

**Rock River Water Reclamation District
Rockford, Illinois**

Bidding Requirements and Contract Forms

for

**Emergency Power Distribution Upgrades
Graceffa Administration Building**

Capital Project No. 1929

**Rock River Water Reclamation District
Rockford, Illinois**

**Bidding Requirements and Contract Forms
and
General Provisions and Technical Specifications
for
*Sanitary Sewer Construction***

for

**Emergency Power Distribution Upgrades
Graceffa Administration Building**

Capital Project No. 1929

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Not to be used for bidding purposes

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Section I

Bidding Requirements

Article 1 — Notice to Bidders

The Rock River Water Reclamation District (District) will receive sealed and signed bids for Emergency Power Distribution Upgrades – Graceffa Administration Building, Capital Project No. 1929, at the District's offices, 3501 Kishwaukee Street, Rockford, Illinois until 10:30 a.m. on Tuesday, October 16, 2018 at which time and place all responsive / responsible bids will be publicly opened and read aloud.

The Emergency Power Distribution Upgrades – Graceffa Administration Building, Capital Project No. 1929 consists of the installation of a new 800A, 480V, 3PH Emergency Switchboard, connection of the new switchboard to an existing automatic transfer switch and existing loads, and all other appurtenances as indicated on the plans and in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders 3.8 requirements for Statement of Qualifications. Bidder must have a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL.

All work shall be completed by February 28, 2019. Liquidated damages shall be \$300 per calendar day. The amount of liquidated damages from unplanned power outages exceeding thirty (30) minutes shall be \$2,000.00 per hour.

Copies of the specifications may be obtained by depositing Fifty Dollars (\$50.00) with the District. The amount of the deposit for each set of specifications will not be refunded.

All work will be done in accordance with specifications on file with the District, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction* (Current Edition) by the Rock River Water Reclamation District of Rockford.

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount of ten percent (10%) of the total bid price. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured.

A Mandatory Pre-Bid Meeting for this project will be held on Tuesday, October 9, 2018 at 2:00 p.m. at the District's Board Room, 3501 Kishwaukee Street, Rockford, Illinois. All contractors who intend to bid on this project must attend the pre-bid meeting.

Bid documents may be obtained by contacting the Engineering Department at the District, (815) 387-7660, 3501 Kishwaukee St. For more information, visit the District web site at www.rwrwd.dst.il.us. Plans and specifications are also available for viewing through the Northern Illinois Building Contractors Association, whose office is located at 1111 S. Alpine Rd, Rockford, IL.

The successful bidder will be required to furnish a satisfactory performance bond in the full amount of the bid or proposal. No bid shall be withdrawn without the consent of the District for a period of 60 days after the scheduled time of receiving bids.

The District, reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of the Rock River Water Reclamation District.

Dated this 27th day of September, 2018.



BY: Chris Black, Business Manager

Not to be used for bidding purposes

Article 2 — Instructions to Bidders

1 General

1.1 Scope and Intent

This section of the contract documents is concerned with furnishing detailed information and requirements for preparing bids to prospective bidders, bidders' responsibility, the preparation and the submission of bids, basis for awarding the contract and other general information concerned with bidding and executing the contract.

1.2 Contradictions

If in the case of apparent contradiction between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, District General Provisions and Technical Specifications for Sanitary Sewer Construction. The language in the first such document in which language regarding the conflict, error or discrepancy occurs shall control.

2 Legal Requirements

2.1 Illinois Regulations

1. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor.

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on standard IDOT forms.

2. Public Act 83-1030 entitled "Steel Products Procurement Act" requires that steel products used or supplied in performance of this contract or subcontract shall be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

- a. Where the contract involves an expenditure of less than \$500.
- b. Where the executive head of the public agency certifies in writing that
 - i. the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
 - ii. obtaining the specified products, manufactured or produced in the United States would increase the cost of the contract by more than 10%.
- c. When its application is not in the public interest.

3. Public Act 96-929 (30 ILCS 570) provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.
4. Public Act 99-0933 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
 - a. the illegality of sexual harassment
 - b. the definition of sexual harassment under Illinois State law
 - c. a description of sexual harassment, utilizing examples
 - d. my (our) organization's internal complaint process including penalties
 - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
 - f. directions on how to contact the Department and the Commission
 - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

Upon request, this information shall be provided to the Illinois Department of Human Rights and the District.

5. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
6. The Contractor for this project shall comply with the Occupational Safety and Health Act.
7. The Contractor for this project shall comply with the Federal Drug-Free Workplace Act.
8. Public Act 96-1416 requires the Certification of Clean Construction and Demolition Debris (CCDD) and uncontaminated soil prior to disposal at a CCDD fill site. The Contractor for this project shall comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.
 - a. In the event that contaminated soil is uncovered on the project, the Contractor shall notify the District immediately. Any extra costs resulting from the presence of contaminated soil shall be evaluated in accordance with District General Provisions & Technical Specs for Sanitary Sewer Construction; General Conditions: Article 5 – Time Provisions and Article 8 – Changes.

2.2 Americans with Disabilities Act

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Rock River Water Reclamation District (District) and their representatives from all:

1. suits, claims, or actions
2. costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement
3. damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

3 General Instructions

3.1 Bidder's Responsibility

Bidders are cautioned not to submit proposals until having carefully examined the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and having made all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing and handling the materials at the site, and having informed themselves thoroughly as to all difficulties involved in the completion of all the work under this Contract in accordance with its requirements.

Bidders must examine the Plans, Specifications and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amount or quantities necessary to complete fully the work in strict compliance with the Contract Documents. No pleas of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill, in every detail, all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

The Contractor is responsible for verifying the location of all existing utilities in the project areas.

The Bidder, therefore, shall satisfy himself by such means as he may deem proper as to the location of all structures that may be encountered in construction of the work.

3.2 Addenda and Interpretations

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois. To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

3.3 Laws and Regulations

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of the District in the performance of the work under this contract. The Bidder's attention is specifically called to that provision of the General Conditions regarding the rate of wage to be paid on the work.

3.4 Quantities Estimated Only

Bidders are warned that the estimate of quantities of the various items of work and materials, as set forth in the proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

3.5 Form, Preparation, and Presentation of Proposals

For particulars as to the quantity and quality of the supplies, materials and equipment to be furnished, and the nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of the District.

Each bid will be submitted upon the prescribed proposal form. All blank spaces for bid prices must be filled in, in ink, with the unit or total sum or both for which the proposal is made. If the proposal contains any omissions, erasures, alterations, additions or items not called for in the itemized proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the proposal, the unit price as expressed in figures will govern. In no case is the agreement form to be filled out or signed by the bidder.

The Contractor may opt to contact the District's Engineering Department at 815.387.7660 to obtain an electronic Proposal form. If used, this form must be attached to the hard copy proposal form and appropriately signed and executed with the bid.

The bid must be verified and be presented on the prescribed form in a sealed envelope on or before the time and at the place stated in the Advertisement for Bids, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed to Clerk of the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. The District will not accept facsimile generated bids.

3.6 Bid Security

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount specified in Article One, Notice to Bidders. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured. The District's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

Within ten (10) days after the opening of bids, the deposits of all but the three lowest bidders will be returned. The deposits of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the contract, or, if no such contract has been executed, within sixty (60) days after the date of opening bids. The deposit of the successful bidder will be returned only after he has duly executed the contract and furnished the required bond and insurance.

3.7 Affidavit of Compliance

Each proposal must be accompanied by an executed Affidavit of Compliance. A separate Affidavit of Compliance form is enclosed with the Proposal packet. Failure to submit an executed Affidavit of Compliance with the proposal may constitute sufficient cause for rejection of the bid.

3.8 Statement of Qualifications

Each proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, has a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL, and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual obligations. The bidder shall document no less than three (3) contracts for similar work within the past five (5) years having equal or greater value to the bid being submitted. The District reserves the right to request additional information as needed to evaluate bids prior to making an award.

3.9 Comparison of Proposals

Bids on item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

3.10 Acceptance of Bids and Basis of Award

No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days.

The contract will be awarded, if at all, to the lowest responsive, responsible bidder. The Rock River Water Reclamation District also reserves the right to reject any or all bids.

The bidder whose proposal is accepted shall enter into a written contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by the Engineering Manager of the District has been served on such bidder personally or by mailing a postpaid wrapper to such bidder at the address given in his proposal. If the bidder to whom the contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of the notice, the amount of his deposit shall be forfeited and shall be retained by the District as liquidated damage and not as a penalty. It being now agreed that said sum is a fair estimate of the amount of damages that the District will sustain in case said bidder fails to enter into a contract and furnish the required bond and insurance. No plea of

mistake in the bid shall be available to the bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

3.10.1 Evaluation of Responsiveness

The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Instruction to Bidders.

