring in the immediate vicinity of the access location. Maintain and keep open access locations where alternative access is not available at all times by closing one driveway at a time.
- 13.3 When an access or parking area must be limited due to construction operations, notify the Owner inspector, property owners, and occupants of the premises at least 2 days prior to the beginning of the construction operation. Complete the work in a reasonable time and manner to resume access to the driveway or side road. Coordinate with each business for the best time to complete utility installation operations so as not to interrupt business operations during open hours.
- 13.4 Maintain emergency vehicle access and delivery vehicle access at all times to all properties throughout construction; except during utility installation operations occurring in the immediate vicinity of the property. When access must be limited due to construction operations, notify the police and fire departments, the Owner inspector, property owners, and occupants at least 2 days prior to the beginning of the construction operation. Complete the work in a reasonable time and manner to resume access to the property.
- 13.5 Use drums, barricades, flexible tubular markers, and safety fence to direct vehicular traffic in the work zone if required by the Owner's inspector. Protect and delineate hazards such as open excavations, abrupt drop-offs, and exposed manholes, inlets, and hydrants, with wedged material, drums, barricades, and safety fence as shown in the plans, special provisions, or as directed by the Owner.
- 13.6 Portions of highways and roads which become closed to traffic shall be protected by suitable barricades on which shall be placed acceptable warning detour signs. All barricades and obstructions shall be illuminated at night, and all lights shall be kept burning from sunset until sunrise. Satisfactory evidence of such arrangements for protection shall be filed with the Owner, if required, before work is begun.
- 13.7 Access to the Work from the existing road shall be provided by the Contractor at their own expense. The cost of any work done in building, improving, repairing, or maintaining any road, highway, or structure thereon for use in performance of the Work under these specifications shall be considered as having been included in the price proposed for the various items of the Work.
- 13.8 Maintain pedestrian access to residences, businesses, public parking lots, and schools or provide where necessary, as directed by the Owner inspector.



## 14 SEQUENCE OF WORK

- 14.1 The sequence to complete the Work is up to the discretion of the Contractor so long as Owner approval is granted, and project deadlines are met. Because the project will be built in residential neighborhoods with limited on-street parking all construction shall be staged so that the work in each location is completed before moving to the next. A work area should be limited to one street and be several blocks in length.
- 14.2 The Contractor shall provide a detailed weekly schedule of all work activities by the pre-construction meeting. Provide weekly schedule updates to the Owner's inspector while construction is ongoing. The decision of the Owner will be final in matters regarding changes to the sequence of work.

## 15 WORK, HOLIDAY, AND SPECIAL EVENT RESTRICTIONS

- 15.1 Work can only take place Monday through Friday between the hours of 7:00 AM and 10:00 PM, per City Ordinance. The Contractor is responsible for coordinating construction around any special events.

## 16 STREET WORK OPERATIONS

- 16.1 Equip vehicles with a tailgate and adequate sideboards when hauling material subject to spillage on all roadways. Use cover and/or other protective devices to prevent spillage as directed by the Owner inspector. Immediately clean up any debris or spillage that falls onto live traffic lanes.
- 16.2 Any pavement or sidewalk that is damaged is to be replaced at the Contractor's expense.
- 16.3 Comply with all local ordinances that apply to local street work operations, including those pertaining to working during nighttime hours. Furnish any ordinance variance issued by the municipality or required permits to the Owner in writing 3 business days prior to performing such work.
- 16.4 All tree trimming required will be done by Negaunee. Street light poles, hydrants, and other utility poles are to remain in place during construction unless otherwise noted in the plan and/or part of the Work
- 16.5 Conform to industry best practices for work zone protection. Provide a minimum of 6 feet lateral clearance where possible from the edge of travel lane to the work zone. In areas where 6 feet of lateral clearance cannot be provided, protect work zone with appropriate measures. Backfill or plate utility excavations during non-working hours.
- 16.6 Do not store equipment, vehicles, or materials on adjacent streets beyond the Project limits without specific approval of the Owner.