3.10.2 Evaluation of Responsibility

To be judged as responsible, the bidder shall:

- a. Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- b. Be able to comply with the required completion schedule for the project;
- c. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from the District;
- d. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- e. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.
- f. Have satisfactorily completed no less than three (3) contracts for similar work within the past five (5) years of equal or greater value to the bid being submitted.

3.11 The Rejection of Bids

The District reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy the District that such bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. The District reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of the District after all proposals have been examined and canvassed.

3.12 Insurance and Bonding

Contractor shall provide all necessary insurance and bonds required to complete the project. No more than ten (10) calendar days subsequent to the District's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. The District shall be the sole judge as to the acceptability of any such proof.

Contractor shall provide and maintain all insurance and bonds as required by the District.

3.12.1 General

The Contractor shall ensure that:

1. All insurance policies shall be specific to the project.

2. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for the Emergency Power Distribution Upgrades – Graceffa Administration Building, Capital Project No. 1929 project.
3. The District shall be named as Additional Insured in all policies; this shall include the Owners Contractors Protective Policy option.
4. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the project and completed operations shall stay in force for two (2) years following completion of the project.

3.12.2 Insurance

The Contractor shall, for the duration of the contract and for two (2) years following project acceptance, maintain the following:

1. **General Liability**: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
2. **Automobile Liability**: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non-owned vehicles, as applicable.
3. **Workers' Compensation and Employers Liability**: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
4. **Umbrella**: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
5. **Errors and Omissions**: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the contract.

The policies shall contain, or be endorsed to contain, the following provisions in the General Liability and Automobile Liability Coverage's:

- a. Unless otherwise provided in paragraph "c" of this section, the District, its officers, officials, employees and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the Contractor, products and completed operations of the Contractor, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officers, officials, employees, volunteers, or agents.

- b. Unless otherwise provided in paragraph “c” of this section, the Contractor’s insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor’s insurance and shall not contribute with it.
- c. As an acceptable alternative to provisions “a” and “b” of this section, the Contractor may provide owner's and contractor's protective liability insurance with coverage limits, named insureds, and in conformity with all applicable specifications of this section.
- d. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, officials, employees, volunteers, or agents.
- e. The Contractor’s insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- f. All Coverages — Each insurance policy required by this clause shall not be suspended, voided, canceled by either party, reduced in coverage, or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the District.

3.12.3 Best's Ratings

The District shall be the sole judge of whether or not said insurer's ratios are satisfactory. The District's decision shall be final and the District's bidding procedures contain no appeal provision.

1. Alphabetical Rating: For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to the District.
2. Financial Size Rating: Provided an insurer's alphabetical rating is satisfactory, the District will examine said insurer's financial size rating.
 - a. If Best classifies the insurer XII or larger, said insurer shall be acceptable to the District.
 - b. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to the District’s Business Manager and/or the District’s insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the Contractor.

3.12.4 Performance Bond and Labor & Materials Payment Bond Form

The Contractor shall provide a Performance Bond and Labor & Materials Payment Bond form acceptable to the District. The performance bond shall be for either 100% of the contract price or for the Contractor's unit price times the estimated number of units, as applicable.

This Request for Bids contains a Performance Bond and a Labor & Material Bond form for the Contractor's use.

If the Contractor fails to provide acceptable bonds within the specified time, he shall be in default.

3.12.5 Correction of Contractor's Insurance or Bond Deficiencies

If the District determines that the Contractor's insurance or bond documentation does not conform to these specifications, the District shall inform said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of the District's deficiency notice, he shall be in default.

3.12.6 Indemnification Clause

Contractor shall protect, indemnify, hold and save harmless and defend the District, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the Contractor or District, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the Contractor or subcontractor, whether such loss, damage, injury or liability is contributed to by the negligence of the District or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful bidder shall have no liability for damages or the costs incident thereto caused by the sole negligence of the District.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the Contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers Compensation Act.

No inspection by the District, its employees, or agents shall be deemed a waiver by the District of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverages in the Contract.

3.13 Tax Exemption

The District is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder shall exclude those taxes from his bid. The District's tax exemption number is E9992-3696-06. The bidder shall include all applicable taxes in his bid price.

Article 3 - Detailed Specifications

1 General

This article contains detailed specifications relating to Proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. In addition, work shall conform to the following Technical Specifications: *Standard Specifications for Water and Sewer Main Construction in Illinois*, current edition, and Rock River Water Reclamation District (District) *General Provisions and Technical Specifications for Sanitary Sewer Construction*. When referenced in applicable sections, work shall conform to the Illinois Department of Transportation's *Standard Specifications for Road and Bridge Construction*, current edition (also referred to as *I.D.O.T. Standard Specifications*).

Throughout these specifications, the terms "Owner," "District," and "Engineer" shall be synonymous.

In the event of apparent contradictions between *Article 3 - Detailed Specifications*, and *General Provisions and Technical Specifications for Sanitary Sewer Construction, Article 3* – these *Detailed Specifications* shall govern.

Utility locations shown on the plans are based on the information obtained at the time of design and are not guaranteed. The location and/or elevation of existing underground utilities, such as gas mains, water mains, electric lines, field tiles, irrigation pipes, etc., shall be determined by the Contractor. The Contractor shall assume full responsibility for all utility locations.

The general location of the proposed work is governed by existing obstructions. Minor variations in location may be made to facilitate construction operations if approved in advance by the District.

No work shall be permitted on Sundays or District Holidays without prior approval by the District Engineering Manager.

All products and product components shall be implicitly warranted by the supplier(s) that they are suitable and fit for the intended use and are free from all defects in material, workmanship or design. Such warranty shall run to the benefit of the District and shall apply to all products and product components whether constructed as a result of these specifications or fabricated as a result of a supplier's design.

District will not supervise, direct, control, have authority over or be responsible for Contractor's means, methods, techniques, sequences, procedures of construction, safety precautions and programs incident thereto, or for any failure of Contractor to comply with laws and regulations applicable to the furnishing or performance of the work. The District will not be responsible for Contractor's failure to perform or furnish the work in accordance with the contract documents.

2 General Electrical

2.1 General

This section covers the furnishing and installation of all equipment and materials needed for the electrical requirements of this Contract.

All electrical gear, service and equipment panels shall be rated for the available fault current.

Electrical apparatus for all equipment shall be installed complete and placed in readiness for proper operation.

Electrical materials furnished and installed under this section shall be fabricated, assembled, erected, and placed in proper operating condition in full conformity with the Drawings, Specifications, engineering data, instructions, and recommendations of the equipment manufacturer, unless exceptions are noted by the District.

Electrical work shall conform to the construction schedule and progress of other trades.

Supplementing this section, the Drawings indicate conductor sizing, locations of equipment and enclosures and provide schematic diagrams regarding the connection and interaction with other equipment.

CODES AND PERMITS. It is understood by the District that the work included in this project will not require local permitting. All work shall be performed and materials shall be furnished in accordance with the National Electrical Code (NEC), the National Electrical Safety Code (NESC), and the following standards where applicable:

ANSI	American National Standards Institute.
ASTM	American Society for Testing and Materials.
AWG	American Wire Gauge.
Fed Spec	Federal Specification.
ICEA	Insulated Cable Engineers Association.
IEEE	Institute of Electrical and Electronics Engineers.
IESNA	Illuminating Engineering Society of North America.
NEIS	National Electrical Installation Standards
NEMA	National Electrical Manufacturers Association.
NFPA	National Fire Protection Association.
UL	Underwriters' Laboratories.

Equipment covered by this section shall be listed by UL, or by a nationally recognized independent third party testing laboratory. All costs associated with obtaining the listing shall be the responsibility of Contractor. If no third-party testing laboratory provides the required listing,

an independent test shall be performed at Contractor's expense. Before the test is conducted, Contractor shall submit a copy of the testing procedure to be used.

2.2 Identification

2.2.1 Conductors

All conductors in power, control, and instrumentation circuits shall be identified and color coded as described herein.

Except for lighting and receptacle circuits, each individual conductor in power, control, and instrumentation circuits shall be provided with wire identification markers at the point of termination.

The wire markers shall be of the heat-shrinkable tube type, with custom typed identification numbers.

Power conductors shall be color coded as indicated below. For conductors #6 AWG and smaller, the color coding shall be the insulation finish color. Equipment grounding conductors shall be green or green with one or more yellow stripes if the conductor is insulated.