## 17 INTERRUPTION OF SERVICE

17.1 Do not access any Owner facilities containing energized conductors without prior authorization. It shall be the Contractor's responsibility to perform the Work in such a manner as not to cause service interruptions of existing utilities, other than scheduled outages, during construction of the Work.

## 18 EXISTING UTILITIES

18.1 Contractor shall pothole all existing utilities using Hydrovac excavation. Prior to starting any work near any other utility line, the Contractor shall make all necessary precautions and efforts to protect the utility line, and shall perform all work required by the Contract that impacts (at a minimum) water, gas, sewer, power or pipe lines, telephone or telegraph lines, railroad communication/signaling, street lighting, or fire alarms in a manner satisfactory to the owners of the affected facilities. The Contractor shall comply with all applicable laws and regulations. The cost of such work shall be considered as having been included in the price stipulated for the Work.

18.2 The Contractor shall diligently comply with all laws and regulations pertaining to the safeguarding of existing utilities in the vicinity of their construction activities.

18.3 There may be abandoned utility facilities within the Project limits. If a conflict with an abandoned utility facility is encountered, contact the appropriate utility owner/representative to coordinate construction activities and proper removal and disposal of said facility, as necessary.

## 19 CONTAMINATED SOIL

19.1 No contaminated soils are expected. If suspected contamination is encountered, the Contractor shall notify the Owner. Testing and contaminated soil disposal profiles will be provided by the Owner. The Contractor is responsible for transporting contaminated soil to the disposal facility in compliance with all federal, state, and local laws, regulations, and rules.

## 20 CONSTRUCTION STAKING/AS-BUILT DRAWINGS

20.1 Construction Staking will be performed by the Owner prior to installation. The Contractor shall provide a minimum notice of 3 working days prior to needing staking completed. Contact the Owner for interim survey verification.

20.2 Maintaining grade stakes during construction shall be the responsibility of the Contractor. Costs for re-staking due to Contractor negligence will be deducted from payments.

20.3 As-built field survey measurements will be completed by the Owner following construction operations.

**END OF SECTION**

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DIVISION 1 – UNIT SPECIFICATIONS

SECTION 01 10 00 – INFORMATION AND  
REQUIREMENTS

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SECTION INDEX

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1. General
  2. New Overhead Construction Units
  3. New Underground Construction Units
  4. Removal Assembly Units
  5. Miscellaneous
  6. Overhead and Underground Construction Units
-

## 1 GENERAL

- 1.1 This section, titled Unit Specifications, provides vital project details and will be included as part of the official contract for this project. This Contractor shall perform all excavation, utility installation, backfill, and restoration as described herein and within Exhibit A – Engineering and Construction Drawings.
- 1.2 The Contractor shall comply with the requirements of the General Orders on Safety in Construction issued by the State Industrial Commission and/or the Occupational Safety and Health Act. They shall always provide and maintain barricades and other protection required to protect the public within the construction area. The Contractor shall verify all dimensions at the site and be responsible for their accuracy.
- 1.3 The unit item specifications listed below include all work shown in the plans to complete the Work, in addition to specifications for items not in this Contract. Specifications are provided for items with, and without unit pricing required in Section B of this Proposal.

## 2 NEW OVERHEAD CONSTRUCTION UNITS

### 2.1 Pole Units

- A. A pole unit consists of the installation of one pole and the numbering of the pole to Owner's specifications. The two digits indicate the length of the pole. Pole classes can range between 3 and 5 classifications per A.S.A. (example: 40 means a pole 40 feet long, class 3 through 5).
- B. In distributing the poles, large, choice close-grained poles shall be used for transformer, dead-end, angle, and corner poles.
- C. The minimum setting depths for poles shall be as follows:

<u>Pole Length</u> (feet)	<u>Setting Depth</u> (feet)
30	5.0
35	5.5
40	6.0
45	6.5
50	7.0
55	7.5

- D. On sloping ground, the depth of the hole shall be measured from the low side of the slope.
- E. Auger holes for poles shall be approximately 8 inches larger than the butt diameter of the pole and shall be at least as large at the bottom as at the top.
- F. All frozen materials shall be carefully excluded from the backfill. Where excavated material is considered unsatisfactory for backfill, the Engineer or Owner shall be advised.