The following color coding system shall be used:

- 24VDC - blue
- 120/240V single-phase — black, red, and white
- 480V three phase – brown, orange, and yellow

2.2.2 Circuit Breakers

Circuit breakers shall contain a visual trip indicator. Circuit breakers shall be provided with nameplates identifying related equipment. Nameplates shall be laminated black-over-white plastic, with 1/8 inch engraved letters, and shall be securely fastened to the circuit breakers.

2.3 Protection and Storage

During construction, the insulation on all electrical equipment shall be protected against absorption of moisture, and metallic components shall be protected against corrosion by strip heaters, lamps, or other suitable means. This protection shall be provided immediately upon receipt of the equipment and shall be maintained continuously.

2.4 Products

2.4.1 Cable & Conductors

All cables of each type shall be from the same manufacturer.

Cable for electronic circuits to instrumentation, metering, and other signalling and control equipment shall be two- or three-conductor instrument cable twisted for magnetic noise rejection and protected from electrostatic noise by a total coverage shield. Control cable shall be Belden 89418 or District approved equal.

Conductors for power circuits shall be stranded, uncoated copper with max operating temperature of 90°C dry and 75°C wet. Conductor insulation shall be polyvinyl chloride, UL 83, type THWN or THHN.

2.4.2 Conduit

Conduit and raceways shall be as described in the following paragraphs:

Interior locations shall be electrical metallic tubing (EMT) manufactured in accordance with ANSI C80.3. Diameters shall be as indicated in plans.

2.4.3 Junction Boxes and Pull Boxes

Unless noted otherwise in plans, indoor boxes (larger than switch, receptacle, or fixture type) shall be NEMA Type 1 and shall be rigidly supported by galvanized steel framing.

Bolt-on junction box covers 3 feet square or larger, or heavier than 25 lbs, shall have rigid handles. Covers larger than 3 by 4 feet shall be split.

All Junction boxes shall be sized in accordance with the National Electrical Code.

2.5 Execution

All material, equipment, and components specified herein shall be installed, tested, and commissioned for operation in compliance with NECA 1000 – NEIS Specification System. Where required in NECA 1000, testing and commissioning procedures shall be followed prior to energizing equipment.

2.5.1 Cable/Conductor Installation

Except as otherwise specified or indicated on the Drawings, cable shall be installed according to the following procedures, taking care to protect the cable and to avoid kinking the conductors, cutting or puncturing the jacket, contamination by oil or grease, or any other damage. Circuits to supply electric power and control to equipment and devices, communication and signal circuits as indicated on the one-line diagrams shall be installed continuous and may not be spliced unless approved by the Engineer.

- A. Stranded conductor cable shall be terminated by lugs or pressure type connectors. Wrapping stranded cables around screw type terminals is not acceptable.
- B. Stranded conductor cable shall be spliced by crimp type connectors. Twist-on wire connectors may be used for splicing solid cable and for terminations at lighting fixtures.
- C. Splices may be made only at readily accessible locations.
- D. Cable terminations and splices shall be made as recommended by the cable manufacturer for the particular cable and service conditions. All shielded cable stress cone terminations shall be IEEE Class 1 molded rubber type. Shielded cable splices shall be tape or molded rubber type as required. Shielded cable splices and stress cone terminations shall be made by qualified splicers. Materials shall be by 3M Company, Plymouth/Bishop, or equal.
- E. Cable shall not be pulled tight against bushings nor pressed heavily against enclosures.

- F. Cable-pulling lubricant shall be compatible with all cable jackets; shall not contain wax, grease, or silicone; and shall be Polywater "Type J".
- G. Where necessary to prevent heavy loading on cable connections, in vertical risers, the cable shall be supported by Kellems, or equal, woven grips.
- H. Spare cable ends shall be taped, coiled, and identified.
- I. Cables shall not be bent to a radius less than the minimum recommended by the manufacturer.
- J. All cables in one conduit, over 1 foot long, or with any bends, shall be pulled in or out simultaneously.
- K. Circuits to supply electric power and control to equipment and devices are indicated on the one-line diagrams and shall be in separate conduits. Conductors in designated numbers and sizes shall be installed in conduit of designated size. Circuits shall not be combined to reduce conduit requirements unless acceptable to Engineer.

2.5.2 Conduit Installation

Contractor shall be responsible for routing all conduits. This shall include all conduits indicated or shown on the plan Drawings. Conduits shall be routed as defined in these Specifications. Where conduit routing is shown on plans, it shall be considered a general guideline and shall be field verified to avoid interferences.

Except as otherwise specified or indicated on the Drawings, conduit installation and identification shall be completed according to the following procedures.

2.5.2.1 Installation of Interior and Exposed Exterior Conduit

This section covers the installation of conduit inside structures, above and below grade, and in exposed outdoor locations.

Unless otherwise indicated on the Drawings, Contractor shall be responsible for routing the conduit to meet the following installation requirements:

- A. Exposed conduit shall be rigidly supported by hot-dip galvanized hardware and framing materials, including nuts and bolts.
- B. Exposed conduit shall be installed either parallel or perpendicular to structural members and surfaces.
- C. Two or more conduits in the same general routing shall be parallel, with symmetrical bends.
- D. Conduits shall be located at least 6 inches away from high temperature piping, ducts, and flues.
- E. Metallic conduit connections to sheet metal enclosures shall be securely fastened by locknuts inside and outside.
- F. Conduit shall be clear of structural openings and indicated future openings.

- G. Conduit installed through any openings cut into non-fire rated concrete or masonry structure elements shall be neatly grouted.
- H. Conduits shall be capped during construction to prevent entrance of dirt, trash, and water.
- I. Horizontal conduit shall be installed to allow at least 7 feet of headroom, except along structures, piping, and equipment or in other areas where headroom cannot be maintained.
- J. Conduit shall not be routed across the surface of a floor, roof, or walkway unless approved by Engineer.
- K. All conduits that enter enclosures shall be terminated with acceptable fittings that will not affect the NEMA rating of the enclosure.

2.5.2.2 Sealing of Conduits

After cable has been installed and connected, conduit ends shall be sealed by forcing non-hardening sealing compound into the conduits to a depth at least equal to the conduit diameter. This method shall be used for sealing all conduits at handholes, manholes, and building entrance junction boxes, and for 1 inch and larger conduit connections to equipment.

2.3 Equipment Installation

Except as otherwise specified or indicated on the Drawings, the following procedures shall be used in performing electrical work.

2.3.1 Setting of Equipment

All equipment and boxes shall be installed level and plumb. Boxes, equipment enclosures, metal raceways, and similar items mounted on water- or earth-bearing walls shall be separated from the wall by at least 1/4 inch thick corrosion-resistant spacers. Where boxes, enclosures, and raceways are installed at locations where walls are not suitable or available for mounting, concrete equipment pads, framing material, and associated hardware shall be provided.

2.3.2 Concrete Housekeeping Pads

Concrete for housekeeping pads shall conform to the standards as published by the American Concrete Institute (ACI), and National Ready-Mix Concrete Association (NRCA). Portland cement shall be Type 1 for general construction. Housekeeping pads shall be 4" thick and include reinforcing mesh. Concrete reinforcing mesh shall be two-way reinforcement with 10 gauge wire at 4" spacing. 2" of cover over reinforcement shall be maintained. Top edges of housekeeping pads shall be chamfered to prevent chipping.

2.4 Grounding

The electrical grounding system materials, equipment and installation shall comply with the National Electrical Code, UL 467 and the following requirements:

- A. All ground conductors shall be at least #12 AWG soft drawn copper cable or bar, bare or green-insulated in accordance with the National Electrical Code.
- B. Ground cable splices and joints, ground rod connections, and equipment bonding connections shall meet the requirements of IEEE 142, and shall be exothermic weld

connections or irreversible high-compression connections, Cadweld "Exothermic" or Burndy "Hyground". Mechanical connectors will not be acceptable. Cable connections to bus bars shall be made with high-compression two-hole lugs.

- C. All powered equipment, including lighting fixtures and receptacles, shall be grounded by a copper ground conductor in addition to the conduit connection.
- D. Ground connections to equipment and ground buses shall be made with copper or high conductivity copper alloy ground lugs or clamps. Connections to enclosures not provided with ground buses or ground terminals shall be made with irreversible high-compression type lugs inserted under permanent assembly bolts or under new bolts drilled and inserted through enclosures, other than explosion proof enclosures, or by grounding locknuts or bushings. Ground cable connections to anchor bolts; against gaskets, paint, or varnish; or on bolts holding removable access covers will not be acceptable.
- E. Ground conductors shall be solid for #8AWG or smaller and stranded for #6 AWG or larger. Conductors shall be routed as directly as possible, avoiding unnecessary bends. Ground conductor installations for equipment ground connections to the grounding system shall have turns with minimum bend radii of 12 inches.