- G. Poles shall be set so that alternate crossarm gains face in opposite directions, except at dead-ends, where the gains of the last two poles shall be on the side facing the dead-end. On unusually long spans, the poles shall be set so that the crossarm is framed on the side of the pole facing away from the long span. Where pole top pins are used, they shall be on the opposite side of the pole from the gain, with the flat side against the pole.
- H. Poles shall be in alignment and plumb except at corners, terminals, angles, junctions, or other points of strain, where they shall be set and raked against the strain so that the conductors shall be in line. The Contractor has final responsibility for pole alignment in each straight-line section as indicated in the Engineering and Construction Drawings. If the Contractor has any doubts as to correct pole placement, he shall contact the Engineer or Owner prior to installation of such poles.
- I. At line angles, where suspension construction is used, poles shall be offset on the bisector of the angle so that conductors will hang directly over the point of intersection or in line with the tangent in both directions.
- J. Pole backfill must be thoroughly tamped the full depth. The Contractor is responsible for following Owner's requirements on final grade restoration.
- K. The tops of poles shall not be cut except under exceptional conditions and upon approval of the Engineer or Owner. If cutting is deemed necessary, the pole top shall be covered with a mastic type cap. Under no circumstances shall the butt of any pole be cut.

## 2.2 Pole Top Assembly Units

- A. A pole top assembly unit consists of the installation of the hardware, crossarms and their appurtenances, insulators, etc., except the wire, required to support the primary conductors.
- B. Bolts must be of proper length. Through bolts, when installed in the structure, shall extend at least ½ inch and not more than 2 inches beyond the nuts. The Owner to modify lengths to suit special requirements.
- C. Locknuts shall be installed with each nut, eyenut, or other fastener on all bolts or threaded hardware such as insulator pins, upset bolts, double arming bolts, etc.
- D. A 2-¼ inch flat washer is required between the crossarm and the top side of all 15kV standard crossarm pins.
- E. A 3-inch square washer is required between the backside of the pole and the nut on all pole mounted dead-end eyebolts. A 2-¼ inch washer is required between the crossarm and nut on all crossarm mounted dead-end eyebolts.

## 2.3 Conductor Assembly Units

- A. A conductor assembly unit consists of the installation of one (1) foot of conductor or cable for primaries, secondaries, or services. In computing the compensation to the Contractor for conductor assembly units, only the horizontal distance between conductor supports or pole stakes shall be used.

- B. Conductors must be handled with care. Conductors shall not be trampled on nor run over by vehicles. Each reel shall be examined, and the wire shall be inspected for cuts, kinks, or other injuries. Injured portions shall be cut out and the conductor spliced. The conductors shall be pulled over suitable rollers or stringing blocks properly mounted on poles or crossarms if necessary, to prevent binding while stringing.
- C. The neutral conductor should be maintained on one side of the pole (preferably the road side) for tangent construction and for angles not exceeding 20 degrees.
- D. With pin-type and post-type insulators, the conductors shall be tied in the top groove of the insulator on tangent poles and on the side of the insulator away from the strain at angles. Pin-type insulators shall be tight on the pins and on tangent construction the top groove must be in line with the conductor after tying in.
- E. A certified etched-glass thermometer shall determine the air temperature at the time and place of stringing. The temperature at which the conductor is sagged in and the spans in which sags are measured shall be recorded and the information given to the Engineer or Owner.
- F. All conductor shall be strung by controlled-tension method using neoprene lined (or approved equal) double bull-wheel type tension stringing equipment. The equipment shall have groove sizes that will in no way damage the conductor. It shall be of a type capable of maintaining preset tension and pulling speed. Sufficient continuous tensions shall be maintained to keep conductors clear of ground or obstructions that could damage the conductor or that could be damaged by the conductor. Sheaves shall be designed and used so that the pulling line does not damage the sheaves or deposit foreign matter in the liner which may damage the conductor or cause foreign matter to be deposited on the conductor.
- G. The maximum pulling tensions shall not exceed 110% final sag tension. The cable pullers, tensioners, and pulling machines shall be located preferably as near the midspan as possible, but in no case shall the slope of the conductor between the machine and the stringing block at the first structure be steeper than three horizontal to one vertical. The length of conductor sagged in one operation shall be limited to the length that can be sagged satisfactorily as approved by the Owner's inspector.
- H. Conductors shall be spliced and dead-ended as shown on the Engineering and Construction Drawings. Splices shall be no closer than 1,000 feet from one another and there shall be no more than 3 splices per mile in any primary phase or neutral conductor. Splices shall not be located within 10 feet of any supporting structure. No splices shall be located in Grade B crossing spans or in the adjacent spans.
- I. The Owner will supply primary and secondary splicing sleeves and conductors as needed to lengthen existing taps because of the realignment of the mainline.
- J. All conductors shall be strung according to the stringing charts supplied by the Engineer or Owner.
- K. The Contractor shall provide guard poles and other material necessary as required to install new conductors.

## 2.4 Guy Assembly Units

- A. A guy assembly unit consists of the installation of the hardware and wire, and guy insulators where necessary. An overhead guy assembly unit does not include the associated pole and down guy, each of which is listed separately. Guy markers shall be installed on all anchor guys.
- B. Guys shall be installed in locations specified in the Engineering and Construction Drawings. Points of attachment to poles shall be shown in the Engineering and Construction Drawings. Guys shall be installed before conductors are strung.
- C. Guy wire shall be  $\frac{3}{8}$  inch extra high strength steel or  $\frac{1}{2}$  inch extra high strength (large dead-end guying when necessary).
- D. A  $\frac{5}{8}$  bolt and 3-inch square curved washer is required on all standard guy attachments.  $\frac{3}{4}$  inch bolts and 4-inch square curved washers are required on pole-eye plate guy attachments.
- E. Guy strand dead-ends shall be formed type or strain viced.

## 2.5 Anchor Assembly Units

- A. An anchor assembly unit consists of the installation of an anchor with rod complete, ready for attaching the guy wire.
- B. Holes for anchors shall be dug in locations staked by the Engineer. Anchor rods shall be in line with the strain and so installed that approximately 8 inches of the rod shall remain out of the ground. Under no circumstances shall the eye of the rod be covered. Holes shall be backfilled and tamped in the same manner as pole holes.
- C. The Contractor will bond all anchor rods with anchor rod bonding clamps sized appropriately to bond the anchor rod eye and formed grip over the guy wire.

## 2.6 Transformer Assembly Units

- A. A transformer assembly unit consists of the installation of the transformer and its hardware and leads with their connectors and supporting insulators and pins. This unit does not include the installation of the pole top, secondary, service, or grounding assembly.
- B. All transformer units include the necessary jumpers, hot line clamps, ampact tap saddles, service connection sleeves, all mounting hardware, animal guards, and any material necessary for a complete transformer installation.
- C. Transformers will be protected with a crossarm or fiberglass standoff mounted cutout and arrester. These items are separate from the transformer assembly units as specified in the Engineering and Construction Plans.

## 2.7 Secondary and Service Assembly Units

- A. A secondary and service assembly unit consists of the installation of the hardware, insulators, etc., to support the secondary and service conductor or cable. It does not include the installation of the secondary or service conductor or cable.
- B. Secondaries and service drops shall be installed so as not to obstruct climbing space.



There shall not be more than one splice per conductor in any span and splicing sleeves shall be located at least 10 feet from the conductor support. Where the same covered conductors or service cables are to be used for the secondary and service drop, they may be installed in one continuous run.