2.5 Modifications to Existing Equipment

Modifications to existing equipment shall be completed as specified herein and indicated on the Drawings. All existing facilities shall be kept in service during construction. Temporary power or relocation of existing power and control wiring, equipment, and devices shall be provided as required during construction. Coordination and timing of outages shall be as specified in other sections of these Specifications. Electrical power interruptions will only be allowed where agreed upon in advance with the District.

2.5.1 Demolition

Unless otherwise specified or indicated on the Drawings, all cable and all exposed conduit for power and control signals of equipment indicated to be removed shall be demolished. Conduit supports and electrical equipment mounting hardware shall be removed, and holes or damage remaining shall be grouted or sealed flush. Conduit partially concealed shall be removed where exposed, and plugged with expanding grout flush with the floor or wall. Repairs shall be refinished to match the existing surrounding surfaces. Demolished equipment shall be discarded or salvaged as indicated on the Drawings and as specified in other sections of these Specifications.

2.6 Submittals

Contractor shall submit material and installation specifications for the following:

- A. 800A, 480V, 3PH Emergency Switchboard (See Plan Sheet E-2)
- B. EMT conduit, fittings, and mounting hardware
- C. Concrete mix design and reinforcing steel specifications
- D. Conduit sealing compound
- E. Junction boxes
- F. Conductors

2.7 Payment

Work described in this section shall be included in the Contract Lump Sum (LS) price for the complete project.

3 Electrical Coordination Study

3.1 General

- A. The electrical contractor shall retain the services of an independent third party firm to perform an arc flash hazard study as described herein.

3.1.1 References

- A. Institute of Electrical and Electronics Engineers:
1. IEEE 1584 – Arc Flash Hazard Calculations Standards
 2. IEEE 242 – Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems (Buff Book)
 3. IEEE 399 – Recommended Practices for Power Systems Analysis (Brown Book)
 4. IEEE 141 – Recommended Practice for Electric Power Distribution for Industrial Plants
- B. National Fire Protection Association:
1. NFPA 70 – National Electrical Code
 2. NFPA 70E – Standard for Electrical Safety in the Workplace

3.1.2 Computer Software

- A. Computer Software Developers: All electrical studies shall be performed using the following:
1. ESA Inc., Easy Power

3.1.3 Design Requirements

- A. Complete Arc Flash Study to meet requirements of NFPA 70E(2015).
- B. The study shall be performed, stamped, and signed by a registered professional engineer in the State of Illinois.
- C. Report Preparation:
1. Prepare study prior to project completion.
 2. Perform study with aid of computer software program.
 3. Calculate the available incident energy in calories per square centimeter (cal/cm^2) at a working distance of 18 inches for the following equipment:
 - a. New Emergency Distribution Panel
- D. Report Contents:
1. Include the following:
 - a. Calculation methods and assumptions
 - b. Partial one-line diagram.
 - c. List of components in the partial one-line diagram and their characteristics (manufacturer, catalog number, size, etc.)
 - d. Tabulations of calculation quantities and results

- e. State conclusions and recommendations
- f. NFPA 70E compliant labels for the listed equipment that include the following:
 - 1) Bus Name
 - 2) Upstream protective device
 - 3) Nominal System Voltage
 - 4) Arc Flash Boundary
 - 5) Available incident energy and the corresponding working distance
 - 6) Required PPE
 - 7) The minimum arc rating of the required PPE

3.1.4 Submittals

- A. Third Party Qualifications Data: Submit the following for review prior to starting study:
 - 1. Submit qualifications and background of firm
 - 2. Submit qualifications of the Professional Engineer performing the study
- B. Software: Submit for review information on software proposed to be used in performing study.
- C. Submit copies of final report signed by Professional Engineer. Make additions or changes required by review comments.

3.2 Products

3.2.1 Sample Label:

- A. The labels shall be approximately 3.75" H x 5" W printed on self-adhesive vinyl
- B. The labels shall be similar in nature to the following label:



**Arc Flash and Shock Risk Assessment
Appropriate PPE Required**

0' - 8"	Arc Flash Boundary
0.4	cal/cm2 at 18 Inches - Arc Flash Incident Energy
#1	Arc-rated shirt and arc-rated pants or arc-rated coverall
<hr/>	
0.48	kV Shock Hazard when cover is removed
3' - 6"	Limited Approach
1' - 0"	Restricted Approach - Class 00 Voltage Gloves

Equipment Name: MCC-1 (Fed by: MCC-1 MAIN)



3.3 Execution

3.3.1 Examination

- A. Examine Project overcurrent protective device submittals for compliance with electrical distribution system coordination requirements and other conditions affecting performance. Proceed with coordination study only after relevant equipment submittals have been assembled. Overcurrent protect devices that have not been submitted and approved prior to coordination study may not be used in study.

3.3.2 Power System Data

- A. Gather and tabulate the following input data to support coordination study:
 1. Product Data for overcurrent protect devices specified in other Division 26 Sections and involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
 2. Impedance of utility service entrance.
 3. Electrical Distribution System Diagram: In hard-copy and electronic-copy formats, showing the following:
 - a. Circuit-breaker and fuse-current ratings and types.
 - b. Relays and associated power and current transformer ratings and ratios.
 - c. Transformer kilovolt amperes, primary and secondary voltages, connection type, impedance, and X/R ratios.
 - d. Generator kilovolt amperes, size, voltage, and source impedance.
 - e. Cables: Indicate conduit material, sizes of conductors, conductor material, insulation, and length.
 - f. Busway ampacity and impedance.
 - g. Motor horsepower and code letter designation according to NEMA MG 1.
 4. Data sheets to supplement electrical distribution system diagram cross-referenced with tag numbers on diagram, showing the following:
 - a. Special load considerations, including starting inrush currents and frequent starting and stopping.
 - b. Transformer characteristics, including primary protective device, magnetic inrush current, and overload capability.
 - c. Motor full-load current, locked rotor current, service factor, starting time, type of start, and thermal-damage curve.
 - d. Generator thermal-damage curve.
 - e. Ratings, types, and settings of utility company's overcurrent protective devices.
 - f. Special overcurrent protective device settings or types stipulated by utility company.
 - g. Time-current-characteristic curves of devices indicated to be coordinated.
 - h. Manufacturer, frame size, interrupting rating in amperes rms symmetrical, ampere or current sensor rating, long-time adjustment range, short-time adjustment range, and instantaneous adjustment range for circuit breakers.
 - i. Manufacturer and type, ampere-tap adjustment range, time-delay adjustment range, instantaneous attachment adjustment range, and current transformer ratio for overcurrent relays.

- j. Panelboards, switchboards, motor-control center ampacity and interrupting rating in amperes rms symmetrical.

3.3.3 Fault-Current Study

- A. Calculate the maximum available short-circuit current in amperes rms symmetrical at circuit-breaker positions of the electrical power distribution system. The calculation shall be for a current immediately after initiation and for a three-phase bolted short circuit at each of the following:
 - 1. Switchgear and switchboard bus.
 - 2. Distribution panelboard.
 - 3. Branch circuit panelboard
- B. Study electrical distribution system from normal and alternate power sources throughout electrical distribution system for Project. Include studies of system-switching configurations and alternate operations that could result in maximum fault conditions.
- C. Calculate momentary and interrupting duties on the basis of maximum available fault current.
- D. Calculations to verify interrupting ratings of overcurrent protective devices shall comply with and IEEE 242.
 - 1. Low-Voltage Circuit Breakers: IEEE 1015 and IEEE C37.20.1.
 - 2. Low-Voltage Fuses: IEEE C37.46.
- E. Study Report: Show calculated X/R ratios and equipment interrupting rating (1/2-cycle) fault currents on electrical distribution system diagram.
- F. Equipment Evaluation Report:
 - 1. For 600-V overcurrent protective devices, ensure that interrupting ratings are equal to or higher than calculated 1/2-cycle symmetrical fault current.
 - 2. For devices and equipment rated for asymmetrical fault current, apply multiplication factors listed in the standards to 1/2-cycle symmetrical fault current.
 - 3. Verify adequacy of phase conductors at maximum three-phase bolted fault currents; verify adequacy of equipment grounding conductors and grounding electrode conductors at maximum ground-fault currents. Ensure that short-circuit withstand ratings are equal to or higher than calculated fault current.