## 2.8 Grounding Units

- A. Ground rods shall be driven full length in undisturbed earth. The top shall be at least 12 inches below the surface of the earth. The ground wire shall be attached to the rod with a clamp and secured to the pole with staples. The staples on the ground wire shall be spaced 2 feet apart except for a distance of 8 feet above the ground and 8 feet down from the top of the pole where they shall be 6 inches apart. Ground wire molding to be installed from ground line to 8 feet above.
- B. All equipment shall have at least 2 connections from the frame, case, or tank to the multi-grounded neutral conductor.
- C. The equipment ground, neutral wires, and lightning-protective equipment shall be interconnected and attached to a common ground wire.

## 2.9 Miscellaneous Assembly Units

- A. A miscellaneous assembly unit consists of the installation of an additional unit needed in the Project for the new line construction but not otherwise listed in the Proposal. This section includes the installation of grounding assemblies, fuse cutouts, reclosers, sectionalizers, switches, capacitors, regulators, metering, and other assembly units.

# 3 NEW UNDERGROUND CONSTRUCTION UNITS

## 3.1 Underground Cable Assembly Units

- A. An underground cable assembly unit consists of the installation of one (1) foot of one cable for underground single-phase primaries and three cables for underground three phase primaries. It does not include the boring, trenching, and backfilling, or the termination of the primary cable that is provided for in other assembly units. It includes the labor of sealing of primary, secondary, and service cables and conductors as shown in the Engineering and Construction Drawings. In computing the compensation to the Contractor for underground cable assembly units, only the distance between stakes, paralleling the cable shall be used. The number of units so computed includes all installations of cable in all specified trenches, risers, conduits, crossings, manholes, and transformers.

## 3.2 Conduit Assembly Unit

- A. A conduit assembly unit consists of the installation of one (1) foot of conduit for underground primaries, secondaries, and services with sizes as specified in the Engineering and Construction Drawings. This unit shall be included with the boring or excavation units as noted in the plans.

### 3.3 Underground Equipment Pad Assembly Units

- A. An underground equipment pad assembly unit consists of a fiberglass or pre-cast concrete equipment base.
- B. This unit includes installation of the pad, drainable material, backfill, compaction, and site preparations.
- C. All pads will be set by the Contractor and backfilled with sand. Terminations will be completed by the Contractor.

### 3.4 Pad-mounted Transformer Assembly Units

- A. A pad-mounted transformer assembly consists of installing a pad-mounted transformer, pad, grounding, and making all necessary connections. The Contractor is to route underground cables installed under a separate Bid Item into the transformer base. The Contractor will terminate all cables and make final connections.

### 3.5 Junction Cabinet Installation Unit

- A. A junction cabinet installation assembly consists of installing a sleeved junction cabinet, grounding, and making all necessary connections. The Contractor is to route underground cables installed under a separate Bid Item into the junction cabinet. The Contractor will terminate all cables, make final connections, and install dust covers on unused modules.

### 3.6 Underground Grounding Units

- A. The Owner requires 8' ground rods with minimum #2 Cu ground wire to be installed for underground cabinet and transformer installations.

### 3.7 Underground Secondary and Service Assembly Units (Pedestal)

- A. An underground secondary and service assembly unit consists of the installation of the secondary or service cable terminal housing. It includes the installation of the power pedestal, stake (when required), mounting hardware, pedestal lock, warning & danger signs, directional marker, housing identification marking, and the cable identification tags. It also includes the installation of the cable terminations, ground rod, or pad, when required.

### 3.8 Miscellaneous Underground Assembly Units

- A. A miscellaneous underground assembly unit consists of the installation of any additional units needed in the Project, but not otherwise listed in the Specifications for Construction. Where primary risers are specified, the unit is to include the preparation of the cable, the installation of the termination, applicable grounding, and associated equipment installation as shown on the Construction

Specification Drawings. This section includes the installation of the miscellaneous assembly units as shown on the respective underground construction drawings.

- B. If primary splices are needed, they will be installed by the Contractor.
- C. Secondary splices may be installed in the air or under the PVC pipe if necessary.