3.3.4 Coordination Study

- A. Perform coordination study using approved computer software program. Prepare a written report using results of fault-current study. Comply with IEEE 399.
 - 1. Calculate the maximum and minimum 1/2-cycle short-circuit currents.
 - 2. Calculate the maximum and minimum ground-fault currents.
- B. Comply with IEEE 242 recommendations for fault currents and time intervals.
- C. Transformer Primary Overcurrent Protective Devices:
 - 1. Device shall not operate in response to the following:
 - a. Inrush current when first energized.
 - b. Self-cooled, full-load current or forced-air-cooled, full-load current, whichever is specified for that transformer.

- c. Permissible transformer overloads according to IEEE C57.96 if required by unusual loading or emergency conditions.
2. Device settings shall protect transformers according to IEEE C57.12.00, for fault currents.
- D. Conductor Protection: Protect cables against damage from fault currents according to ICEA P-32-382, ICEA P-45-482, and conductor melting curves in IEEE 242. Demonstrate that equipment withstands the maximum short-circuit current for a time equivalent to the tripping time of the primary relay protection or total clearing time of the fuse. To determine temperatures that damage insulation, use curves from cable manufacturers or from listed standards indicating conductor size and short-circuit current.
- E. Coordination-Study Report: Prepare a written report indicating the following results of coordination study:
1. Tabular Format of Settings Selected for Overcurrent Protective Devices:
 - a. Device tag.
 - b. Relay-current transformer ratios; and tap, time-dial, and instantaneous-pickup values.
 - c. Circuit-breaker sensor rating; and long-time, short-time, and instantaneous settings.
 - d. Fuse-current rating and type.
 - e. Ground-fault relay pickup and time-delay settings.
 2. Coordination Curves: Prepared to determine settings of overcurrent protective devices to achieve selective coordination. Graphically illustrate that adequate time separation exists between devices installed in series, including power utility company's upstream devices. Prepare separate sets of curves for the switching schemes and for emergency periods where the power source is local generation. Show the following information:
 - a. Device tag.
 - b. Voltage and current ratio for curves.
 - c. Three-phase and single-phase damage points for each transformer.
 - d. No damage, melting, and clearing curves for fuses.
 - e. Cable damage curves.
 - f. Transformer inrush points.
 - g. Maximum fault-current cutoff point.
- F. Completed data sheets for setting of overcurrent protective devices.

3.4 Payment

Work described under this section shall be included in the Contract Lump Sum (LS) price for the complete project.

Article 4 – General Conditions and Requirements

1 General

1.1 Access, Parking and Material Deliveries

- A. Access: The Contractor will be provided two (2) remote gate actuators to access the parking area on the west side of the Graceffa Administration Building at 3501 Kishwaukee Street. The contractor will also be provided two (2) key cards to access the building and work areas within the building. Contractor shall return all gate actuators and key cards prior to final payment.
- B. Parking: Contractor will be provided two (2) parking spaces on the north side of the building adjacent to the overhead door which will be utilized for access to the elevator to the basement. If additional parking is required, contractor shall use the general public parking on the east side of the building.
- C. Material Deliveries: The contractor must coordinate deliveries of materials with the District. Contractor may utilize the area adjacent to the overhead door on the north side of the building to off-load delivered equipment during times approved by the District. The Contractor is responsible for opening gates for delivery vehicle access. Contractor shall minimize time to off-load delivery vehicles. Once materials or equipment are delivered, delivery vehicles shall exit the gated parking area.

1.2 Contractor Use of Site

- A. Confine all work operations and activities to the immediate and general vicinities as may be necessary to complete the specified work.
- B. Contractor shall coordinate construction operations with the District.
- C. Assume full responsibility for protection and safekeeping of material and products stored on or off premises.
- D. Move any stored material or products which interfere with operations of District or other Contractors.
- E. The Contractor shall be allowed reasonable use of the District's elevator. Max capacity of the elevator is 5,000 Lbs.
- F. The Contractor shall be allowed reasonable use of the available on-site 120V electrical power sources for hand held tools, ancillary lighting, etc., as long as it does not interfere with the normal functioning of District operations and as long as the usage is not abused. Any power needs greater than 120V shall be the Contractor's responsibility.

- G. The Contractor shall be allowed reasonable use of the existing sanitary facilities located in the basement of the building. Contractor shall clean the sanitary facilities used to the satisfaction of the District prior to final payment.
- H. Contractor shall repair or replace any District property damaged during the course of their work.
- I. Time restrictions for performing work shall be as stated in *Part 2, Schedule and Sequence of Operations*.

1.3 Work Sequence

- A. The Contractor is required to determine his own methods of construction and detailed work sequences, within the terms of the Contract, so long as the constraints defined in *Part 2, Schedule and Sequence of Operations* are observed and the overall project is completed within the allotted time.

1.4 District Occupancy

- A. Cooperate with District to minimize conflicts with District operations.

1.5 Field Verification of Drawing Information

- A. The Contractor shall field verify the size and location of existing structures, equipment, and conduit depicted on the Drawings. Information on the Drawings is based on field measurements and record drawings of buildings and appurtenances. Although effort was made to produce accurate drawings, the Contractor shall be solely responsible for verifying all measurements and obtaining any additional measurements needed to ensure the proper fabrication and construction of the proposed work items. Contractor shall be responsible for locating all conduits and equipment and all electrical power, control and wiring locations prior to construction. Notify the District immediately of any discrepancies plan drawings and actual conditions.

1.6 General Conditions

- A. *Section 1, General Conditions, and Section 2, General Requirements of the General Provisions and Technical Specifications for Sanitary Sewer Construction* as issued by the RRWRD shall be the general conditions for contract administration, except *Article 3 – Detailed Specifications* of the document shall prevail in any conflict.

2 Schedule and Sequence of Operations

2.1 Progress of the Work

- A. General: The work shall be performed at such times and in or on such parts of the project and with such forces, materials and equipment to prevent any delay to the completion of the project within the time limits stated in Article 1, and in accordance with the sequences and constraints specified herein.
- B. Work Hours:
1. The Contractor may not enter the Building prior to 6:00 a.m. without triggering the buildings security alarm. The Contractor may, with written approval from the District and at the Contractor's own expense carry on work outside regular hours of 6:00 a.m. to 5:00 p.m., Monday through Friday excluding holidays. To obtain District consideration of work outside the above-mentioned hours, or on Saturdays, Sundays or holidays, the contractor shall submit a written request, with reasons, to the Engineer and shall allow 48 hours, minimum, for written approval and satisfactory arrangements to be made for observing the work in progress. The Contractor shall comply with all applicable requirements of the District.
 2. Such permission, however, shall be subject to revocation if the Contractor fails to maintain adequate equipment and supervision for the proper execution and control of the work.

2.3 Sequences and Constraints

- A. The following sequences and constraints are essential to reducing downtime of facilities due to construction and the time of completion of this project:
1. **Existing emergency distribution panel "EMDPT" may not be without power for more than twenty (20) minutes. This panel shall be back in service prior to 7:00 a.m. the day of work.**
 2. **All nine (9) loads receiving work on existing panel "MSB" shall be back in service prior to 7:00 a.m. the day of work.**
 3. **Contractor shall submit a schedule and planned sequence of work for power outages for District approval prior to performing any work. Schedule shall include time of day for outages, length of outages and, if necessary to accommodate the above constraints, a request for work outside of normal working days and/or hours.**
 4. **All power outages shall be meticulously planned and scheduled with the owner. Standby power shall be provided for all outages exceeding 30 minutes, or as directed by the owner for critical electrical loads. The amount of liquidated damages from an unscheduled power outage exceeding 30 minutes shall be \$2,000 per hour.**
- B. The Contractor shall plan, schedule and coordinate his work to minimize the amount of time existing facilities are out of service due to construction. Contractor shall coordinate all work with the District and shall be responsible for scheduling his work per the sequences and constraints specified herein.

- C. The Contractor shall perform all work in a manner so as not to interfere with conflict other utility lines in the vicinity.
- D. Required removals and relocations of existing piping, wiring and related appurtenances shall be coordinated with the District. Any modifications to existing equipment, piping, electrical, etc., required to remove and/or install new equipment shall be approved by the Engineer and performed at the Contractor's sole expense.
- E. Contractor shall be responsible for all temporary electrical, pumping, piping and any other facilities required to minimize the amount of time the various operations are out of service. Downtime of certain operations and/or processes may be allowed with prior District approval.
- F. Before any shutdown coordination takes place, verify that all equipment, materials, and other necessary items required for shutdown work are on-site and prepared for installation. Pre-fabricate as much of this work as possible for accurate, proper and expedited installation.
- G. District reserves right to place facilities taken out of service back into service on an emergency basis upon notifying Contractor

2.4 Preconstruction Meeting

- A. Before beginning the work and after the Contract has been awarded, the District will conduct a pre-construction meeting to review construction schedules and procedures, the Contractor's use of the site and existing facilities, District regulations and other matters deemed relevant to the effective performance of the work.
- B. The meeting shall be attended by:
 1. Contractor's Authorized Representative.
 2. Contractor's General Superintendent.
 3. Any subcontractor's or supplier's representatives whom the Contractor may desire.

2.5 Construction Schedule

- A. The overall schedule shall begin upon District issuance of the Notice-to-Proceed and conclude at the final contract completion date. Failure to submit a project schedule will be considered cause for withholding of any partial payments otherwise due under the Contract in accordance with the General Conditions.

2.6 Project Review Meetings

- A. The Contractor shall conduct Project Meetings every month or more frequently if necessary, for the purpose of discussing and resolving matters concerning the various elements of the work and for coordination of schedules and work sequencing.
- B. The time and place for the meetings will be as directed by the District. The Contractor's Authorized Representative and Superintendent shall attend all meetings. The District will direct whether any subcontractors are required to attend, and the Contractor shall comply with these attendance requirements and shall also require, if necessary, his subcontractors to attend.
- C. Prior to the Project Review Meeting, the Contractor shall assemble all necessary information that reflects the progress of work to date. If requested by the District, the Contractor shall provide an updated Schedule for review at the meeting. The Schedule shall include the following information:
1. For activities started and/or completed during the previous period: start and completion dates, and duration.
 2. For activities begun but not yet completed: the percentage complete to date, the remaining duration of the work and the estimated completion date.
 3. For activities not yet started: revised durations and the estimated start and completion dates as necessary.
 4. For authorized Modification Orders: Add authorized Modification Orders and revised durations where required.
- D. The Contractor shall submit a monthly report to the Engineer until the Engineer determines further reports are unnecessary. The report shall:
1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
 2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
 3. Define problem areas, anticipated delays, and impact on Schedule.
 4. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors.

2.7 Delays and Recovery

- A. If it becomes evident the work will not be completed by the contract completion date, the Contractor shall submit to the Engineer a revised schedule outlining the additional amount of time needed to expedite completion of the remaining work. Contractor shall be liable for liquidated damages for all unjustifiable delays per the terms of the contract.
- B. Whenever it becomes apparent from the current progress of construction that the interface completion dates and/or contract completion dates will not be met, the Contractor shall take some or all of the following actions:
 - 1. Increase construction manpower in such quantities and crafts as shall substantially eliminate the backlog of work.
 - 2. Increase the number of working hours per shift, shifts per work day, work days per week, or the amount of construction equipment, or any combination of the foregoing sufficient to substantially eliminate the backlog of work.
 - 3. Reschedule work items to achieve concurrency of accomplishment.
- C. The addition of equipment or construction forces, increasing the working hours or any other method, manner or procedure needed to make up for time lost due to avoidable delays shall not be considered as justification for requesting a revised contract completion date or regarded as an acceleration order.

3 Submittals

3.1 Submittal Procedures

- A. All product data, shop drawings, samples, test reports, certificates, and all other submittals shall be submitted to the District as follows:
 - 1. Email PDF copies to Project Engineer to be named at the preconstruction meeting.
 - 2. Electronic copies are acceptable for review. Upon approval of all submittals, Contractor shall submit two (2) bound hard copies of all project submittals. Hard copies shall be sent to:
 - Rock River Water Reclamation District
 - 3501 Kishwaukee Street
 - Rockford, IL 61126
 - Attn: Project Engineer
 - Emergency Power Distribution Upgrade, Graceffa Administration Building
- B. No equipment or material for which listings, drawings or descriptive material are required shall be fabricated, purchased, or installed until the Engineer has on hand copies of such approved lists and the appropriately stamped final shop drawings.
- C. Transmit each submittal with Engineer accepted form. Submit only one specification section per transmittal.

- D. Submit all items specified in a particular specification section at the same time. Coordinate submission of related items.
- E. Sequentially number the transmittal forms. Revise submittals with original number and a sequential alphabetic suffix.
- F. Identify Project, Contractor, Subcontractor or supplier; pertinent Drawing and detail number, and specification Section number, as appropriate.
- G. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. **Submittals that have not been reviewed and approved by the Contractor will be rejected.**
- H. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed work.
- I. Identify product data sheets and product description literature with equipment tag numbers, specification section, paragraph and sub-paragraph numbers.
- J. Clearly mark the selected product by use of arrows, underlines, or circles where more than one product is shown. Use of highlighters to identify the selected product is not acceptable. Fax copies are not acceptable and will be rejected.
- K. Provide space for Contractor and Engineer review stamps.
- L. When revised for resubmission, identify all changes made since previous submission.
- M. Distribute copies of reviewed submittals, as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- N. Delays caused by the need for re-submittals shall not constitute reason for an extension of Contract time.
- O. To aid the continued instruction of District's operating and maintenance personnel and to provide a positive source of information regarding products incorporated into the work, the Contractor shall submit four (4) hard copies of applicable Operation and Maintenance (O&M) manuals to the District. Manuals shall contain all pertinent data and information appertaining to the proper operation and recommended maintenance requirements for all equipment. O&M manuals must be reviewed and approved by the District prior to final project acceptance and payment.

3.7 Test Reports

- A. Submit for the Engineer's knowledge as contract administrator or for the District.
- B. Submit test reports for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

3.8 Certificates

- A. When specified in individual specification sections, submit certification by the manufacturer to District.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Engineer.

4 Site Preparation and Salvage

4.1 General

- A. The Contractor shall be responsible for determination of the full extent and nature of the work involved in disconnection and removing existing materials and equipment by careful review of the Plans and Specifications and by conducting a thorough inspection of the project site and surrounding areas prior to submitting a bid.
- B. The Contractor shall be responsible for the repairs and associated costs in repairing, restoring or replacing any damages resulting from performance of the work under this Section.
- C. The Contractor shall be responsible for turning off the power and disconnecting all electrical feeds to equipment to be moved, removed or replaced under the Contract.
- D. Contractor shall be responsible for referring to all the Plans and Specifications for other trade's details for facility equipment disconnects and which affect the work covered under this Section.

4.4 Project Conditions

- A. Conduct site preparation work to minimize interference with other work being performed in vicinity.
- B. Elements designed, furnished and installed by the Contractor for stability and safety during construction are not shown on the Plans.

4.5 Safety Requirements

- A. Contractor shall take measures to fully ensure the safety and protection of all personnel on the premises.
- B. Notify the District's Representative prior to any activities associated with the work under this Section which may affect safety of personnel on the premises.
- C. All work shall be done in conformance with the rules and regulations pertaining to safety established by OSHA, the Illinois Administrative Code, NFPA 70E (latest edition).
- D. Maintain protected egress and access to the Work.
- E. Maintain clean, uncluttered work area. Collect and dispose of all debris at an approved off-site location periodically to ensure safety of personnel during preparation work.
- F. Perform all site preparation work in accordance with the applicable requirements of Safety Requirements for Demolition, American National Standard A10.6.
- G. All work shall be conducted in a manner to ensure the safety of workers and all personnel on premises.

4.6 Existing Conditions

- A. General
 - 1. Some existing conditions may not be shown. Bidders are advised to carefully inspect the existing sites before preparing their proposals. The removal of minor obstructions encountered that are not shown on the drawings, but could have been foreseen by visual inspection of the site prior to bidding, shall be anticipated and accomplished without a cost adjustment to the contract, even though not shown or specifically mentioned.
 - 2. Major obstructions encountered that are not shown on the drawings, or could not have been foreseen by visual inspection of the site prior to bidding, should immediately be brought to the attention of the District's Representative. The District's Representative will make a determination before proceeding with the Work. If the District's Representative finds that the obstruction adversely affects the Contractor's cost or schedule for completion, an appropriate adjustment to the Contract will be made.
 - 3. The approximate location of the existing items to be moved or removed is shown on the drawings. All site preparation work shall be coordinated between the specifications and all drawings. Site preparation requirements shall not be limited to those explicitly identified on drawings.

4.7 Products

- A. The Contractor shall provide all materials and equipment in suitable and adequate quantities as required to perform the work shown, as specified herein and as required to complete the project.
- B. If District's tools or equipment obstruct the work, Contractor shall notify the District's Representative and request that the District temporarily relocate such items until such time as work has been accomplished. If District's tools or equipment are missing or damaged during the duration of the work, Contractor shall be responsible for replacement or repair to a condition that existed prior to the commencement of the work.
- C. All tools, materials and equipment shall be clearly labeled with names of Contract and Contractor. Containers of materials and equipment shall also include labeling indicating contents.