### 3.9 Underground Excavation Assembly Units

- A. Trenching Assembly Unit – Consists of one (1) lineal foot of trenching in soil, measured parallel to the surface of the ground at a minimum depth of 36 inches, including the excavation, backfilling, and compacting. This unit includes all labor required in the repair and/or replacement of streets, roads, drives, fences, lawns, shrubbery, water mains, pipes, pipelines and contents, underground power and communications facilities, buried sewer and drainage facilities, and any other property damage by the trenching, except as specifically provided for in other units. The installation of underground cable is not included in this unit.
- B. Trenchless Assembly Unit: consists of the installation of one (1) lineal foot of conduit(s) via directional drilling or pneumatic boring. The conduit material will be of type, size, and quantity specified in the Engineering and Construction Drawings. This unit includes the boring or pushing of conduit(s) and any excavation, backfilling, and tamping necessary for the installation of the conduit(s). The conduits(s) will be installed at a minimum depth of 36 inches unless specified by the Engineer or Owner. The installation of underground cable in the conduit is not included in this unit.
- C. Contractor shall notify all companies with underground utilities in the work area via the state or local “one-call” to obtain utility locates. Once the utilities have been located Contractor shall physically identify the exact location of the utilities by vacuum or hand excavation in order to determine the actual location and path of any underground utilities which might be within 20 feet of the underground installation path. Contractor shall not commence boring or trenching operations until the location of all underground utilities within the work area have been verified.

## 4 REMOVAL ASSEMBLY UNITS

### 4.1 General

- A. Includes the furnishing of all labor for the removal of existing units of construction from existing lines, disassembling into material items, and all labor and transportation for the returning of all materials to the location designated by the Owner in an orderly manner or transporting elsewhere to the site of the Project for reuse in the prosecution of this Contract as directed by the Owner.
- B. The unit removal prices shall include all labor required to reinstall in accordance with specifications any conductors temporarily detached. The Contractor will reinstall at his own expense any other units removed by him for his own convenience.
- C. The Contractor will return all retired material back to the location designated by

the Owner. The Contractor will not bury non-salvaged material in pole holes or other locations on site.

#### 4.2 Pole removal Units

- A. All poles regardless of height and pole class are designated by the same unit. The Contractor is not required under this unit to remove from the pole any ground wire or pole numbering attached to the pole. This unit includes the refilling, tamping, and restoration according to City requirements, of holes in a workmanlike manner unless they are to be reused.

#### 4.3 Pole Top Removal Units

- A. Pole top units are simplified to single circuit and double circuit pole top units. These units shall include all miscellaneous items encountered in removing the pole top unit and pole.
- B. The unit of removal of pole-top assemblies also includes any holding or handling of mainline or tap conductors at tap lines, angles, and dead-ends where such is involved, and the reinstalling of such conductor in accordance with the Engineering and Construction Drawings.

#### 4.4 Conductor Removal Units

- A. The conductor removal unit covers the removal of one (1) foot of conductor or cable and reeling or coiling it in a workmanlike manner in such a way that it can be salvaged by the Contractor. The Owner will furnish to the Contractor reels if it is to be returned to the Owner's warehouse on reels.

#### 4.5 Guy Removal Units

- A. Down guys, regardless of length, type of attachment, or size of guy strand are specified by the same unit and will be invoiced accordingly. Removal of existing guy strain insulators is included as part of the retirement of the guy unit.
- B. Span guys, regardless of length, type of attachment, or size of guy strand are specified by the same unit and will be invoiced accordingly. Removal of existing guy strain insulators is included as part of the retirement of the guy unit.

#### 4.6 Anchor Removal Units

- A. Only anchor rods are to be removed by the Contractor in anchor removal units. If the rod cannot be unscrewed, the end of the rod shall either be cut off or bent down so that the rod will be at least 18 inches below ground.
- B. All anchor units regardless of length, type, or size are specified by the same unit and will be invoiced accordingly.
- C. The Contractor will not be paid to install or remove anchors required temporarily for stringing purposes.

#### 4.7 Transformer Removal Units

- A. Only one unit is specified for each type and all sizes of transformer from 1 to 15kVA. Transformer sizes greater than 15kVA will be individually specified. PCB bags for noted transformers will be used upon removal from pole to location designated by Owner.