4.8 Repair of Damage

- A. Material for repair of facilities damaged and disturbed during site preparation work shall be equal to that existing prior to the start of the work.

4.9 Execution

- A. The location of the equipment, structures piping, and miscellaneous items to be moved or removed shall be as indicated on the Plans and as directed by the District.
- B. Operations shall be done in such manner as to avoid hazards to persons and property and interference with the use of adjacent areas or interruption of free passage to and from such areas. Care shall also be taken to prevent the spread of dust and flying particles.
- C. Take whatever precautions are necessary to prevent any damage to existing building and structure elements which are to remain, and promptly repair any such damage resulting from such operations.
- D. Cease operations and notify the District's Representative immediately if adjacent appurtenances appear to be endangered in any way. Do not resume operations until corrective measures have been taken.
- E. Debris shall not be allowed to accumulate. Excess debris and waste material shall be removed from the site daily as the work progresses.
- F. Where new Work is to be installed or suspended concealing existing surfaces or spaces, Contractor shall remove foreign substances such as grease, sludge, and odoriferous materials before starting Work.

- G. Where surfaces are to remain exposed, Contractor shall remove foreign substances such as grease, sludge, and odoriferous material.

4.10 Site Preparation Requirements

- A. Contractor shall inform District's Representative at least three (3) days prior to start of any work and shall obtain consent from the District to proceed with demolition work. Work shall steadily proceed from commencement to completion.
- B. Unless otherwise noted, all existing utility lines requiring connection to new lines shall be expected to be in service.
- C. Work equipment shall be selected and operated such that structures, utilities, and other existing works that are to remain will not be damaged and cause injury to workers.
- D. Provide temporary shoring, bracing and other means to ensure safety of workers during demolition and removal.

4.11 Protection of Property

- A. Provide, erect and maintain temporary barriers and barricades, as required, around the work area to prevent District personnel from entering the work vicinity.
- B. The Contractor shall protect the existing buildings, structures and property, in the vicinity of the work from all damage. The Contractor shall provide bracing and shoring as necessary.
- C. The Contractor shall protect existing property, roads, walks, equipment, vehicles and other potentially impacted items, which are in the vicinity but beyond the scope of the proposed work.
- D. Perform work with trades qualified to perform work in manner causing least damage to each type of work.
- E. Dust, dirt, and debris shall be controlled to protect existing equipment and operations from shutdown.
- F. Contractor shall provide watertight and dust-tight enclosures for existing equipment that may be affected by operation of concrete saws, drills, or other work activities. Contractor shall ensure that protective enclosures do not shut down equipment due to excessive heat accumulation.
- G. Give special attention to fire protection in areas where welding will be performed. Flame cutting shall not be permitted without special approval by the District's Representative.

Protect combustible materials. Provide dry chemical extinguisher and train workers in their use.

- H. Maintain in service and protect from damage and leakage, all existing utilities that are not being removed or replaced.

4.12 Salvage

- A. Removed items the District does not wish to retain shall become the property of the Contractor to be properly disposed of at a location off District property.

4.13 Restoration

- A. Existing structures and surfaces that are damaged during the course of the work shall be restored to the condition that existed prior to the commencement of the work, to the District's satisfaction.
- B. Restoration shall be done with new materials and appropriate methods as specified for new work of similar nature; or, if not specified, best recommended practice of manufacturer or appropriate trade association and industry standards.
- C. After preparation work, restore all remaining surfaces to a condition acceptable for the installation of new work as governed by the Specifications for new material.

4.14 Mechanical Demolition

- A. All piping and equipment shall be drained or pumped as necessary to complete the proposed demolitions and/or improvements.
- B. Electrical equipment in the vicinity of piping modifications shall be protected from water sources in accordance with applicable codes and regulations.
- C. Where existing materials and equipment are removed or relocated, remove materials no longer used such as studs, straps, conduits, and wires. Remove or cut and cap concealed or embedded conduit, boxes, or other materials and equipment flush with the adjacent surfaces.
- D. Remove all miscellaneous fasteners, fixtures, and other protrusions flush with attachment surface that are not called for removal elsewhere in the specifications or drawings.
- E. Repair affected surfaces, which are to remain in place, to match the type, quality, and finish of the surrounding surface in a neat workmanship manner.

4.15 Disposal of Removed Materials, Equipment and Debris

- A. Where existing materials, equipment and debris are to be removed, Contractor shall be responsible for removal and disposal. Disposal shall be in accordance with all applicable

codes and regulations. Remove materials from the site as work progresses. Leave areas in clean condition upon completion of the work each day.

4.16 Cleaning

- A. Perform periodic cleaning and final cleaning to District's satisfaction.
 - 1. Clean District occupied areas daily.
 - 2. Clean spillage, overspray, and heavy accumulation of dust in District occupied areas immediately.
- B. At completion of alteration and work in an area, provide final cleaning and restore space to condition suitable for use by District.

Not to be used for bidding purposes

Not to be used for bidding purposes

Section II
Contract Forms

Proposal

Project: Emergency Power Distribution Upgrades –
Graceffa Administration Building, Capital Project No. 1929

Location: 3501 Kishwaukee Street, Rockford, Illinois, 61109

Completion Date: February 28, 2019

Liquidated Damages: \$300 per calendar day

To: Board of Trustees
Rock River Water Reclamation District
3501 Kishwaukee Street
Rockford, IL 61109

From: _____
(Individual, Partnership or Corporation, as case may be)

(Address of Individual, Partnership or Corporation)

Gentlemen:

I (We), the undersigned, hereby propose to furnish all materials, equipment, tools, services, labor, and whatever else may be required to construct and place in service the above subject Sanitary Sewer for the Rock River Water Reclamation District all in accordance with the plans and specifications, provided by the Rock River Water Reclamation District. The undersigned also affirms and declares:

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all

difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.

3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Rock River Water Reclamation District, which it is agreed, shall be retained as liquidated damages by said Rock River Water Reclamation District if the undersigned fails to execute the Contract in conformity with the contract documents incorporated in the contract documents and furnish bond as specified, within ten (10) days after notification of the award of the contract to the undersigned.
5. The Bidder is of lawful age and that no other person, firm or corporation has any interest in this Proposal or in the Contract proposed to be entered into.
6. The Bidder is not in arrears to the Rock River Water Reclamation District, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Rock River Water Reclamation District.
7. No officer or employee or person whose salary is payable in whole or in part by the District is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the District and the District's representatives.

In regard to participation in an approved Apprenticeship program, upon request, Contractor will be required to provide written proof of participation.

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 99-093 and will make this information available upon request.
10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including the Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor. The successful Bidder shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Prevailing wage rates may be found on the Illinois Department of Labor website at <http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx>.

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (SBE 348) or other approved equal.

11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.
12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act".
13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents employment.
14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.

15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by the Rock River Water Reclamation District to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of sixty (60) days from the opening thereof.

The undersigned further declares that he (they) has (have) carefully examined the following items of work and that the cost of all the work to complete this project is given in this Proposal.

Not to be used for bidding purposes

LUMP SUM BID AMOUNT

1. Total Amount of Lump Sum Bid, expressed in figures, for providing all materials, equipment, warranty, and labor compliance to complete Emergency Power Distribution Upgrade – Graceffa Administration Building in conformance with all Specifications in this Invitation to Bid:

\$ _____

The undersigned acknowledges that they have received Addendum numbers ____, ____, ____, and realizes that all Addenda are considered part of the contract.

Date: _____

Bidder:

By:

(Print Name of Firm)

(Authorized Rep's Signature)

(Print Street Address)

(Print Rep's Name)

(Print City, State, Zip)

(Print Rep's Title)

(Area Code and Phone Number)

(Fax Number)

(Authorized Rep's Email Address)

Note: The Rock River Water Reclamation District, a Governmental Unit, pays neither Federal Excise Tax nor Illinois Retailers' Occupational Tax. The bidder shall exclude those taxes from their bid.

Not to be used for bidding purposes

Fair Employment Practices Affidavit of Compliance

PROJECT: Emergency Power Distribution Upgrades – Graceffa Administration Building, Capital Project No. 1929

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE ROCK RIVER WATER RECLAMATION DISTRICT CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

_____, being first duly sworn, deposes and says that:
(Name of person making affidavit)

They are: _____ of _____
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.
4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Departments Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 I11. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: _____ Expiration Date: _____

Signature

Subscribed and sworn to before me this _____ day of _____, 20_____.

Notary Public

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

_____ (hereinafter called the Principal) and

_____ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of _____ with its principal offices in the City of _____ and authorized to do business in the State of Illinois are held and firmly bound onto the Rock River Water Reclamation District of Winnebago County, Illinois (District), in the full and just sum of: TEN PERCENT (10%) OF THE TOTAL BID PRICE good lawful money of the United States of America, to be paid upon demand of the District, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to the District, a proposal for constructing Sanitary Sewers and Appurtenances.

WHEREAS, the Principal desires to file this bond, in accordance with law, to accompany this Proposal.

NOW THEREFORE, The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within ten days after the date of receipt of a written notice of award of Contract, execute a Contract in accordance with the Proposal and upon the terms, conditions, and prices set forth therein, in the form and manner required by the District, and execute a sufficient and satisfactory Contract Performance Bond payable to said District in an amount of one hundred percent (100%) of the Contract price (including alternates) in form and with security satisfactory to said District, then this obligation to be void, otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid District, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this ____ day of _____, 20__.

Principal

(Seal)

By _____

Name: _____

Title: _____

Date: _____

ATTEST:

Secretary

Surety

(Seal)

By _____

Name: _____

Title: _____

Date: _____

Not to be used for bidding purposes

Agreement

1. General

THIS AGREEMENT, made and concluded this _____ day of _____, 2018, between the Rock River Water Reclamation District, Rockford, Illinois (District), acting by and through the Board of Trustees, and _____, his/their executors, administrators, successors or assigns:

2. Scope of Work

WITNESSETH: That for and in consideration of the payments and agreements made in the Proposal attached hereto, to be made and performed by the District and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with the District at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the District and its representative.

And it is also understood and agreed that the Bidding Requirements, Detailed Specifications, Contract Forms, General Conditions, General Requirements, Technical Specifications, Plans, Addenda, and provisions required by law are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

3. Contract Price

The District shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, subject to any additions or deductions provided for hereby, in current funds, the Total Contract Price of _____ and 00/100 (\$_____).

Payments are to be made to the Contractor in accordance with and subject to the provisions of Section 7 of this Agreement, which is a part of this Contract.

4. Bond

The Contractor has entered into and herewith tenders a bond of even date herewith, in the penal sum of _____ and 00/100 (\$_____) to insure the faithful performance of this Contract, which said bond is hereby made a part of this Contract by reference.

5. Maintenance and Guarantee

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to the District all work for a period two (2) years from the date of final acceptance of the Contract. The Contractor shall, for this period, indemnify and save harmless the District, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by the District, the District shall have the right to have the work done by others and to call on the Contractor and his bondsman to pay the costs thereof.

6. Contract Execution

IT IS EXPRESSLY UNDERSTOOD AND AGREED that the entire improvement shall be done in a thorough and workmanlike manner, under the direction and to the satisfaction of the District and in full compliance with all the requirements of its representative under them. All loss or damage arising out of the nature of the work to be done, or from any detention of unforeseen obstruction or difficulty which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

The Contractor will be held responsible for all accidents, and hereby agrees to indemnify and protect the District from all suits, claims, and actions brought against it, and all cost, and damages which the District may be put to by reason of an injury or alleged injury, to the person or property of another in the execution of this contract, or the performance of the work, or in guarding the same, or for any material used in its prosecution or in its construction.

Any person employed on the work who shall refuse or neglect to obey the directions of the District or its representative, or who shall be deemed by the District to be incompetent, or who shall be guilty of any disorderly conduct, or who shall commit any trespass on any public or private property in the vicinity of the work, shall at once be removed from the work by the Contractor when so requested by the District.

Any request to extend the contract completion date must be considered by the Board at the Board meeting prior to the then-existing contract termination date. Any deviation from this action will result in the liquidated damage clause in the contract to be exercised.

7. Payments to Contractor

The District hereby covenants and agrees, in consideration of the covenants and agreements in this Contract, specified to be kept and performed by the Contractor and subject to the conditions herein contained, and if the District receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the District Engineering Manager, the District shall issue payment before the fifth day of the succeeding month. If the District receives an acceptable invoice on or after the tenth day of the month, the District shall issue payment before the fifth day of the second succeeding month.

The District reserves the right at all times to refuse to issue payment in case the Contractor has neglected or failed to pay any subcontractors, workmen or employee on the work.

8. Subcontracts

No part of the work herein provided for shall be sublet or subcontracted without the express consent of the District, to be entered in the records, and in no case shall consent relieve the Contractor from the obligation herein entered into, or change the terms of this Agreement.

9. Contractor's Responsibility

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to him, the Contractor represents and warrants: that he is not in arrears to the District upon debt of the Contract and that he is not a defaulter, as surety, contractor or otherwise; that he is financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in his proposal and the information given by him is true and correct in all respects, and that he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that his information was secured by personal investigation and research.

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (Form SBE 348).

In regard to nondiscrimination in employment, Contractor will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations as provided herein.

The Contractor shall comply with the American Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify the District and their representatives from all:

- (a) suits, claims, or actions;
- (b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement, and;
- (c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

Contractor shall also comply with Public Act 99-0933, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment
- (b) the definition of sexual harassment under Illinois State law;
- (c) a description of sexual harassment, utilizing examples;
- (d) my (our) organization's internal complaint process including penalties;
- (e) through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
- (f) directions on how to contact the Department and the Commission; and
- (g) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

Upon request this information will be provided to the Illinois Department of Human Rights. Upon District award of a contract, the District will be provided this information described no more than ten working days after the District issues its award notification.

The Contractor shall comply with Article 2 of Public Act 83-1472 which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

The Contractor shall comply with all rules and regulations of OSHA during the execution of this Contract.

The Contractor shall comply with the Federal Drug Free Workplace Act.

The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.

The Contractor shall comply with Public Act 96-1416 regarding the disposal of CCDD and uncontaminated soil at CCDD fill sites as explained in the Instructions to Bidders.

10. Time

Work under this Agreement shall be commenced upon written Notice to Proceed. The completion date for this project shall be February 28, 2019.

11. Liquidated Damages

All work shall be completed by February 28, 2019. Liquidated damages shall be \$300 per calendar day. The amount of liquidated damages from unplanned power outages exceeding thirty (30) minutes shall be \$2,000.00 per hour.

12. Seals

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

**Rock River Water Reclamation District
Winnebago County, Illinois**

(Seal)

By _____
President, Board of Trustees

ATTEST: _____
Clerk of the Board

Contractor

(Corporate Seal)

By _____
Contractor's Officer

Name: _____

Title: _____

Date: _____

ATTEST: _____

Not to be used for bidding purposes

Labor & Material Payment Bond

TO: _____ Contractor Name
_____ Contractor City, State

KNOW ALL MEN BY THESE PRESENTS

That _____ (Contractor)

as Principal, and _____

a corporation of the State of _____ as Surety, are held and firmly bound unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of

_____ Dollars (\$ _____), for the payment where of Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____ 20____ Entered into a Contract with Obligee for _____ in accordance with contract documents prepared by the Rock River Water Reclamation District which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of

business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Oblige, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Oblige and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Oblige of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.
5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Oblige relative to claims made against this Bond.

Signed and Sealed this _____ day of _____, 2018.

CONTRACTOR SURETY
Contractor Firm Name

By: _____
Signature

By: _____
Attorney-in-Fact

Title Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Performance Bond

KNOW ALL MEN BY THESE PRESENTS, that WHEREAS, the Rock River Water Reclamation District has awarded to: _____ hereinafter designated as the “Principal”, a contract, dated, _____, for the Rock River Water Reclamation District.

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract (the “Bond”);

NOW, THEREFORE, we the Principal and _____, as Surety, are firmly bound unto the Rock River Water Reclamation District 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 for a performance bond. The conditions of this obligation is such that if the said Principal does well and faithfully performs all the conditions and covenants of said Contract, according to the true intent and meaning thereof, upon its part to be kept and performed, then the above obligation is to be null and void, otherwise to remain in full force and effect.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Rock River Water Reclamation District, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Rock River Water Reclamation District shall be named as beneficiary on this Performance Bond.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their seal this _____ day of _____, 20_____, 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.

CONTRACTOR

Contractor Firm Name:

SURETY

By: _____

By: _____ Signature

Attorney-in-Fact

Title

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Not to be used for bidding purposes

Section III

**General Provisions & Technical
Specifications for Sanitary Sewer
Construction**

(Separate document incorporated by reference - on file)