#### 4.8 Secondary Removal Units

- A. The unit for removal of secondary assemblies includes, in addition to the removal of the assembly itself, all necessary handling such as untying, resagging, and retying of secondary conductor or cables where existing secondary conductor or cable is to be reused.
- B. The unit for removal of the secondary assembly includes the handling or holding of any conductor at tap lines where such is involved, and the reinstalling of such tap conductor in accordance with the Engineering and Construction Drawings.

#### 4.9 Service Removal Units

- A. The unit for removal of service assemblies includes, in addition to the removal of the assembly itself, all necessary handling such as untying, resagging, and retying of service conductor or cable where existing service conductor or cable is to be reused.

#### 4.10 Miscellaneous Removal Units

- A. The unit for removal of miscellaneous assemblies includes, in addition to the removal of the assembly itself, all necessary handling such as untying, resagging, and retying of conductor or cable where necessary for the removal of the unit.

### 5 MISCELLANEOUS

#### 5.1 Transfer Units

- A. Transfer units include all labor to transfer the assembly unit from an existing pole to a new pole. This includes all necessary jumpers and handling to complete the transfer including temporary means to maintain an energized system and reconnection to the new pole. All splice and transfer units for underground includes excavation necessary to complete the work.

#### 5.2 Outages

- A. Although the work under this contract is expected to be completed with the primary system energized, should any primary outage be necessary, the Contractor shall provide a minimum of one week's notice to the Owner. Any secondary/service outages required will be coordinated between the Contractor and affected customers.

### 5.3 Fusing & Sectionalizing

- A. All fusing and sectionalizing information will be provided to the Contractor from the Owner. The Contractor will record and return to the Owner all fuse and sectionalizing locations, sizes, and settings.

### 5.4 Invoicing

- A. All construction invoices for projects shall be sent to the attention of Power System Engineering, Inc.
- B. Contractor invoicing will be completed monthly based on the work completed to date. All invoicing will be on a unit basis and will show the total bid unit quantity, completed units to date, amount billed to date, and current billing amount.

### 5.5 Material

- A. All material other than hardware items will be supplied by the owner. All hardware items are to be supplied by the contractor. Hardware items to include, but not limited to all bolts, washers, eye-nuts, locknuts, staples, and screws.

## 6 OVERHEAD AND UNDERGROUND CONSTRUCTION UNITS

- A1.011: Crossarm jumper pin and insulator.
- A5.03: Single phase primary dead-end.
- A5.04: Single phase neutral dead-end.
- A5.3: Single phase primary tap.
- B5.23: Two phase primary tap - Fiberglass arm.
- C1.11: Three phase diamond tangent – Fiberglass arm.
- C2.51: Three phase medium angle – Fiberglass arm.
- C2.52: Three phase large angle – Fiberglass arm.
- C5.23: Three phase primary tap - Fiberglass arm.
- C6.23: Three phase double dead-end - Fiberglass arm.
- C6.52G: Three phase flat double dead-end - Fiberglass arm.
- C6.91: Three phase buckarm corner - Fiberglass arms.
- D1.81: Three phase double circuit tangent -Fiberglass arms.
- D2.52: Three phase double circuit large angle - Fiberglass arms
- E1.1: Single downguy assembly
- E1.4: Single overhead guy assembly
- E2.1: Double downguy assembly
- E3.1: Triple downguy assembly
- F2.12: 12" Single helix anchor assembly
- F2.1010: 10" Double helix anchor assembly
- F7: Pole key anchor assembly
- H1.1: Ground rod type pole ground assembly

- H4.1: Platform type pole ground assembly
- K1.1: Secondary and service assembly
- P1.01: Surge arrester assembly
- S1.01: Fused cutout assembly
- S2.3: Three phase gang operated switch assembly
- SP.3: Three phase double circuit buckarm corner - Fiberglass arms.
- UC6.2: Three phase underground cable riser assembly

**END OF SECTION**